SOUND ON SOUND™

EUROPE'S NO.1 HI-TECH MUSIC RECORDING MAGAZINE

George Michael

THE *OLDER* SESSIONS

PLUS

Novation DrumStation Rack

Digidesign Audiomedia III PCI

DIY Digital Production

Gary Numan

& much more...

Steinberg Cubase VST

PLUG-IN POWER SEQUENCING

WIN

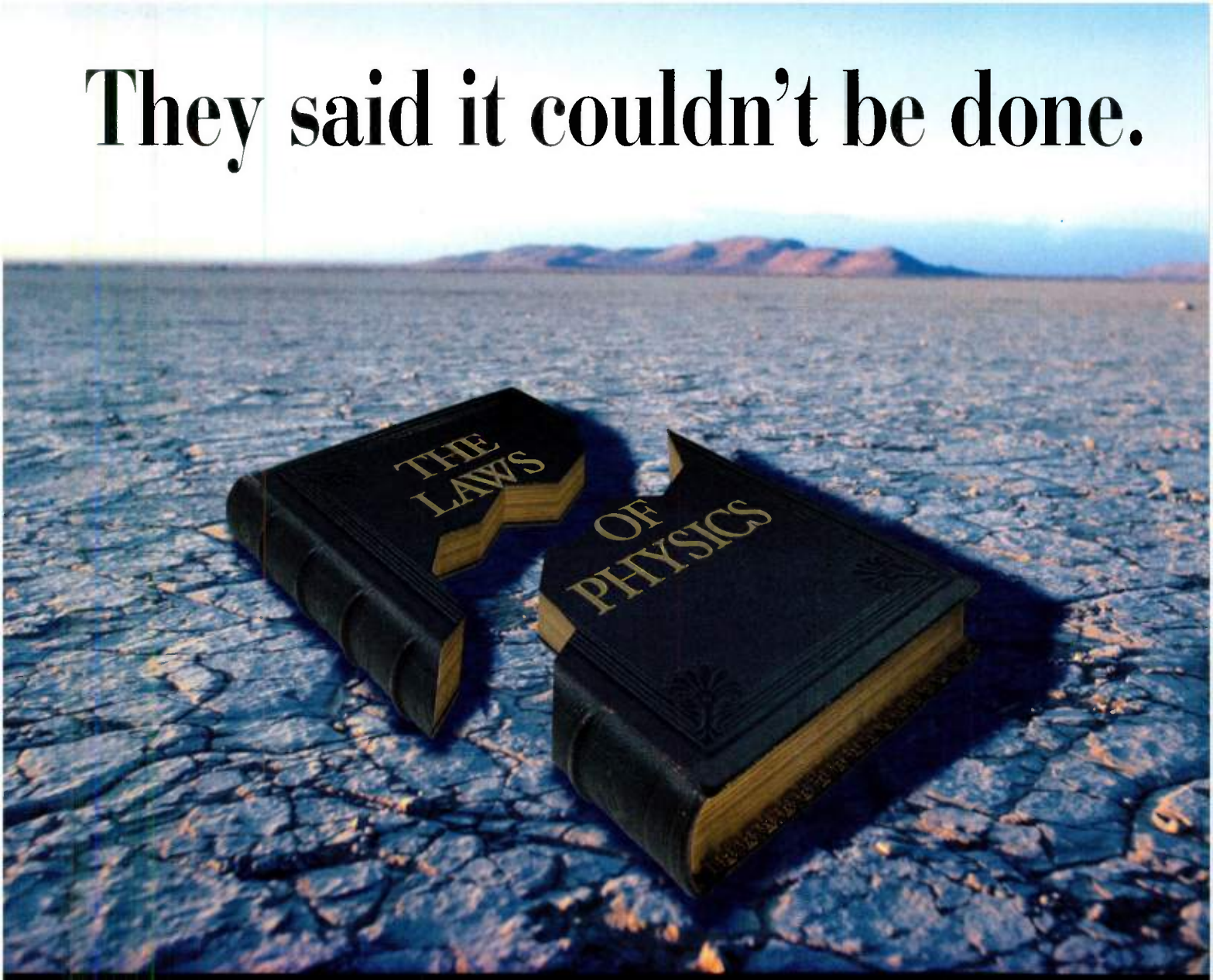
Novation BassStation Rack

SPIRIT FOLIO SX MIXER • DIGITECH MIDI VOCALIST • 808 STATE
LA AUDIO 4X4^2 • ENSONIQ SQ80 RETRO • SALVAGING THE MIX
MACKIE 1604 VLZ MIXER • LEXICON PCM80 EXPANSION CARDS
SYNTECNO BASS MODULE • PC • APPLE • ATARI MUSIC NEWS

VOLUME 11
ISSUE 9
JULY 1996
£3.25

07
9 770951 681054

They said it couldn't be done.



When digital audio pitch shifting "exceeds a third above or below the original, the results are very synthetic and unpleasant...it's the laws of physics."

So said a recent software review in a popular music technology magazine.

But that was before Digital Performer® 1.7...

Transpose your vocals by a fifth or more in Digital Performer 1.7 and they still sound like the original singer. No squeaky chipmunks. No darth vader.

Gender-bend your male vocals into female vocals. Turn a soprano singer into a baritone. Even build an entire mixed chorus from a single vocal track. It's all possible with Digital Performer because of our ground-breaking PureDSP™ technology.

With audio effects like these, Digital Performer is a must-have. So get Digital Performer and start breaking a few laws of your own.

Macintosh midi sequencing · digital audio recording/ editing/mixing/processing · music notation printing

Incredible PureDSP is now available in Version 1.7 (a free update to 1.6 users). Special upgrades from Performer and other sequencers are available for a limited time; phone for details.

Mark of the Unicorn

musictrack

PO BOX 4
ARLESEY
BEDFORDSHIRE
SG15 6AA

TEL: 01462 733310
FAX: 01462 733390

the.best.software@ the.best.price

Opcode Overture
New, easy to use professional 64 stave score writing software with full OMS compatibility

£199SRP

Opcode Digitrax
Multitrack recording and editing on Power Macintosh. Ultra flexible.

£149SRP

Midi Translator II
1 IN, 3 OUT giving 16 channel support. Use two for for 32ch.

£49 ex vat

Midi Translator PC
2 in 2 out expandable with up to 4 units in tandem for 32ch.

£89 ex vat

Midi Translator Pro
2 IN, 6 OUT. Midi interface giving full 32 channel support.

£99 ex vat

Translator Pro Sync
2 IN, 6 OUT. Full 32 ch support. Plus SMPTE read/write sync.

£169 ex vat

Studio 4
8 INs & OUTs plus 2 extra THRUs. 128 ch support. SMPTE read/write inc. 29.97 non-drop.

£349 ex vat

Studio 5Lx
15 INs & OUTs for 240 ch compatibility. All SMPTE formats inc 29.97 non-drop. Patchbay.

£799 ex vat

MusicQuest by Opcode is a comprehensive range of MIDI and Sync interfaces for IBM PC and compatibles. Whether you have need for a simple 1 in 1 out MIDI interface, a full blown 8x8 Midi matrix with SMPTE or anything in between, MusicQuest has the cost effective solution.

StudioVision 3.0
£429ex vat
£504 INC VAT

Vision 3.0
£199ex vat
£234 INC VAT

Vision Windows 2.5
£199ex vat
£234 INC VAT

OK so you want the best music software out there. You want all the features, all the bells and all the whistles as well. And you want a great price.

Well now you have it all - and then some.

MCMXCIX, the first name in music software distribution can now offer, (for a limited period only) the world's best music software and hardware for the Macintosh and Wintel platforms at incredible savings.

FREE MODEM

For a limited period only you can buy Vision 3.0 Mac for just £199 ex vat (£234 inc). That's less than £200 and a cool £100 less than it's nearest rival, for a software package which offers stunning sequencing capabilities along with digital hard disk recording on Power Macintosh with no extra hardware required. Studio Vision Pro v3 meanwhile can be had for a incredible £429 ex VAT and offers the massive feature-set of Vision plus intelligent features such as audio to MIDI, MIDI tempo control of audio, pitch shift, other DSP functions and full automated mixing.

But that's not all.

Buy Vision* or StudioVision Pro* before the end of July and get an 'Internet ready' 14.4bps Fax/Data modem absolutely FREE. - Perfect for checking out the new MCM home page packed with info and updates.

Call MCMXCIX for more information, or call into an Authorised Opcode stockist.

*Macintosh versions only

MCM XCIX

OPCODE

MacOS For Windows and Mac OS

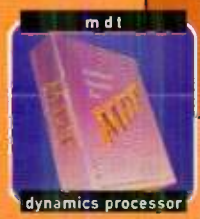
MCMXCIX. 9 Hatton Street. London NW8 8PL. Tel: 0171 723 7221. Fax: 0171 723 8150. www.mcm.co.uk/opcode

WRH

TSC

THE SOLUTIONS COMPANY

Designed for Macintosh with PCI



Pro Tools delivers uncompromising power (16-48 tracks), and performance for audio post, broadcast and music production. Quality is unsurpassed and you can customise a system in almost any way imaginable using add-ons and plug-ins such as DINR noise reduction, D-Verb 24bit digital reverb, Master List CD creator, QSYS 3D sound FX, d2 Focusrite multi-band EQ, TC/Tools reverb chorus & delay, in fact in our experience no two Pro Tools systems are the same.

The nuts and bolts are as follows:

- 16-48 tracks of record/playback on PCI Macs
- 8 to 64 channels of I/O
- Multichannel digital mixing + total recall
- MIDI sequence recording, playback & automation
- Sequencer-style digital audio editing
- Graphic breakpoint-style automation editing for audio & MIDI events. SMPTE sync & more.
- Time sampling of regions
- 44.1 & 48kHz sampling rates
- Balanced +4dBm I/Os
- Parametric digital EQ
- Plug-In architecture

TSC - the only serious choice for Pro Tools. Phone today for a personal evaluation.

digidesign
pro tools from £599
to £15,000 ex vat

free
FOCUSRITE OR DIRECTOR

Buy a Pro Tools Power Mac system before July 31st and get Macromedia Director Bundle (a £1100 value) or a Focusrite Green Mic Pre-Amp (a £699 value) FREE!

TDM BUS

DIGIDESIGN TDM BUS™

The TDM Bus provides software-controlled digital matrix routing for up to 256 channels of 24-bit digital audio among various I/O ports, DSP cards & FX processors. In effect it reduces a conventional studios patch bay and mountains of rack gear into a single computer cable & a handful of expansion cards.

digidesign pro tools

888 INTERFACE

888 I/O

- 8 XLR balanced ins, 8 XLR balanced outs
- 8 AES/EBU connectors • LED metering
- 16 channel 8 track recording

882 INTERFACE

882 I/O

- 8 track digital recording interface
- Balanced jacks
- SPDIF digital I/O

SMPTE SLAVE DRIVER

- Track Pro Tools to incoming LTC source
- Resolves any speed deviations
- MTC and SSP as standard

ADAT INTERFACE

- Sample accurate digital audio transfer between Pro Tools & ADAT
- Use ADAT as back up for your Hard Drive

WRH

digital audio midi seq.

OPCODE STUDIOVISION
- Includes all the sequencing of Vision
- Full Pro Tools support, auto mixing, DSP functions..... £429 £504 inc

FREE MODEM

CUBASE AUDIO
- Includes all features of Cubase Score
- Groove quantising, tempo-fit logical to use ..... £499 £586 inc

EMAGIC LOGIC AUDIO
- Great features such as time compression
- Digital re-grooving.
- Very musical to use ..... £499 £586 inc

yamaha o2r phone for best price

Yamaha's O2R features ultra-high quality digital mixing, EQ and DSP effects at an incredible price. It can be configured with up to [illegible] making it a viable replacement for any 'big console'.

digital recording and mixing

TSC supports only the finest in digital recording and mixing solutions: The following deserve your evaluation.

- Akai DD1500
  16 track pro system with comprehensive sync & DSP facilities. -Will lock to anything making it iceal for video-post.

akai dd1500 from £11.495 ex vat £13 507 inc

- Akai DR16 & DR8
  16 and 8 track hard disk records which function just like tape machines. 8 track simultaneous recording - 18-bit A/d & D/A.

akai dr8 & dr16 demo units from £1999 ex vat £2349 inc

- Roland VS-880
  All-in-one digital studio featuring up to 64 virtual tracks, digital EQ, mixing and optional DSP effects.

- Alesis ADAT XT
  Latest version of the ever-popular ADAT format - features track copy and editing.

roland vs-880 from £1149 ex vat £1350 inc

mac computing

TSC, is the solutions division of Computer Warehouse, one of the top two Apple Resellers in the country. We stock everything Macintosh from the computers themselves (Apple & Power Computing) to monitors, printers, memory, hard drives etc. and the largest selection of music, multimedia, business, games and education software you'll find anywhere.
TSC have been specialists in integrating the Mac into the music, pro-audio and video-post environments since our inception in 1987. We have the experience, the prices and the reputation.

p.mac 7600/120
16/1.2G cd £2199
£2584 inc vat

p.mac 8500/150
16/2G cd £3099
£3641 inc vat

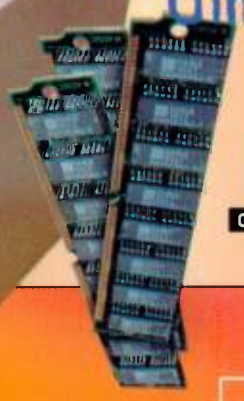
p.mac 9500/150
16/2G cd £3389
£3979 inc vat

The Power Computing [illegible] machines are the fastest Mac OS compatible machines out there. Chose from [illegible] or [illegible].

power tower 166
16/2G cd-rom £2995 + vat
£3519 inc

power tower 180
16/2G cd-rom £3295 + vat
£3872 inc

memory dimms + simms



MEMORY MODULES
- 4Mb SIMM memory ..... £34 £40 inc
- 8Mb SIMM memory ..... £58 £68 inc
- 16Mb DIMM memory ..... £139 £163 inc
- 8Mb DIMM memory ..... £75 £88 inc
- 16Mb DIMM memory ..... £149 £175 inc

CALL FOR MORE

contact
voice 0171 258 3454
facsimile [illegible] 723 8150
email tsc@mcm.co.uk

All prices are EX VAT - E & O E

Authorised Reseller

TSC

THE SOLUTIONS COMPANY

POWER MACINTOSH 6200
This super Power Macintosh 6200/75 features a fast 75Mhz PowerPC processor, 8Mb of RAM memory (expandable to 64Mb), 500Mb Hard Drive, Quad-speed CD-ROM drive, TV Tuner with remote control.
These special bundles come complete with a MAG 15" monitor, mouse, keyboard and MIDI interface and FREE MODEM.

complete with vision mac bundle only £1149 ex vat £1350 inc

complete with cubase vst mac bundle only £1199 ex vat £1409 inc

Shown with optional Apple 15" monitor

FREE MODEM

Buy a TSC sequencing bundle and get a 14.4 bps 'Internet-ready' modem absolutely FREE.

macintosh midi sequencing

MIDI SOFTWARE

Opcode Vision FREE Modem	£199	£234inc
Steinberg Cubase VST	£249	£293inc
Emagic Logic	£299	£351inc
Opcode EZ Music Starter Kit	£199	£234inc

MIDI INTERFACES

Midi Translator II 1 in 3 out	£49	£234inc
Midi Translator Pro 2 in 6 out	£99	£117inc
Translator Sync 2/6 SMPTE	£169	£199inc
Studio 4 8/8 SMPTE	£349	£410inc

No-one but no-one can match TSC for Macintosh based sequencing. Take for example the exclusive 6200 bundle above, it includes everything. Midi sequencer, multimedia Macintosh, monitor, keyboard. Plus this machine can double as a TV and is ready for Internet connection!

- Macintosh MIDI Sequencers

Emagic, Steinberg, and Opcode. New Vision v3.0 now only £199 ex VAT and comes with FREE Fax/Modem. New Cubase VST offers superb feature set. Logic as popular as ever.

- Macintosh MIDI Interfaces

Chose Opcode MIDI and SMPTE interfaces for Macintosh. MIDI interfaces from only £49 ex VAT. SMPTE/MIDI from only £169.

digital samplers and synths

Akai Emu Roland Ensoniq Kurzweil Yamaha

- Akai 3200XL

Akai's flagship. 16Mb RAM as standard. Hard Disk recording. Comes with multi-effects & 2nd filter board fitted. Incredibly flexible and with un-matched sonic quality.

- Akai 3000XL

10 outputs, RAM expandable with standard SIMMS, complete with FREE Mac editing software. Hard disk recording.

- Emu EIV

Absolute quality, 128-note poly, exp. to 128 MB RAM, extra output options, SCSI, renowned 'Morpheus' filters, optional dsp board for digital FX.

- Emu E64

64 note polyphonic, expandable to 64 Mb RAM, same filtering as EIV, SCSI interface.

- Emu Orbit

Dance sample module packed with useable cutting-edge sounds fitted with 6 outputs and 'Morpheus' filtering. Innovative 'beats mode'.

- Roland JV1080

The top synthesizer module, 64 note polyphonic. Expandable with optional ROM sample boards.

SAMPLERS & SYNTHS

Akai 3200XL rrp	£2299	£2701 inc
Akai 3000XL rrp	£1299	£1526 inc
Emu EIV rrp	£3199	£3759 inc
Emu E64 rrp	£1799	£2114 inc
Emu Orbit rrp	£599	£704 inc
Roland JV-1080 rrp	£899	£1056 inc

AKAI 3200XL
See below for TSC's special 3200XL bundle which includes
Akai CD library
16Mb RAM
CD-ROM Player

cd library + cd-rom player
akai 3200xl only £2399 ex vat
£2819 inc

contact
voice 0171 258 3454
facsimile 0171 723 8150
email tsc@mcm.co.uk

All prices are EX VAT E & O E

WRH

This is... computer warehouse

- ONE OF THE LARGEST APPLE RESELLERS IN THE UK
- TWO GREAT STORES PACKED WITH EQUIPMENT
- DEDICATED WAREHOUSE & DISTRIBUTION CENTRE
- APPLE AUTHORISED SERVICE CENTRE
- ALL THE LATEST PRODUCT + SPECIAL CW EXCLUSIVES!

Authorised Reseller

FREE MACINTOSH ADVICE SERVICE

CW DELIVERS DIRECT TO YOUR DOOR

BUY YOUR MACS IN-STORE!

TEL: 0171 724 7104

CONTACT CW ON THE INTERNET http://computerwarehouse.co.uk OR EMAIL CW info@computerwarehouse.co.uk

6200/75 PERFORMA

ASTONISHING CW VALUE!

The Performa 6200/75 delivers excellent performance, superb multi-media facilities and good expandability - all packaged in one of Apple's classic desktop designs.

- 75Mhz PowerPC 603
- X4 CD-ROM drive
- 8Mb of RAM (Exp to 64Mb)
- 1Mb VRAM
- 500Mb Hard Drive
- External SCSI interface
- TV Tuner / Video In - Watch TV or record QuickTime!
- **FREE CD-ROM titles!**
- **FREE PSI 14.4 Fax Modem!**

SAVE ££'S @ CW!!

6200/75 8/500 CD, KEYBOARD 15" MAC MONITOR £899 COMPLETE SYSTEM INC SOFTWARE

6200/75 8/500 X4 CD, TV TUNER, MODEM

LOADS OF FREE SOFTWARE! £699 EX KEYBOARD EX VAT £821 INC VAT

HOT PRODUCT!

THIS SPECIAL CW 6200/75 PLUS II INCLUDES ALL THIS, FREE!!

INSTALLED ON HARD DRIVE: At Ease, Claris Works v3, ClickArt, eWorld, Hypercard Player, MacGallery, Mavis Beacon Teaches Typing, Millie's Math House, Spin Doctor, Superhoose Wars, Thinking Things 2

INCLUDED ON CD ROM: Astoria Language, Concertware, Darling Kingsley The Way Things Work, EA 3D Atlas, Grollers Encyclopedia, Making Music, Myst, Redmix, Rock, Rap & Roll, Snoopy CD, Sticktion Encounter

7200 SERIES POWER MACINTOSH

WHILE STOCKS LAST!

FREE SOFTWARE WORTH £69!!

STUNNINGLY GOOD CW VALUE!

The CW Recommended Power Macintosh 7200 systems offer enhanced expandability and performance that make them CW ideal for small and medium-size businesses, for home offices, and for educational establishments. With a choice of 75 or 90Mhz PowerPC 601 processors, Power Mac 7200 computers offer superb value for money.

- Choose 7200/50 (75 Mhz 601) OR 7200/90 (90Mhz 601)
- 32K on-chip cache, Optional 256k Level 2 cache
- 3 PCI expansion slots • AAUI and 10BaseT Ethernet
- 8Mb RAM memory - exp to a hunking 256Mb via DIMMS
- 1Mb VRAM video memory - expandable to 4Mb
- CD ROM optional on 7200/75. Included on 7200/90

7200/75 8MB RAM 500MB H.DRIVE

A CW SUMMER SPECIAL OFFER! £799 EX VAT £939 INC VAT

NOW IN STOCK AND READY TO GO @ CW

NEW Power Computing POWER CENTER COMPATIBLES

WOW!

INCREDIBLE CW VALUE!!

The NEW Power Center's feature the super-fast 604 Power PC processorS which makes them blindingly swift ! Ideal for multimedia creation, music, business, high-graphics, education and home use, they offer tremendous value for money and real glant slaying ability. Just check out these great features

- Choice of 120, 132 or 150Mhz PowerPC 604 models in two casing designs
- Builtin x4 speed CD-ROM drive
- 3 PCI expansion slots
- RAM expansion to 256 Mb using 168-pin DIMMs
- 1Mb VRAM, 15-pin Mac + SVGA ports on board

FREE SOFTWARE!!

- Claris Works v4
- Nisus Writer 4.1
- Now Contact 3.0
- Now Utilities 6
- Quicken SE
- Pro Bluestream Type 1 Postscript fonts
- Corel Multimedia Encyclopedia
- Launch
- The Animated 2.0
- U.S. Atlas
- World Atlas

FREE SOFTWARE!!

P. CENTER 16/1GIG, x4 CD-ROM 132 Mhz 604 PROCESSOR £1999 £2349 INC VAT

P. CENTER 16/1GIG, x4 CD-ROM 150 Mhz 604 PROCESSOR £2495 £2936 INC VAT

P. CENTER LOW PROFILE 604/120 8/850/CD

£880 OF FREE SOFTWARE! 120 Mhz 604 PROCESSOR £1599 EX KEYBOARD EX VAT £1872 INC VAT

STYLEWRITER 1200 £95 £112 INC VAT

MEMORY SIMMS £139 £164 INC VAT

1 GIG HARD DRIVE £199 £234 INC VAT

MOTOROLA MODEM £139 £164 INC VAT

IOMEGA ZIP DRIVE £159 £187 INC VAT

SAVE ££'S @ CW!

SAVE ££'S @ CW!

THE UK'S FAVOURITE WAREHOUSE!

All products and offers subject to availability. Prices exclude VAT unless otherwise stated. E&OE. Apple, Power Macintosh are trademarks of Apple Computer. All other trademarks respected

FAX: 0171 723 8150 FAX YOUR ODER OR QUOTATION REQUEST TODAY

TEL: 0171 724 7104 CALL INTO: No 9 HATTON STREET, LONDON NW8 8PL

CONTACT CW ON THE INTERNET http://computerwarehouse.co.uk OR EMAIL CW info@computerwarehouse.co.uk

leader

You can't turn on a TV or look at a newspaper these days without encountering a discussion about the Internet, the information super-highway that will change our lives forever. Indeed, if the more enthusiastic proponents are to be believed, anyone without an Internet address and their own Web page might just as well move into a cave and rub sticks together. And their argument is so logically presented — the wealth of information out there is immense, there are people whose only joy in life is to help their fellow cyber travellers, and musicians from all corners of the globe can collaborate on vast and meaningful, cross-cultural, General MIDI symphonies. There are libraries full of free software to meet your every need, friendly manufacturers to solve any problem you might have with your equipment, and even on-line philosophers and psychoanalysts you can turn to if you develop an inferiority complex about the speed of your modem or the size of your Pentium chip.

This is the promise, but what is the reality? Here at SOS, we've used on-line services to communicate by email for over seven years now. We chose CompuServe, as it has a huge advantage over the mainstream Internet in that it allows users to send each other files that arrive intact, just as if they'd been sent on a floppy disk. Not so with the Internet — it seems email works fine (I can't imagine life without email in my job), but trying to send other types of file via Internet, especially if you're a Mac user, is a complex ritual which involves turning the file into something that believes it's a text message, emailing it, then relying on the person at the other end having access to a suitable piece of software to convert the file back again. What's more, if the file is over a certain length, it gets broken into chunks which are then sent separately and the recipient has to guess which order they were sent in before they can be reconstituted. If you've ever seen the film The Fly, you'll have a fair idea what can happen to files sent via the Internet. The whole experience is so frustrating that on more than one occasion I've resorted to airmailing a jiffy bag with a disk in it!

But what about the wonderful World Wide Web, the data super-highway where you can browse, graze and cruise as you feed your intellect and your curiosity? Well, I've been there — I've surfed the Net, trawled hyperspace and supped at the cybercafe of life, but compared with the so-called information super-highway, the M25 during rush-hour is like Silverstone; it's not so much like surfing as wading through a tar-filled septic tank wearing ill-fitting Wellington boots, partly filled with decomposing melon! It's so agonisingly slow — you can easily spend an hour or more trying to track down a useful file only to find yourself wandering down fruitless, time-consuming dead ends. Select a new link and the wait before it appears seems interminable (especially if the USA is awake), and when it does finally materialise, it isn't the data you want anyway. Before you know it, you feel jet-lagged, your eyes are watering, and you desperately want to go to bed (and that's if you log on in the morning!). But interestingly, you persevere and keep doing it, because every once in a while you come up with a nugget of information or a useful file that makes it all seem worthwhile.

Information technology may be the future, but I can't see the Internet being the future of information technology — the information age demands something much faster and better structured. At the moment, the only people who really stand to benefit are the opticians — have you had your eyesight checked since you became a Net addict?

Paul White *Editor*

SOUND ON SOUND
Media House, Burrel Road, St. Ives
Cambridgeshire PE17 4LE.
Telephone: 01480 461244
Fax: 01480 492422
Email: CompuServe 100517,1113

Editor Paul White
Assistant Editor Matt Bell
Technical Editor Dave Lockwood
Editorial Director Ian Gilby
News Derek Johnson & Debbie Poyser

Advertisement Manager Robert Cottee
Classified Sales Manager Patrick Shelley

Production Manager Shaun Barrett
Ad Production & Design Andy Brookes
Senior Designer Clare Holland
Classified Production Andy Baldwin

Publisher Ian Gilby
Financial Manager Patricia Urwin
Administration Lisa Thompson
Mail Order Sally Thompson

Photography Ewing-Reeson
DTP Bureau Sound Design
Colour Scanning CL Enterprises Ltd
Colour Origination Spectrum Repro Ltd
WYSIWIG
Printing Warners Midlands Plc
Newstrade Distribution Warners Group Distribution Ltd, The Maltings, Manor Lane, Bourne, Lincolnshire, PE10 9PH

Subscriptions
UK £35 **Europe** £50 **World** £65
Payable in sterling through UK bank

ISSN 0951 - 6816

A Member of the SOS Publications Group

The contents of this publication are subject to worldwide copyright protection and reproduction in whole or part, whether mechanical or electronic, is expressly forbidden without the prior written consent of the publishers. Great care is taken to ensure accuracy in the preparation of this publication but neither Sound On Sound Limited nor the editor can be held responsible for its contents. The views expressed are those of the contributors and not necessarily those of the publishers or editor. The publishers accept no responsibility for the return of unsolicited manuscripts, photographs, or artwork.

Copyright 1996 Sound On Sound Limited, incorporating Music Software magazine & Recording Musician magazine. All rights reserved.

34 Spirit Folio SX Mixer

REVIEWS

31 SyQuest EZ135 Removable Drive

32 Fatar 1176 MIDI Master Keyboard

34 Spirit Folio SX Mixer

36 Shure Beta Microphones

38 Mackie 1604 VLZ Mixer

62 Event 20/20 Nearfield Monitors

66 LA Audio 4x4² 4-Channel Gate Compressor Limiter

82 Novation DrumStation Rack

90 Steinberg *Cubase 3.0 VST* for Macintosh

104 Digidesign *Session for Windows*/Audiomedia III PCI Card

126 Mutronics Mutator Analogue Filter

142 Lexicon PCM80 Expansion Cards

164 Digitech MV5 MIDI Vocalist

178 Syntechno TeeBee Bass Module

196 Tascam 302 Dual Cassette Deck

210 **Brief Encounters:**
Powermaster Rak Mac, Roland MC50 Operations Handbook, Nureality Vivid 3D Stereo System & Prosonix Bantam Patchbay.

SUBSCRIBE & WIN
Tascam 488 MkII Portastudio p230

Volume 11 Issue 9 July 1996

in this issue

FEATURES

40 Paul Gomersall: Recording George Michael's *Older*

46 Digital DIY

120 808 State

134 At Home With... Nigel Shaw

154 Gary Numan

186 How To Become A Record Producer: Part 7

198 Richard Symons: Pro Tape

214 Retrozone: Ensoniq SQ80 Workstation

WIN NOVATION BASSSTATION RACK p243

SOUND WORKSHOPS

70 Fixing The Mix: Part 1

172 Minimising Noisy Effects

REGULARS

8 Crosstalk

12 Shape Of Things To Come

148 Sample Shop

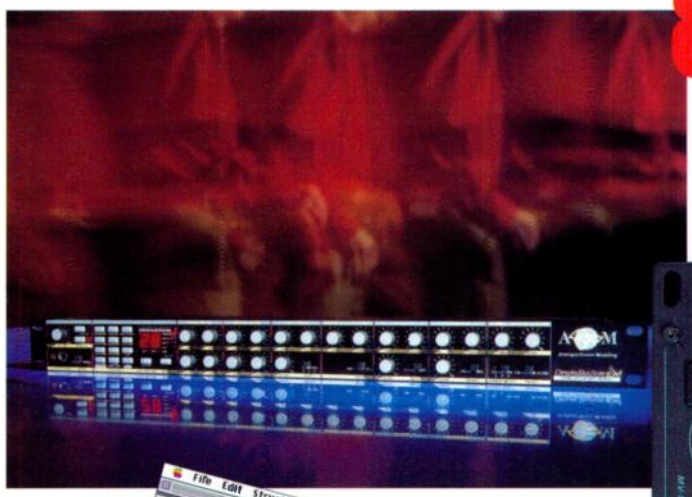
206 Demo Doctor

220 Readers Ads

232 SOS Mail Order: Books, Videos, CDs

244 Classified Ads

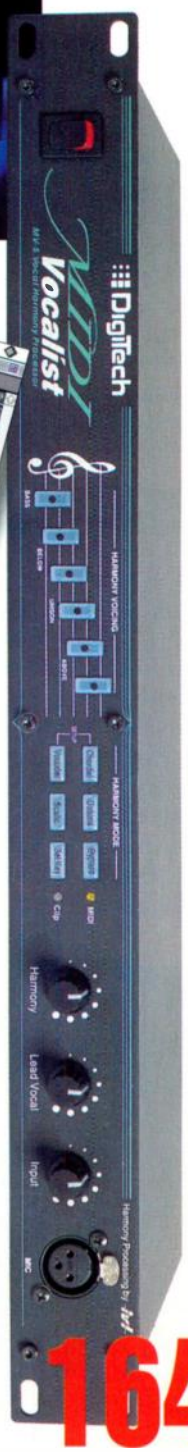
264 Sounding Off



82 Novation DrumStation Rack

90 Steinberg Cubase 3.0 VST

154 Gary Numan



164 Digitech MV5 MIDI Vocalist

Computer notes

Apple Notes.....86
PC Notes.....100
Atari Notes.....114

Crosstalk

Send your letters, tips and comments to: The Editor, Sound On Sound, Media House, St Ives, Cambridgeshire, PE17 4LE.

Our e-mail address is 100517,1113.

or from outside CompuServe, on 100517.1113@compuserve.com

Atari altercation meets Falcon furore

Ofir Gal's Atari Notes column attracted two written comments last month. Sadly, there is not room to print either letter in full — both have been edited for publication.

I am grateful to *SOS* for all the coverage they give my continuing efforts to promote the Falcon (most commonly in the Atari Notes section of the magazine) but I feel I have to react to the underlying tone of June's Atari Notes.

I should first of all state that there is nothing inaccurate in anything Ofir has said. Indeed, I have never known Ofir to misrepresent any facts about any computer (he has proved one of the best sources of information on computers for me over the years). My argument is with the underlying premise of the feature, which makes several assumptions I feel are misplaced in a musician's magazine...

Ofir does at least start out comparing the cost of software between a brand new piece of software just announced for the Mac with Falcon *Cubase Audio*, which has been shipping for three years. Whilst no-one who has bought a Falcon/*Cubase Audio* bundle lately has paid anything like £699 for the software, he is correct that that is the list price Harman will quote you for it. But does *Cubase Audio v3.0* for the Mac include Timestretch RAM sampling and 24 parametric EQ modules on hardware that retails for £680+VAT(and can you get the 32 channels he talks about on that computer)?

What I know definitely isn't available for this software on the Mac is the hardware add-ons for separate outs and S/PDIF and Ofir admits this with the phrases "in the near future" and "on the cards". It is still true to say that if you need these hardware add-ons which divide the multimedia sheep from the serious musical goats today, the Falcon is still the only system which delivers at this price point.

Of course, if you only want stereo-in, stereo-out with computer-quality converters now and don't mind waiting until these hardware add-ons become available, then the Power Mac with *Cubase v3.0 VST* looks a good solution... But to suggest that the Mac has caught up before the hardware add-ons can be bought, plugged in and used is misleading...

You may say that I am over-reacting to a piece that simply suggested some alternative options, but that is not how the people who are attending my roadshows are interpreting it. Several people have said that they are now really worried about buying a Falcon, even though they have never heard of Adobe Photoshop and have no interest in the Internet. What they want is a computer for *music*, and the Falcon seems to do everything they want, but they feel it can't be any good if the guy who writes *SOS*'s Atari Notes is suggesting the Mac looks a better bet... One guy actually suggested that Ofir must have been paid by someone to destroy the Falcon's reputation. I don't think that for a second, but that was a genuine comment from someone who had just read Atari Notes expecting to get information about using his Atari for music. He was amazed to find that with the Falcon he can go direct in digital into his Yamaha 02R desk using the ADAT interface from SoundPool and that he can create a template for an entire audio CD on the Falcon before blowing a recordable CD. These are facilities which musicians are interested in doing on an Atari-compatible computer because that's what they are used to using. If they want to read about Internet access or photo-retouching, they'll buy a general computing magazine, not *SOS*...

I hope this letter dosn't read like a spoilt child who isn't getting his own way all the time. It has just been very depressing for me to have spent so much of my own money (not C-Lab's) setting up and doing roadshows all over the country and finding that all my efforts are undermined by comments made in the Atari Notes of *SOS*, where I had always looked previously for support. I have always believed in the

Continued on page 10 ▶

Midiman Muddled

Following the publication of the MIDIMan press release in *SOS* May '96 (p.16) announcing the new GMan sound module, I would like to clear up a misunderstanding regarding the sound chip that is used in the module.

The GMan sound chip is a GM/GS-compatible sound module, having taken advantage of the release of the GS specification, and does comply with this specification. This information was incorrectly given as "Roland-licensed sounds" on the press release. In fact, the sound chip itself is not licensed from *nor* made by Roland.

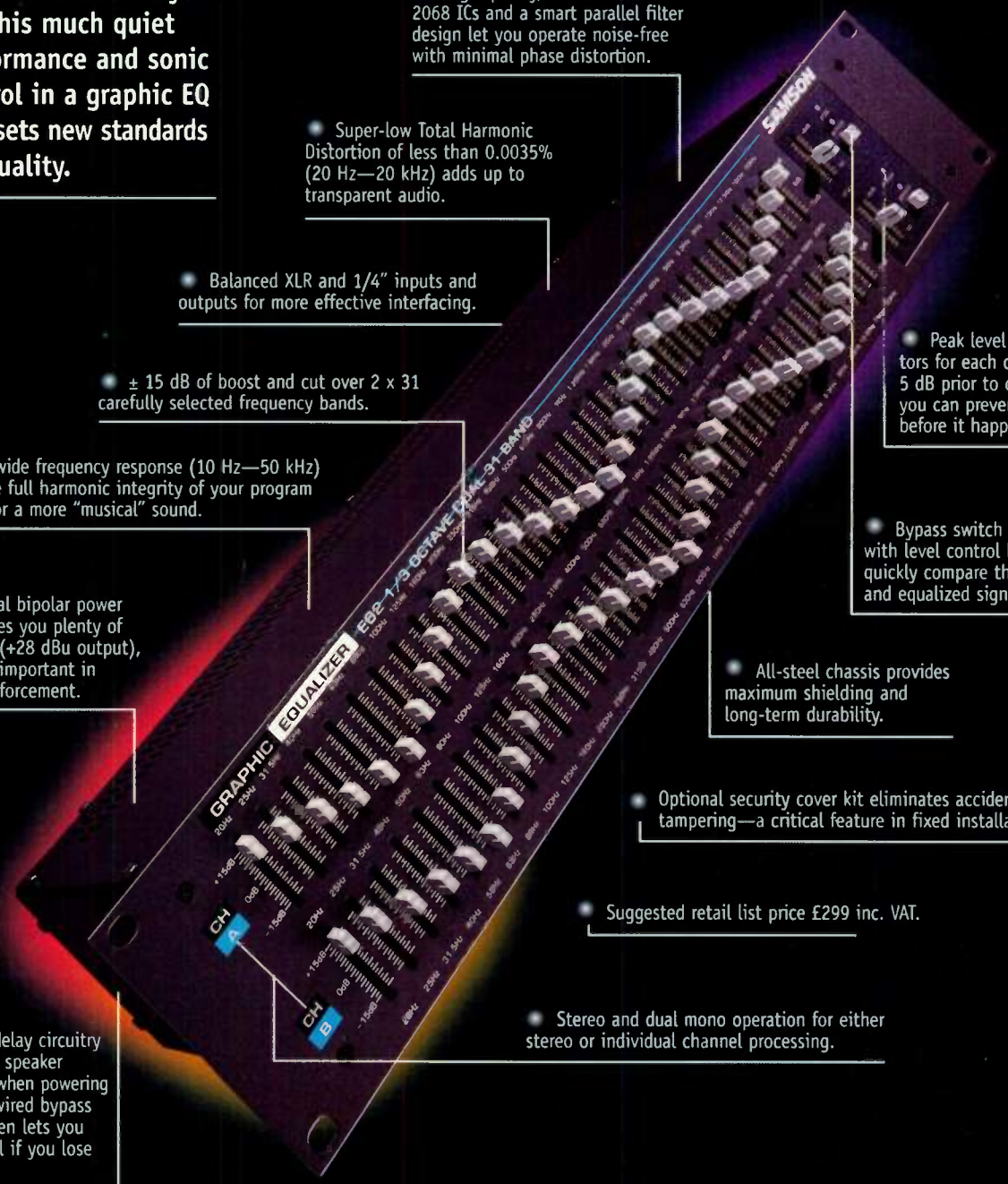
I apologise if this has caused any confusion, and would be grateful if you would print an erratum at the earliest opportunity.

Mike Partridge
Midiman UK ❑

QUIET CONTROL.

E62 DUAL 31-BAND 1/3 OCTAVE GRAPHIC EQUALIZER

- **Never before could you get this much quiet performance and sonic control in a graphic EQ that sets new standards for quality.**
- High-quality, low-noise NJM 2068 ICs and a smart parallel filter design let you operate noise-free with minimal phase distortion.
- Super-low Total Harmonic Distortion of less than 0.0035% (20 Hz—20 kHz) adds up to transparent audio.
- Balanced XLR and 1/4" inputs and outputs for more effective interfacing.
- ± 15 dB of boost and cut over 2 x 31 carefully selected frequency bands.
- Extra-wide frequency response (10 Hz—50 kHz) retains the full harmonic integrity of your program material for a more "musical" sound.
- Internal bipolar power supply gives you plenty of headroom (+28 dBu output), especially important in sound reinforcement.
- Time-delay circuitry eliminates speaker "thumps" when powering on. Hard-wired bypass feature even lets you pass signal if you lose power!



- Peak level LED indicators for each channel light 5 dB prior to clipping so you can prevent distortion before it happens.
- Bypass switch coupled with level control lets you quickly compare the direct and equalized signal.
- All-steel chassis provides maximum shielding and long-term durability.
- Optional security cover kit eliminates accidental tampering—a critical feature in fixed installation use.
- Suggested retail list price £299 inc. VAT.
- Stereo and dual mono operation for either stereo or individual channel processing.

SAMSON

© 1996 SAMSON

WHAT'S NEW?

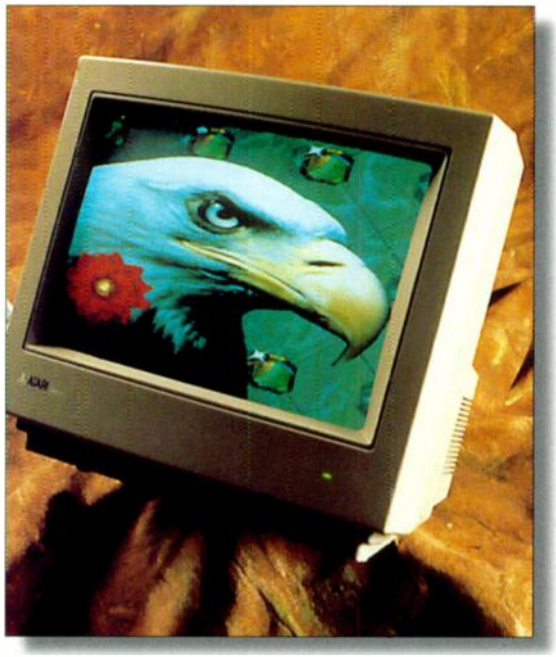
The E30 Dual 15-Band 1/2 Octave Graphic EQ. Same comprehensive control, super-quiet performance and crucially important features as the E62. £219 inc. VAT.

Sound Technology plc
Letchworth Point, Letchworth, Hertfordshire, SG6 1ND England
Tel: +44 (0) 1462 480000 Fax: +44 (0) 1462 480800

Crosstalk

freedom of the press to tell it like it is — I just worry when someone tells it like it might be on the Mac, when they are supposed to be telling you how it is on the Atari platform.

Paul Wiffen
Digital Media



I write as an advertiser in *SOS* to question the content of Atari Notes, currently written by Ofir Gal. The words 'turncoat' and 'judas' spring to mind concerning the way he seems to be turning away from the machine which I presume has made him a lot of money...

At this juncture, let me state that my business is mainly involved in *Cubase* and music on the ST, so my comments should be taken in this context...

March's Atari Notes is mostly Falcon-orientated... and April's Atari Notes was full of info of little use to a muso (multitasking and Magic, which no self-respecting user would try to use with *Cubase*...) In May, the article again has nothing of value to the musician...

Finally, to June. *Surely* this Atari Notes was meant for the Mac Notes page. Nothing for the Atari musician — just 'buy a Mac'. Ofir Gal is taking money under false pretences if he thinks this irrelevance is of use to an Atari user...

We can keep the ST running for another 10 years. It does the job, and on value-for-money grounds alone deserves better treatment than given by recent articles. I suggest Ofir re-reads Vic Lennard's last few Atari Notes and continues in that vein, instead of undermining the ST simply to fill column inches...

Barrie Heywood.
Keychange Music Services
Cheshire

Ofir Gal replies: *I must say I'm surprised with the responses I got to my Atari Notes column. In the first letter, Paul disputes the prices I quote. I always quote recommended retail prices, and as any* SOS *reader knows, you can always get a better price in the shop. Would it be any fairer to compare Mac retail prices with Atari discount prices?*

Paul may also think that musicians are not interested in the Internet or desktop publishing. Well, my band is just about to release an album and we found the Mac very handy. It was used to design the CD cover and booklet as well as taking care of more mundane tasks like sending faxes. The various music and MIDI-related areas on the Internet are extremely busy, so someone out there must be using it. Most of the specific examples he gives, the ability to burn an audio CD-ROM for example, have been available on the Mac for some time.

Mr. Heywood accuses me of writing about things that no "self-respecting muso" will want to use. Well, if the muso is working, he may well be using his Atari for writing invoices, keeping a database of contacts and even doing his accounts.

What Mr Heywood seems to forget that unlike the Atari market which he is involved in, the rest of the computer industry has moved on. There's no point referring to Vic's old Atari Notes — things were different then, and both Vic and I held a more optimistic view of the Falcon. Vic has since sold his Falcon — I still use my Atari. It is sad, but the ST/Falcon-related press releases and product announcements are not exactly pouring in.

I believe that my piece simply stated facts about the Falcon and computers in general. Indeed, I sum up my article by saying that the Falcon does its job well, and you should only look at the alternatives if you need the extra features they offer. My real intention was to bring the availability of two fine products, namely MagiC Mac and GEMulator, to the attention of the reader. I spend a considerable amount of time each month searching for interesting new Atari-related products. I trust both Paul Wiffen and Barrie Heywood will keep me abreast of new developments, so that I can continue to report Atari news to the readership.

Editor Paul White adds: *While I concede that June's Atari Notes included certain negative comments about the Atari platform, I feel that Ofir made a number of valid points — remember that Atari Notes is there to provide information to broaden the knowledge of Atari users, not to try to persuade them to use the platform, or to abandon it for that matter. After all, look at how many Mac magazines ran in-depth articles on Windows 95 when it first came out! Column writers invariably hold personal opinions, and I expect their copy to reflect what they would say if someone asked their advice privately.*

I have an Atari ST of my own running C-Lab's Creator *software, and it has given me reliable service for almost a decade, but most of my work is now done on a Mac running Emagic's* Logic *or* Logic Audio. *The Atari delivers wonderful performance for its price, but after working with a Mac, the Atari feels horrendously clunky. Ofir made a fair point about Atari users being able to upgrade to the Mac without too much pain, because the Atari operating system is, conceptually, very similar. Indeed, that's exactly why I went the Mac route. To use a car analogy, the Atari is like an old VW Beetle — it is reliable, inexpensive to run and goes on forever, but after driving an executive saloon for a few weeks, the Beetle's hard ride, manual-wind windows, noisy engine and non-power steering suddenly look rather crude. Even so, it will still get you from A to B, and will, as Barrie Heywood suggests, probably continue doing so for the next 10 years or more.*

In past issues of SOS, *you will have noticed a number of anti-Apple digs in Apple Notes, while the frustrations of PC ownership surface in various parts of the mag, not just in PC Notes! No computer ever built is above criticism. Our aim is to present the facts as we find them, and the truth is that* all *of the major computer platforms have flaws. These are often most serious when you try to indulge in hard disk recording — a significant percentage of the readers' queries I get concern hard disk 'MIDI plus Audio' sequencers that either refuse to work at all or deliver sub-standard (and/or unstable) performance when they* do *work. Of the calls I receive, those concerning Falcons tend to be rather more numerous than the machine's market share might suggest, whereas almost nobody calls with Atari ST problems.*

Of course, where there are problems, there are solutions, so if any of the manufacturers out there would like to let us in on the workarounds for the various problems rather than simply pretending they don't exist, we'd have a lot more positive things to put in SOS*'s Computer Notes pages!*

true 4-bus design • AFL/PFL • swept mid eq • 16 mic preamps

MORE BUSES, MORE PREAMPS, MORE EQ, MORE FEATURES. INTRODUCING THE NEW CR1604-VLZ.

Five years of user input, new materials, new technologies and the soul of our 8•Bus...at a super-low price.

The original CR-1604 defined the modern compact mixer. Now we've "raised the standard" by adding over 20 new features like true 4-bus design, our famous mic preamps on every channel, flexible routing and monitoring, and swept mid EQ — for just scarcely more than the original CR-1604. Call for a free 40-page brochure.

16 STUDIO-GRADE MIC PREAMPS *means the new CR1604-VLZ actually costs less than our classic CR-1604 & XLR10 expander combination!*

VLZ (Very Low Impedance) CIRCUITRY *developed for our 8•Bus consoles, further reduces noise and crosstalk in critical signal path areas.*

SOLID STEEL *main chassis.*

SEALED *rotary controls.*

TRIM *control on the channel strip! 60dB total mic gain; –10dB "virtual pad" for line inputs.*

6 AUX SENDS *per ch. Aux 1 & 2 switch-able pre/post. Post-fader Aux 3-4 /5-6 selectable via Shift switch.*

HI EQ. *±15dB shelving at 12kHz.*

SWEEPABLE MIDRANGE. *Wide, musical peaking EQ with 100Hz to 8kHz range. ±15dB range.*

LO EQ. *±15dB shelving at 80Hz.*

LOW CUT FILTER *is a must for live sound and acoustic (microphone) recording. Sharp, 18dB/octave @ 75Hz high-pass filter lets you add Lo shelving EQ to vocals without boosting undesirable mic thumps, stage rumble, wind noise, P-pops, etc.*

PAN *control with constant loudness to maintain stereo perspective.*

MUTE *switch.*

MUTE & OVERLOAD *LED.*

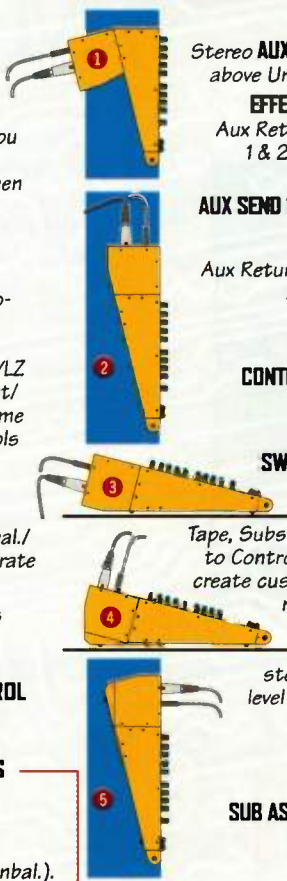
–20dB SIGNAL PRESENT *& SOLO LED.*

SOLO. *In-place AFL or PFL.*

BUS ASSIGN *for Subs 1-2, 3-4 & Main L/R.*

60MM FADERS *with 8•Bus log taper, special lip seal & long-life wiper material.*

5-WAY PHYSICAL CONFIGURATION *via our famous rotating input/output "pod." In minutes you can switch the CR1604-VLZ between ultra-compact 8-rack space configuration with pod to back ❶, rackmount jacks-to-top ❷ or tabletop/jacks-to-back ❸. Optional RotoPod-VLZ bracket places input/output jacks on same plane as the controls (tabletop ❹ or rackmount ❺).*



MONO OUTPUT *(bal./unbal.) has separate level control.*

RCA TAPE *inputs and outputs- (unbalanced).*

Separate **CONTROL ROOM OUTPUT** *(bal./unbal.).*

DIRECT OUTPUTS *(bal./unbal.) channels 1-8.*

SUBMASTER OUTPUTS *(bal./unbal.).*

AUX SEND 1 & 2 MASTERS.

Stereo **AUX RETURNS 1 & 2** *with 20dB gain above Unity for boosting weak effects.*

EFFECTS TO MONITORS *controls fold Aux Return 1 & 2 back into Aux Sends 1 & 2 so that on-stage performers can hear effects.*

AUX SEND 1 & 2 SOLO *switches with LEDs.*

Stereo **AUX RETURNS 3 & 4.**

Aux Return 3 **ASSIGN SWITCHES** *to Main Mix, Subs 1 & 2 or Subs 3 & 4.*

Aux Return 4 **ASSIGN** *to Control Rm/Phones.*

CONTROL ROOM/PHONES *level control.*

TAPE INPUT LEVEL *control and* **TAPE TO MAIN MIX** *switch.*

SWITCHING MATRIX. *This fantastic creative feature lets you route any combination of Tape, Subs 1 & 2, Subs 3 & 4 or Main Mix to Control Room/Phones bus. Lets you create custom headphone or broadcast mixes, monitor 2-track output or route a cue/click track to phones, create a second stereo main output with its own level control & more (covered in the extensive manual).*

Global **SOLO** *level control.*

Global **AFL/PFL SOLO** *switch.*

SUB ASSIGN *to Left or Right Main Mix.*

MAIN MIX FADER.

BNC *lamp socket.*

Global **AUX RETURN SOLO** *with LED.*

LED **METERS** *with –30 to +28 range &* **LEVEL SET** *LED.*

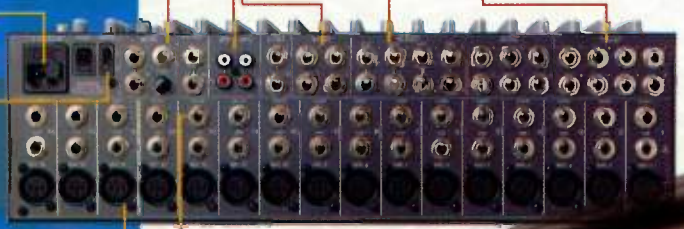
RUDE SOLO *LED.*

HEADPHONE *output.*

60mm **SUB-MASTER** *log-taper faders.*

BUILT-IN *power supply.*

PHANTOM POWER *switch*



Studio-quality **DISCRETE MIC PREAMP** *on every channel.*

Pre-fader **INSERT** *on every ch.*

©1996 MACKIE DESIGNS INC.
ALL RIGHTS RESERVED

MACKIE.™

Mackie Designs Inc. • USA • Represented in the UK by Key Audio Systems Ltd.
Robjohns Road • Chelmsford • CM1 3AG • Essex • 01245 344001 • 01245 344002

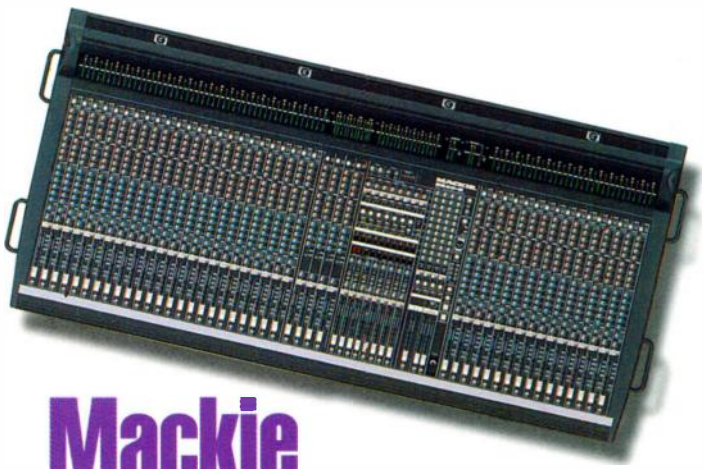
shape of things to come

by Derek Johnson & Debbie Poyser

The X (Music) Files

Bristol-based music equipment retailer X Music have announced the winner of their 'extremely silly' photo competition. Jason Pegg of Brighton netted himself a Roland MS1 sampler by simply sending in the rather odd photo of himself shown below — well, we assume it's him, anyway... Not known for resting on their laurels, X Music have already outdone the splendid silliness of their photo competition with the premise behind their *new* competition. It's very simple — essentially, the person who is deemed to have sent the most unpleasant, smelliest pair of socks to X Music (remember, X Music, *NOT* the *SOS* offices — we're very keen to stress that) wins themselves a pair of Spirit by Soundcraft's new Absolute Zero monitors. Phew! *SOS* staff are just glad they don't have to judge *that* one... And what happens if you only send in one sock? Do you only get one monitor? We think we should be told...

A X Music, 20 Cotham Hill, Cotham, Bristol BS6 6LF.
T 0117 973 4734.
F 0117 973 4800.



Mackie mixes with Digidesign

Mixer manufacturers Mackie Designs and digital recording specialists Digidesign have announced that they are to jointly develop a "low-cost" hardware control surface for Pro Tools, as well as other DAE-based products. Scheduled for release later this year, the new product will feature touch-sensitive moving fader technology, transport controls, and basic editing facilities. More details when we get them.

Back in the world of hardware mixers, Mackie's latest design is the SR40•8, a large-format, 'centre master section'-style sound reinforcement console with full mute automation. The new desk claims to offer the features found on a $20,000-$40,000 desk for substantially less — in the region of £8,500 in the UK. Improvements in manufacturing technology have allowed Mackie to achieve significant savings. Yet the desk is still fully featured, and includes a 12 x 4 matrix section, eight aux sends, 4-band EQ (with swept hi- and low-mids), comprehensive talkback, and much more.

A Key Audio Systems Ltd, Unit D, Chelford Court, Chelmsford, Essex CM1 3AG.
T 01245 344001.
F 01245 344002.

SOS can be reached on CompuServe; our e-mail address is 100517,1113.

Our full Internet address is 100517.1113@compuserve.com.

Michael Gerzon (1945-1996)

Renowned Oxford-based mathematician and scientist

It is with great sadness that Waves announces the passing on May 6 of Michael Gerzon, the inventor of many key technologies behind Waves' DSP software. Michael Gerzon was 50 years old and had suffered from severe asthma for many years.

Mr Gerzon graduated from Oxford University in 1967 and did post-graduate research in axiomatic quantum theory there. He undertook extensive research in psychoacoustics and was awarded an AES Fellowship for work on directional psychoacoustics in 1978. He also had extensive practical live recording experience in classical, jazz, improvised and rock music, including several LP and CD issues. He was the co-inventor of the Soundfield microphone and was deeply involved in its development. He was also the main inventor of the Ambisonics technology for surround sound, under the auspices of the British Technology Group.

In 1971 and 1976, he published papers on multi-channel versions of the Schroder-Loagan algorithms for 'unitary' networks. This was the basis for the Waves *TrueVerb* and other future products. Mr Gerzon formulated all mathematical and physical models of Ambisonics, for which he was awarded the AES Award for Excellence in 1992.

Michael Gerzon had endless creativity, ideas and enthusiasm for his work. He did not need much for himself and truly worked out of enjoyment, together with a strong sense of mission.

FAR out speakers from Belgium

Stockport's Axis Audio Systems have announced the availability of a range of professional monitor speakers from Fundamental Acoustic Research (FAR) of Belgium. Axis are to undertake exclusive UK distribution of the range. Seven models are available, from the CR10 compact 2-way nearfield monitor, with a 5-inch LF driver and a retail price of £499, through the larger 2-way CR20 and CR40, with 7-inch and 8-inch LF drivers respectively, at £799 and £699 (the more expensive CR20 has a Kevlar HF cone), up to the top of the range DbW200, a 3-way model with dual 12-inch bass drivers, at £4569. In the middle of the range are 3-way models costing £1485, £1995, and £3995. Prices include VAT and are per pair.

All the models above come in soft black or blue finishes, but other custom colours are available at a small extra charge. Contact Axis for more info or a brochure.

A Axis Audio Systems Ltd, 3 Waterloo Road, Stockport, Cheshire SK1 3BD.
T 0161 474 7626.
F 0161 474 7619.

Shelter stage house night for homeless

It's a little known fact that Bristol has the second highest number of homeless people in Britain outside London. In an attempt to fight the complacency amongst 'young people' when faced with youth homelessness, the volunteers at Shelter's Housing Aid Centre in Bristol are arranging a club night at the New Trinity Community Centre. Trinity is apparently a popular local night club, and Shelter have got the venue for free (apart from security and equipment hire). The club holds 950 people, and DJs already agreeing to appear for free include Andy Weatherall and Justin Robertson. Other national and local DJs are yet to be confirmed — there may well be more famous names to come. The date to put in your diary is October 26; contact Shelter in Bristol for further details. Ticket prices have yet to be set — again, contact Shelter for details.

The group are also looking for a PA for the night, so if anyone in the industry thinks they can help, the team would be more than happy to hear from you.

A Shelter Bristol Housing Aid Centre, 3rd Floor, Sterling House, Fairfax Street, Bristol BS1 3HX.
T 0117 926 8115.
F 0117 926 8617.

Sounds of summer: Dance-tech '96

Soundivision Ltd, in association with the Mean Fiddler and Universe Organisations, have announced Dance-Tech '96, an exhibition dedicated to DJs, remixers and producers. The event, which is officially sponsored by Roland UK and *DJ* magazine, will offer attendees the opportunity to see, hear and demo the latest dance music-orientated products. Hi-tech manufacturers showing their wares include Roland, Yamaha, Akai, Korg, Emu and Novation; suppliers of DJ products at the event include Technics, Vestax, Pioneer, Denon, and Gemini.

Dance-Tech '96 takes place at the new Complex Club at 1-5 Parkfield Street, Islington, from 1pm to 6pm on July 7. Entry is £3 in advance or £3.50 at the door. All visitors will have the chance to enter a draw for six Complex VIP tickets, a Roland JS30 sampler and six annual subscriptions to *DJ* magazine.

A Soundivision, Adelaide House, 383-385 Liverpool Road, Islington, London N1 1NP.
T 0171 609 6639.
F 0171 609 1310.

L-R: Soundivision's David Graham (MD) and Paul Harris (hi-tech and studio manager) with Universe Organisation's Chris Birch (marketing) and Ian Jenkinson (co-director).

caught in the net

WEB MASTER
UK mixer manufacturers Studiomaster have a new web site featuring a full catalogue of the Studiomaster range. The site will also contain regularly updated news pages with information on forthcoming products and other fun stuff. Surf on down to:
http://www.studiomaster.com

XG FAQ — FAB!
Yamaha have launched an XG home page on the world wide web. The new site offers information about the latest XG instruments, an explanation of the XG format and a comprehensive XG FAQ (Frequently Asked Questions) section. There's also an XG Library of downloadable MIDI song file data and MIDI clips, which will be regularly updated. Note that the site doesn't offer technical support, but Yamaha say the information available could answer many XG-related questions. You can find the XG home page at:
http://www.yamaha.co.uk/

CYBER SPACE FROM TC ELECTRONIC
TC Electronic's TC CORE (Co-efficient Optimised Room Emulator) Reverb v2.0 for the M5000 Digital Audio Mainframe can now be downloaded by M5000 users, free of charge, from TC's web site. All M5000 users who purchased and registered their M5000 before April 3 of this year will receive the v2.0 software by mail, but future software updates will only be available via the TC web site. The new software features small room and plate reverbs and is the first in a series of CORE reverbs.
Head for:
http://www.tcelectronic.com

shape of things to come

Observant readers of last month's Effects Buyers Guide will have spotted a change of UK distribution for ART effects. We can now confirm that Key Audio Systems are exclusive UK distributors of the redesigned ART range.
T 01245 344001.

Voyager Media are compiling unsigned artists onto CD compilations; the compilations will be grouped into three categories — Dance/Pop, Rock/Indie/Guitar, and Miscellaneous. There is a charge for the service — £117.50 including VAT per track. This entitles the customer to receive 14 copies of the CD, which will be packaged with artwork and band information.
T 01382 205100.

Alan Parsons has recently begun recording a new album (his 20th), and will be using a range of Audio Technica mics to get the job done. AT4050s will be used as drum overheads, vocals and piano mics, while AT4051s will be used on guitar cabs. Alan has been a fan of Audio Technica mics for several years, and used the company's mics exclusively on his recently-completed world tour.
T 0113 277 1441.

Mastering and post-production house The Digital Audio Company have launched a new CD manufacturing service. Previously, the company was involved in mastering and transfers for CD production, but now they've responded to customer demand and can handle the whole process, from raw session master to delivery of the finished product. The Digital Audio Company creates CD masters on Exabyte — "to ensure data integrity" — although CDR and 1610 remain available, and the company will continue to provide mastering and transfers to anyone with their own manufacturing arrangements.
T 01756 797100.

US company BBE, manufacturers of the Sonic Maximizer range of psychoacoustic enhancers, have published a glossy new brochure with details of the whole Sonic Maximizer range, plus BBE's two acclaimed instrument preamps. The brochure also includes an explanation of how the BBE system works to improve the sound of recordings. You can get your copy from UK distributor MAD, at the address below.
A Music & Audio Distribution, 10 Station Parade, Willesden Green, London NW2 4NH.
T 0181 452 1009.
F 0181 452 9019.

Orbital programme the future with Prophecy

While working on their most recent album, *In Sides*, Paul and Phil Hartnoll — better known as Orbital — took delivery of a Korg Prophecy physical modelling synth. The duo have made use of the sonic potential of the Prophecy on the new album.

Still on the Prophecy front, Korg UK have released two new banks of sounds for the synth. Titled 'Analogue and Vintage Sounds' and 'Modern Models', both the new banks make full use of the Prophecy's five different virtual synthesis methods, and are available as either RAM (£89) or ROM (£50) cards.

A Korg UK, 9 Newmarket Road, Kingston, Milton Keynes MK10 0AU.
T 01908 857100.
F 01908 857199.

Crimewatch SOS

Thieves struck at the Barnet branch of Digital Village over the weekend of 25th-26th May. The following new gear was taken:

Two Akai Remix 16 samplers; Akai CD3000i sampler; Akai S3200XL sampler; two Fostex DMT8 digital multitracks; two Fostex D80 digital multitracks; two Roland VS880 digital recorders; Roland DM80 digital recorder; Roland JV1080 synth module; two Roland Dance and two Orchestral synth expansion boards; Roland Vintage and Roland Dance Sound Expansion series sound modules; three Oktava MK219 mics; two Audio Technica ATM series mics; Phonic UM97 mics; one Iomega Jaz drive; three Mackie 1402 mixers and one Mackie 1604 mixer; one pair of Spirit Absolute 2 monitors; Technics WSA1R synth module; four Tascam DA20 DAT recorders; two Emagic *Logic* and two *Logic Audio* sequencer packages; Shure SM57 and SM58 mics; ART Tube MP mic preamp; MIDIMan MacMan MIDI interface; an 80MHz Apple Mac 7100, with 8Mb of RAM, a 500Mb hard disk, and a CD-ROM drive; two Korg 05R/W and two X5DR synth modules; four 270Mb Syquest cartridges; 10 100Mb Zip cartridges; and three 135Mb EZ cartridges.

If you are offered any of the above in suspicious circumstances, or know anything that might help, Ray Edwards of the Digital Village would love to hear from you on 0181 440 3440. Alternatively, give the details to the officer in charge of investigating the break-in, DC Pleece (and yes, that *is* his real name!) at Whetstone police station (0181 733 5206).

During the same incident, reader Alan Broadbent also lost his Roland DM800, which was on the Digital Village premises awaiting repair. There are one or two distinctive points about his unit which might make it easy to identify: firstly, it is equipped with the new v2.01 operating system, which few units have as yet; secondly, it has two internal 500Mb hard drives, one of which is not working; last but not least, it has a serial number of H30558. Please call Alan on 01959 571548 if you know anything that might help.

Spirit Absolute 2 shattered the complacent world of nearfield monitoring, rapidly becoming the preferred choice of professional studios around the world. Now you can get the Absolute sound in a smaller 95W per side package.

Absolute Zero delivers crisp, full-bodied audio in a surprisingly small-footprint, low cost, speaker. The sturdy, no-compromise design produces the consistent, high quality results you'd expect from Spirit – and at the ridiculous price point of around £200 including VAT.

Whatever the use, studio monitoring, installed sound systems or even with a hi-fi, play it cool with Absolute Zero.

Cool me down with more information on Absolute Zero.

Name: .....

Address: .....

.....

.....

Which magazines do you read regularly? .....

.....

I will use my Absolute Zeros for:

.....

SPIRIT
By Soundcraft
A Harman International Company

http://www.spirit-by-soundcraft.co.uk

Spirit by Soundcraft™,
Harman International Industries Ltd.,
Cranborne House, Cranborne Industrial Estate, Cranborne Rd, Potters Bar, Herts EN6 3JN, England. Tel: +44 (0)1707 665000.
Fax: +44 (0)1707 665461.

SO3

shape of things to come

Akai DD1500: Major update

Akai have announced a set of major enhancements for the DD1500 Digital Audio Workstation, with the release of software version 2.00. The new version adds five DSP (Digital Signal Processing) functions — Timestretch, Pitch-Shift (both with a range of -50% to +200%), Varispeed, EQ (with six filter types) and Reverse. The DSP functions are 'off-line' (ie. non real-time) and available on complete edit ranges (so you could timestretch a cross-section of all 16 tracks, for example, if required).

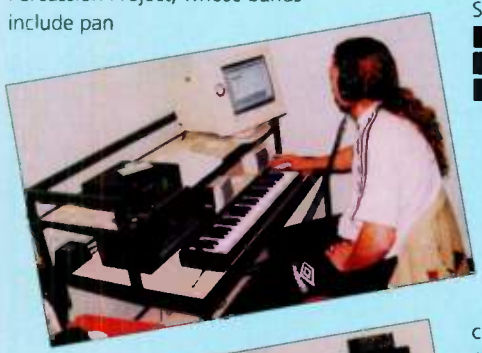
Version 2.00 also includes a flexible Autoconform package, which supports most known EDL (Edit Decision List) formats. Video edits can be shown on a spare audio track, and the EDL can be edited graphically before audio is conformed into the DD1500. Audio can be conformed by Track, Cue, Reel number or selected region. The DD1500's backup options are also enhanced by the new software, which supports the newer generation of 4mm and 8mm tape drives. DD1500 prices start at around £12,000 plus VAT for a 16-track system with mix outputs and a 2Gb hard disk.

The BBC obviously find the DD1500 just right for their broadcast production needs: various BBC departments have taken delivery of no less than four DD1500 systems to go with the ones they already have.

A Akai (UK) Ltd, Haslemere Heathrow Estate, The Parkway, Hounslow, Middlesex TW4 6NQ.
T 0181 897 6388.
F 0181 897 1508.

education corner

LOTTERY WIN FOR ESTOVER

Estover Community College in Plymouth has won £720,000 from the National Lottery for a new community music centre in the South West, to be called The Soundhouse. The College will develop the new centre in partnership with the acclaimed Estover Percussion Project, whose bands include pan

ensemble Real Steel, junk-funk outfit Weapons of Sound, and the 50-piece street band Jam Samba.

The Soundhouse, to open in 1998, will be equipped with a digital 24-track studio, plus performance and rehearsal spaces. This will allow the College to develop its portfolio of Music & Technology courses, currently being run in cramped though well-equipped accommodation. Courses currently on offer include the Music & Technology Training course (MATT); Introduction to MIDI; A-level Music Technology; and, from September, GNVQ Performing Arts. Additional units on the MATT course include ABRSM Exams and Trinity Rock School.

T Dave or Alex, 01752 781714.
F 01752 788569.
E 100764.3151@compuserve.com

WEEKEND BREAK WITH SONE AUDIO

Sone Audio Training are offering a range of weekend-long, hands-on training courses designed for those who wish to further their knowledge of recording and music technology. All aspects of the recording chain from mics to mastering will be covered. The course is supported by Soundcraft and uses facilities provided by the London College of Music and Thames Valley University.

A Sone Audio Training, Down To Earth Centre, Broadway, London E15 1NG.
T 0181 534 6605.

YORK UNIVERSITY'S COMMUNITY SERVICE

The University of York is to introduce a new MA course in Community Music — the first to be offered by a British University. It will be a part-time course starting in October, and is based on a series of short modules, some academic and some vocational. The course is designed to meet the needs of students who are developing music skills in a community setting, such as a school, youth club, hospital, day centre, or prison. York Music Department's past work in Community Music has included training BBC orchestras to work in schools, training prison staff to use music in their work with prisoners, and running vocational courses in music technology for the young unemployed. Students will follow both core modules and options, often including practical placements, and will also submit a research project.

A Department of Music, University of York, Heslington, York YO1 5DD.
T Bruce Cole 01904 433957.

LEWISHAM GOES LIVE

From Autumn, Lewisham College will be offering two new BTEC courses: the National Diploma in Film & Television and the National Diploma in Sound Recording and Broadcasting Media. Other courses available this year are one-year Foundation and Access courses and a two-year National Diploma in popular music, and the college also offers City & Guilds and London Open College Federation courses in sound engineering.

Bands composed of 1996 Lewisham students are playing live at the Albany Theatre, Deptford, London, on 25th and 26th June. Styles will range from soul, jazz and rock to reggae and world music. College tutors will also be at the Albany to give information on courses at Lewisham College, so it's an ideal

USA: Heavenly's final frontier

Heavenly Music UK are pleased to announce the immediate US availability of their range of building block software, via an exclusive distribution deal with Tran Tracks US. Tran Tracks introduced Heavenly's products at the recent NAMM exhibition. Having pioneered the market in the UK and Europe in 1992, Heavenly now see the US as ripe territory for their acclaimed high-quality MIDI file productions.

Back in the UK, Heavenly have a range of new products:

• The new Professional Song File compilations are aimed at the gigging musician. Each compilation contains two 5-song sets with a focus on a particular style — Motown, Beatles, Dance, Rock, and so on. The introductory price per disk is £14.99 including p&p, for a limited period only.

• The Heavenly *SBK AWE32 Sound Fonts* range has been expanded with *Classic Kits* Volumes 1 & 2. Each disk contains four new drum kits for the AWE, suitable for a wide range of styles. Also coming soon is the *Fairlight II SBK* series — virtually the entire sound set of the legendary Fairlight! Classic Kits 1 & 2 cost £14.99 each, including p&p.

• *MIDIRobics* is a set of diagnostic MIDI files aimed at the serious MIDI user — useful in various situations, from setting up a multitimbral sampler to testing a complete MIDI system. Test signals for virtually every currently used controller are included. GM, XG and GS templates are provided to help with sequencing MIDI files, and there are also optimised demo files for each format, plus text files with hints and tips. Again, the price is £14.99.

• Last but not least, Heavenly are offering a collection of the most useful Windows shareware, including MIDI utilities, disk copiers/formatters, databases, calculators, PIMs, art programs, sounds, pictures — almost everything a project studio is likely to want. All applications are supplied as a self-extracting EXE, and the price is a mere £4.99.

Free demo and catalogue packs can be obtained by sending a blank (formatted) floppy disk and an A5 stamped, self-addressed envelope to Heavenly at the address below, or sending a request via email.

A Heavenly Music, PO Box 3175, Essex CO15 2RP.
T 01255 821039.
F 01255 821039.
E heavenly@ortiz.demon.co.uk

Surrey's Wychwood Recording Studio, a 24-track, ADAT-based facility which is gaining popularity with record company A&R departments engaged in artist development, has equipped its control room with a Soundtracs Solitaire 24PB console. Polygram producer Tim Laws is currently working with new artist Otis on a debut album at Wychwood. Pictured are Otis, Tim Laws (middle) and Wychwood's Richard Carson.

T Soundtracs 0181 388 5000.

opportunity for interested parties to get an idea of what can be achieved. Tickets are available from the Albany box office on 0181 692 4446. For details of courses, contact the address below.

A Information and Admissions Centre, Lewisham College, Lewisham Way, London SE4 1UT.
T 0181 694 3240.
T Freephone 0800 834 5454.

SERVICING ON COURSE FROM GATEWAY

Gateway and Kingston University's new Sound and Music Industry Service Course, due to commence this September, is to be a 2-year modular Diploma featuring modules on analogue and digital electronics; software writing and development; electronic sound processing; acoustics and listening skills; recording systems and practices; music business studies; and marketing. The course has been developed in conjunction with leading recording and music industry players, and places a strong emphasis on technical competence, technological expertise and hands-on audio experience. Gateway founder David Ward commented that: "The industry has been asking for this type of course for several years, and we are all aware of the shortage of trained service personnel... In some sectors, service personnel sit at a bench all day and change circuit boards. In our industry, service has a much higher status and consequently training needs to be at a much higher level. It is also important not to overlook the communication skills that a service engineer needs to have, particularly in recording studios."

The new course will result in a Higher Diploma in Sound and Music Industry Service and is currently going through Kingston University's quality control procedures.

A Gateway, The School of Music, Kingston Hill Centre, Surrey KT2 7LB.
T 0181 549 0014.
F 0181 547 7337.

MUSIC GOES POP IN THE MIDLANDS

Nottingham's Arnold & Carlton College is staging the second annual Music Industry Week in Nottingham this July. The four-day event is organised by tutor Carlos Thales and is aimed at anyone interested in getting into any area of the music business, including musicians, promoters and DJs. You'll be able to meet people from the industry (including representatives from labels EastWest, China, Ten and Creation), get your hands on hi-tech equipment, and take advantage of MIDI, PA and business seminars. Carlsbro Sound and the Confetti School of Recording Technology will also be involved, and this year musicians will be given a chance to perform at some of Nottingham's "leading venues".

A Arnold & Carlton College, 29 Wensley Road, Woodthorpe, Nottingham NG5 4JW.
T 0115 953 1222.
F 0115 953 1185.

MT STUDENTS SYNC OR SWIM ON ALBUM PROJECT

Music technology students at Preston College have spent the last eight months preparing a 15-track compilation CD, as part of the Sound Business Project, the major assignment in the final year of the BTEC course. The tracks, which vary from dance and pop to rock and punk, were all written, engineered and produced solely by second-year students in the college's digital studio. The money for manufacturing the CDs was raised from advance sales, a raffle and a Christmas party. The project was handled as a fully commercial enterprise, to simulate the pressures and problems found within the music industry. The CD, *Sync or Swim*, price £6.99, is available from most record stores in Preston.

A Head of Music, Sound Business Project, The Park School, Preston College, Moor Park Avenue, Preston PR1 6AP.
T 01772 254145.

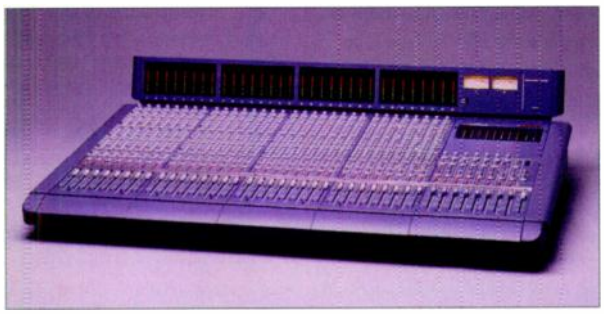
ENGINEERING AT ESSEX

The University of Essex is offering a nine-month, full-time MSc in Audio Systems Engineering. Core subjects include systems design, analogue systems, digital systems, perception of complex sounds in speech and music, theory of signals and systems, and analogue IC design. A range of specialist one-day seminars will also be provided, including loudspeaker design, surround sound systems, multimedia, valve amp design and much more, and practical work will include a technical article, teamwork, and a hardware-, software- or theoretically-based research project.

A Postgraduate Courses Admissions Secretary, Dept of Electronic Systems Engineering, University of Essex, Wivenhow Park, Colchester CO4 3SQ.
T 01206 872419.
F 01206 872900.
E esemsc@essex.ac.uk
W http://esewww.essex.ac.uk/pg-courses.html

Tascam: better, stronger, faster

Two new products from Tascam appear at opposite ends of the recording market, yet both are more in the way of enhanced, relaunched versions of established products than completely new designs. For the serious project studio owner, the M2600 MkII 8-buss desk improves upon the original 2600 (reviewed in *SOS* August 1994) by adding switchable +4dB/-10dB balanced multitrack ins and outs, refined trim control ranges and op-amp designs (for even lower noise performance), new channel inserts, and a choice of three optional meter units with high-intensity bargraphs for faster, more accurate level reading. The M2600 MkII is available in 16-, 24- or 32-input versions, with dual-path design doubling the number of inputs on mixdown. The desk is also equipped with two stereo and four mono aux sends with six stereo returns.



Also more of an updated model than a totally new machine, the 424 MkII Portastudio has been enhanced with the addition of sweep mid-range EQ, balanced XLR mic inputs, and auto punch in/out. Other improvements over the original include a new display, plus improved aux sends, metering and sync capabilities.

A TEAC UK Ltd, 5 Marlin House, The Croxley Centre, Watford, Herts WD1 8YA.
T 01923 819630.
F 01923 236290.

microphone corner

JHS: LOOK PA, NO WIRES

John Hornby Skewes' Scanner wireless mic system set a new affordable price point for wireless technology; now the Scanner II adds true diversity operation (which helps eliminate spurious signals, distortion and instability) to the Scanner specification for a total system price of just £299.

The Scanner II consists of a VHF hi-band, fixed-frequency, dual-diversity receiver with tone-squelch muting circuitry, plus a hand-held mic transmitter with Audio Technica capsule. The original Scanner is still available, providing the same facilities in a non-diversity receiver for the lower price of £199. Both systems are available on the following frequencies: 173.8, 174.1, 174.5, 174.8 and 175MHz. They're DTI-approved, and JHS have also just announced that both systems have been tested to and are compliant with EMC regulations for Radiocommunication Transmission Equipment, as is the Scanner L1 Lavalier non-diversity model (£229).

A John Hornby Skewes & Co Ltd, Salem House, Parkinson Approach, Garforth, Leeds LS25 2HR.
T 0113 286 5381.
F 0113 286 8515.

T-SERIES: SHURE THING

Shure's new series of wireless microphone systems, launched at the Frankfurt music fair, are almost £100 cheaper than their predecessors, making a Shure wireless system more affordable than ever before.

Prices for the T-series start at £305 for single-aerial models and £411 for diversity systems. The range consists of:

- The Vocal Artist, available with either the SM58 or BG 3.0 mic head.
- The Presenter, a belt-back transmitter which comes complete with the Shure WL93 Lavalier mic.
- The Headset belt-pack system, which comes with a Shure WH10 head-worn mic.
- The Guitarist, a belt-pack system with jack lead.

A HW International, 167-171 Willoughby Lane, London N17 0SB.
T 0181 808 2222.
F 0181 808 5599.

You're so square (baby I don't care)

The *Sound Cube* from Best Service of Germany is a 10-CD set of mixed-mode CD-ROMs containing a wide variety of .WAV and AIFF samples a med at multimedia developers and desktop musicians alike. Available together for £89.95, or singly for £12.95 each, the disks' titles say it all. The list includes: *Dance Instruments*, *Orchestra and Classic*, *Voice Spectral*, *World FX* (three disks), *Crash Boom Zap*, *Sound Tracks*, *Ethnic Journey*, and *Rave FX*.

A Time & Space, PO Box 306, Berkhamsted, Herts HP4 3EP.
T 01442 870681.
F 01442 877266.

Paranormal EQ

It's uncanny. The precision and sheer musicality of Ghost's EQ will take your breath away.

Drawing on 22 years of Soundcraft experience, Ghost's new EQ is perfectly in tune with today's music.

Two fully parametric, overlapping mid bands with shelving high and low filters redefine the classic British EQ.

But there's much more. Each channel strip benefits from its own dedicated circuit board and supports both the main input plus a mix B path for tape or other input signals. Ghost's flexibility and fidelity are staggering.

The signal path quiet, true and uncompromised.

And the automated mutes, just part of

Ghost's comprehensive machine control and MIDI implementation, don't so much cut, as fade very quickly. There are no thumps and no clicks.

You'll hear nothing untoward from ProMic either, Ghost's microphone preamplifier boasts a better gain to noise performance than you'd expect on consoles costing many times more.

We could go on, but to appreciate fully the ergonomic and audio integrity of Ghost you need to see and hear one in the flesh.

So call +44 (0)1707 665000 to find out more.

Soundcraft

Ghost

H A Harman International Company

HARMAN INTERNATIONAL INDUSTRIES LTD., CRANBORNE HOUSE, CRANBORNE RD., POTTERS BAR, HERTS, EN6 3JN, ENGLAND TEL +44 (0)1707 665000 FAX: +44 (0)1707 660482

shape of things to come

A new Synthesizer Club is being formed in the Bristol area. The aim is to bring together people with a common interest in creating electronic music (of the traditional Tangerine Dream/Vangelis type rather than current dance). Activities will include concerts, technical discussions, help on using synths, sequencing and recording, playing techniques, live performance. One of the club's objectives is to give electronic music exposure through concerts and recording, and a new record label is projected. A regular newsletter will be produced, and there will be a monthly meeting for members.

A The Bristol Synthesizer Club, PO Box 1414, Mangotsfield, Bristol BS17 3PZ.

T Les Bird 0117 951 5937 (eves); Andy Horrell 0117 956 1855 (days); David Hughes 01633 485927 (eves).

This month sees the launch of new company Sound Solutions, specialising in hi-tech music supplies such as sample CDs, soundcards and software. They will be offering samples from the *Creative Essentials* sample CD series on their web page; the page will be updated each week with two new samples. Also on offer will be samples from *High Wings*, designed for AWE 32 users, in .WAV format. A price list will also feature on the web site, as well as news of product releases and full details of samples available for download. Enquiries about items not listed are welcomed.

T 01403 732606.

E sound.solutions@dial.pipex.com

W http://dspace.dial.pipex.com/sound.solutions/

JBL take it on the road

The TR series of sound reinforcement cabinets from JBL have been designed to offer high quality and rugged build with an affordable price tag. JBL's proprietary protection circuitry — SonicGuard — is also new for this entry-level market; this feature limits power to the speaker under severe drive conditions and protects against thermal stress and sharp transients.

The four new cabinets are as follows:

- TR105 (£799 including VAT): a 225W stage monitor with horizontal or pole-mounting options.
- TR125 (£749 including VAT): a 225W loudspeaker.
- TR126 (£859 including VAT): a 225W loudspeaker with a flared cabinet for improved low frequency response.
- TR225 (£1049 including VAT): a 450W loudspeaker incorporating two LF drivers and improved crossover design.

A Harman Audio, Unit 2, Borehamwood Industrial Park, Rowley Lane, Borehamwood, Herts WD6 5PZ.

T 0181 207 5050.

F 0181 207 4572.

Speedy CD from TEAC

TEAC's new CD58E (£169) is an 8x CD-ROM drive that features 110ms seek time and 1200kB/second data transfer rate. It supports all standard CD-ROM formats, and is fully compatible with the following formats: Video CD, multi-session Kodak Photo CD, CD-ROM Mode 1, Mode 2, XA Ready, CDI and CD Plus. The drive also meets all specifications of the newly-formed MPC Level 3 standard and supports audio CD. The drive will also be available in a SCSI version, as the CD58S.

Also new is the CDR50S (£999 for internal kit, £949 for bare drive). This is a CD-Recordable drive with quad-speed read/write abilities. The drive features an average access time of 220ms, a 1Mb buffer, and high-speed SCSI-2 interface. The 4x performance enables the drive to process 650Mb of data in 15 minutes, and read all CD-ROM formats at quad speed.

A TEAC UK Ltd, Data Storage Division, 5 Marlin House, The Croxley Centre, Watford, Herts WD1 8YA.

T 01923 225235.

F 01923 236290.

musicians wanted!

WIN A RECORD CONTRACT

UK independent dance label Chemical Honey are on the lookout for demos from artists involved in all areas of dance music, including techno, leftfield, jungle, drum & bass/breakbeat and experimental. To add a little more spice to the proceedings, the artist who sends the best demo the company receive will be given the opportunity to professionally master their tracks and sign a recording contract with the label. In case you're wondering what kind of people you might be signing with if you were lucky enough to win, the label philosophy is "to challenge the boundaries of currently accepted forms of music and provide its artists with the security and resources to be freely innovative and forward thinking."

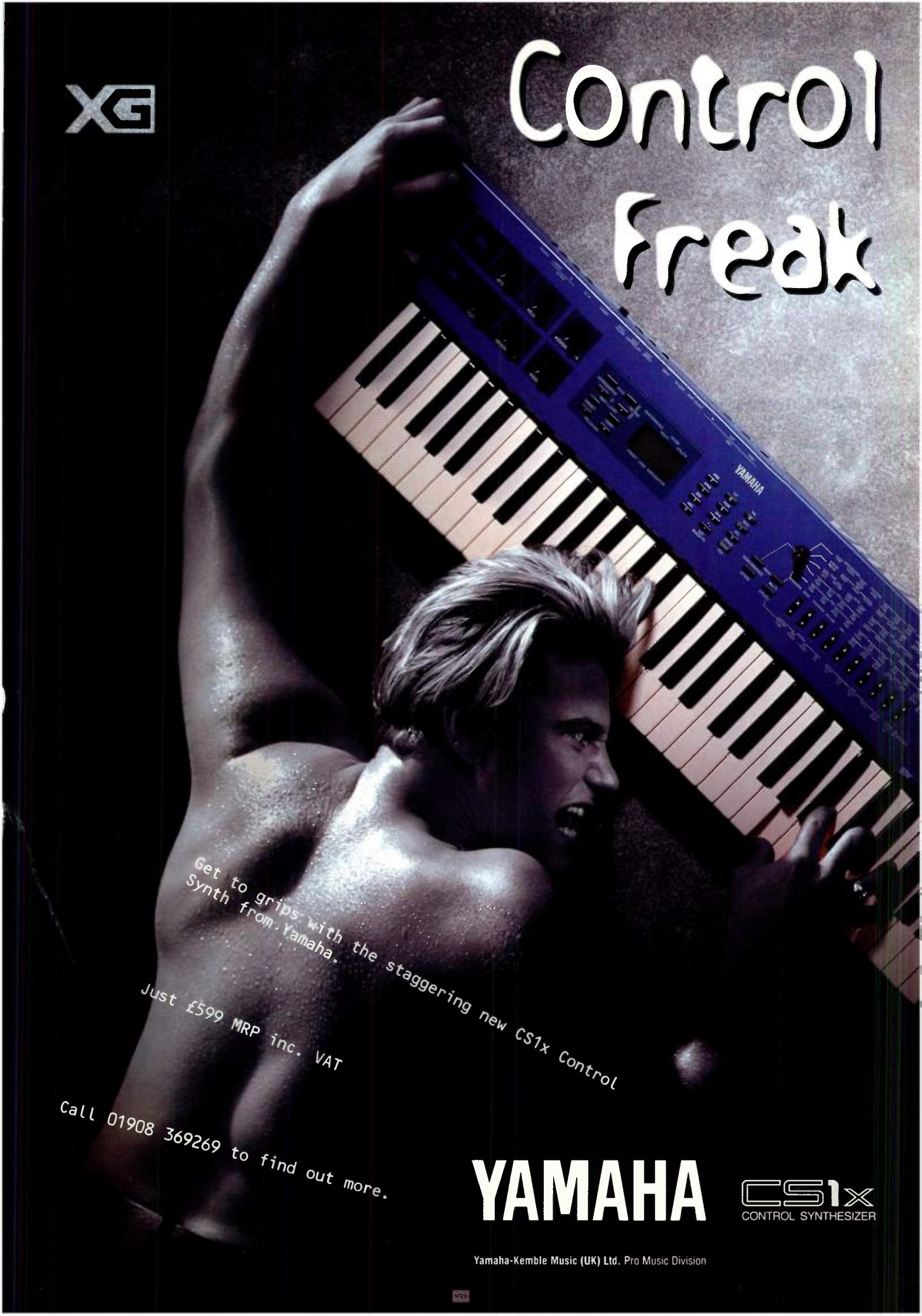
Chemical Honey are currently enjoying success with artists The Mad Dog Reflex and Carbon Unit, and are being very well received by the press and DJs alike. They're waiting for your demos...

A Chemical Honey Records, The Little House, Elsynge Road, London SW1 2HP.

SUS MUSIC SEARCH FOR TALENT

Producer David Yorath's production company SUS Music is also looking for some help in locating new talent. They've launched a search for new artists to form the basis of projects for 1996. Having had success producing artists from overseas, David, who owns the well-known Surrey Sound professional studio, now wants to make a dent in the home market, and is looking for demos from you. He doesn't mention what style, so presumably is open to whatever is out there. What are you waiting for? Tapes or requests for further info, by post only please, should be sent to the address below.

A David Yorath, Surrey Sound Studios, 70 Kingston Road, Leatherhead, Surrey.


XG
Control Freak
YAMAHA
Get to grips with the staggering new CS1x Control Synth from Yamaha.
Just £599 MRP inc. VAT
Call 01908 369269 to find out more.
YAMAHA
CS1x
CONTROL SYNTHESIZER
Yamaha-Kemble Music (UK) Ltd. Pro Music Division

shape of things to come

Hard cards and soft synths from Yamaha

And now for something truly summery: the builders of the world's largest snow castle, at Kemi in Finnish Lapland — as recognised by the Guinness Book of Records — used a Spirit Folio Lite to mix the music and announcements within the large ice arena. Over 400 metres of ice walls and 200 ice sculptures surrounded the mixer, which performed "perfectly". The event was a joint project between Kemi and UNICEF, which is celebrating its 50th anniversary this year.

T 01707 665000.

Calum Malcolm, Edinburgh-based producer of The Blue Nile, Runrig and Simple Minds, has recently bought a pair of Tannoy AMS8 active nearfield monitors for use as part of his mobile recording system. Calum notes: "They are small and light, and sound so natural." The mobile setup allows Calum to turn almost any location, from theatres to country houses, into an effective recording environment.

T 01844 261896.

The first release on Tangerine Dream's own TDI record label is a collection of club-friendly dancefloor remixes of classic TD material. *The Dream Mixes* is "a double CD at a single price", according to UK PR and Marketing company Frontline. Contact Tim on the number below for more details.

T 0181 659 3202.
F 0191 512 1104.

New from Yamaha Media Technology is the SW60XG, the first ISA-bus card from Yamaha to feature their acclaimed XG (Extended General MIDI) sound set. The card features no less than 737 instrument samples, plus 21 drum kits, three independent 24-bit effects processors, and an 18-bit output stage. It's GS/GM- and XG-compatible, naturally, and runs well, according to Yamaha, under both Windows 95 and Windows 3.1. Installation takes only a few seconds, as no IRQ or DMA channel is used. The SW60XG package will include an as-yet unnamed but "world leading" sequencer program, and comprehensive editing software. Recommended retail price is £152.

A fascinating product called the *SSGM Soft Synthesizer* is also on the way from Media Technology. This new software-only synthesizer apparently contains the essence of a professional PC soundcard, and is supplied on a disk. According to Yamaha, users will be able to use the synth to play back their favourite songs "with stunning clarity and accuracy"; they see software synthesis as representing the "long-term future of computer desktop sound", and in keeping with this philosophy, updates to the *SSGM* will be available on the Internet for a nominal cost, as well as through local high street stores. There's no retail price announced as yet, and little in the way of product details, but we'll bring you more on this as soon as we have it.

A Yamaha Media Technology, Yamaha-Kemble Music (UK) Ltd, Sherbourne Drive, Tilbrook, Milton Keynes MK7 8BL.
T 01908 366700.
F 01908 368872.

dynaudio lexicon dbx

turnkey

If you want to look at equipment we'll send you some brochures...

If you'd prefer to listen and evaluate a wide range of products by strict A/B comparison there is currently only one option.

Turnkey's revamped and enlarged demo facilities feature what we believe to be the world's largest digital comparator systems for pro audio* and the only one of its type in the U.K.

Over 70 effects processors are available for instantaneous A/B via relay switching, eliminating the repatching time which makes good comparisons so difficult. 16 pairs of studio monitors, 10 power amps, 16 mixing consoles and around 30 sources and recorders from DATs, CDs, HDRs and Multitracks are on the same matrix so you can instantly configure complete systems.

Take 8 bus consoles - hundreds are bought each year on recommendation. Bearing in mind the sums involved it's hard to believe that the opportunity to properly compare the various brands for EQ and noise has not previously been offered.

We've taken the same innovative approach to demonstrating all our products from CD Rom samples to analog synthesizers.

Most dealers will tell you which products best suit your needs. Only one can show you.

One side of the switcher-equipped recording room.

Compare 6 mics. by recording simultaneously to ADAT.

Pro-Tools III and Soundcraft DC2020 in Studio 1.

Huge range across Mac, PC and Acorn platforms.

* The leading manufacturer of this equipment tells us that the Turnkey systems are the largest ever supplied worldwide.

sound house 0171 379 5148
Fax: 0171 379 0093 114, Charing Cross Road, London WC2H 0D

Authorised Dealer | Soundcraft | STEINBERG | MACKIE | Roland | SONY | TASCAM | FOSTEX | digidesign

GENELEC

the all in one monitoring solution

turnkey PRODUCT

Genelec has become the leading name in Studio Monitoring, and with good reason. Their packaging of speaker, amp and crossover in one box not only makes them affordable, but means that all the components are perfectly matched, to make efficient and fabulous sounding monitors.

- ***Metal dome speakers***
- ***Active bi-amplified design***
- ***Electronic crossover and protection circuitry***
- ***Built-in bass roll-off, treble and bass tilt controls***
- ***Superb frequency response***

At Turnkey (one of only a handful of dealers nationwide) we have all the range that would fit in to our studio on permanent demonstration (and in stock!) and demos of larger pairs are easily arranged. Audition some Genelecs today and we guarantee you'll be impressed - why compromise on monitoring?

A recent addition to the range, the 1092A active subwoofer turns any of the smaller Genelecs into a full-range monitoring system, with frequency response down to 35Hz.

1030a £1249 INCLUDING FREE CABLES AND MOUNTING BLOCKS

1031a £2199 INCLUDING FREE CABLES AND MOUNTING BLOCKS

1032a £2799 INCLUDING FREE CABLES AND MOUNTING BLOCKS

1092a £1299 INCLUDING FREE CABLES AND EARPLUGS!

turnkey PRODUCT

digidesign

New ProTools III software options

ProTools III Package
- *7100/80 8/350 c/w keyboard*
- *17" MultiSync Display*
- *ProTools Core & 882 Interface*
- *2Gbyte Barracuda Hard Disk*

PowerMix™ allows you to use the ProTools software on your PowerPC with no additional hardware or with an AudioMedia II and Session 8 system.

BUNDLE PRICE £9275 INCLUDING INSTALLATION

Supports the full range of DSP plug-ins.

Audio Media III

A new PCI card giving you 2 channels simultaneous record and 8 tracks of simultaneous playback. Comes with industry standard Sound Designer II software which supports DSP plug-ins.

Audio Media Package
- *7100/80 8/350 c/w Kbd.*
- *14" Performa + Display*
- *Audio Media II + Sound Designer*
- *1 Gbyte AV Hard Disk*

BUNDLE PRICE £3400 INCLUDING INSTALLATION

ProTools Project

Designed to provide ProTools functionality at an affordable price the Pro Tools software and Project Audio Card gives 8 tracks of simultaneous record/playback and either analogue or digital i/o.

Session 8 Package
- *7100/80 16/350 c/w Kbd.*
- *15" Multisync Display*
- *Session 8 Core & 882 Interface*
- *1Gbyte Hard Disk*

BUNDLE PRICE £5050 INCLUDING INSTALLATION

YAMAHA

Yamaha 02R Digital Console

The fully digital 40 input 8 bus console with total automation and moving faders. 4 band parametric eq and dynamics for every input and 2 comprehensive on-board fx processors with a range of reverbs, delays and other standard fx. Optional interface cards allow full digital connection of ADAT, T-DIF and AES/EBU formats for integration of MTR and h

BUNDLE AT £8999 INCLUDING FREE HIGH SPEED ADAT & BOARD

CALL FOR CASH PRICE

waldorf

Although Waldorf are not associated with Focusrite in any way, we cannot deny that this Wave is red.

Waldorf Wave

We now offer a new custom range of Wave synthesizers with 76-note keyboards in four colour options - standard blue, red (as shown), Sahara and black. Totally unique sound.

EXCLUSIVE FROM £6300 CALL FOR DETAILS

turnkey 0171 379 5148 sound house 0171 379 5148

E-mail: sales@turnkey.demon.co.uk Fax : 0171 379 0093, 114, Charing Cross Road, London WC2H 0DT E-mail: sales@turnkey.demon.co.uk

AKAI | MACKIE | E-MU | YAMAHA | TANNOY | DENON | AKG | Beyerdynamic | emagic

JOEMEEK

COOK UP YOUR SIGNAL WITH JOEMEEK!

turnkey PRODUCT

- All Discrete Electronics
- Ultra Fat Sound
- Easy to Set Up
- Bright Green Case !

Legendary sixties producer Joe Meek was often asked the secret of his fantastic vocal sound. It was in fact a custom made 'black box' of electronics, whose contents he would not reveal during his life. Now JOEMEEK bring his designs to life, and with knobs on !

In addition to the compressor and ultra high headroom mic amp, controls like Drive, Enhance and Q make these processors the hottest way to get your signal to tape or disc. All discreet modern components mean that superb sound quality is ensured throughout.

The range currently consists of three models: the entry level Pro Channel, mid range Voice Channel, and topped by the JOEMEEK Compressor, for some of the best compression money can buy. Check one out today !

PRO CHANNEL £299 INCLUDING FREE CABLES

VOICE CHANNEL £599 INCLUDING FREE CABLES

COMPRESSOR £1499 INCLUDING FREE CABLES

Macintosh

MIDI Bundles

While stocks last we are offering Apple's Powerful Performa CPU with a MIDI sequencer of your choice - Steinberg Cubase, E-Magic Logic or Opcode Vision. Comes with 1-in, 3-out MIDI interface.

BUNDLE PRICE £1399 INCLUDING SOFTWARE

Performa 630 MIDI Package:

- *Performa 630 8/350CD c/w kbd.*
- *14" Colour Display*
- *MIDI Sequencer + Interface*
- *ClarisWorks Software*

* CPU Apple 8 stock - full warranty

SONY

Turnkey bring you the first stocks of Sony's brand new portable, the TCD-D8. Sturdily built with a back-lit display, the unit features 48kHz and 44.1 kHz analog and digital recording.

TCD-D8

NEW PRODUCT £599 NEW BOXED

No other portable is available under £1499 - initial supplies will be very limited, phone now to reserve yours. The ultimate Walkman !

SyQuest & iOMEGA

Removable disk drives

ZIP

JAZ

EZ-135

There was a time when hard disks were a luxury for sampler owners, but with the advent of the ultra cheap Iomega Zip and Jaz drives, and the soon to be released Syquest EZ 135 drive, this has become a thing of the past. For under £200 the Zip drive stores 100Mb (94Mb formatted) on each cartridge and the EZ drive 135Mb (124Mb formatted). If you want greater capacity the Jaz's 1Gbyte will suit any large fx library and is ideal for many dedicated hard disk audio systems like the Emu Darwin or Akai DR series.

IOMEGA ZIP £199 INC DISK & SCSI CABLE

IOMEGA JAZ £599 INC DISK & SCSI CABLE

SYQUEST EZ-135 £219 INC DISK & SCSI CABLE

turnkey PRODUCT

Focusrite *Green range*

Focusrite

Focusrite have long represented the pinnacle of audio achievement, but sadly their products have always been out of reach for most of us. Now, specifically with the high quality project studio in mind, they have designed the Green range of processors. The first 3 products are the Dual Mic Pre, the Focus 4 band EQ with filters, and the Voicebox - this combines a mic/instrument preamp, compressor, de-esser and parametric EQ in a single unit - the ultimate signal path for digital recording! All 3 are on permanent demo at Turnkey.

DUAL MIC PRE £819 CALL FOR DEMONSTRATION

FOCUS EQ £929 CALL FOR DEMONSTRATION

VOICEBOX £989 CALL FOR DEMONSTRATION

turnkey 0171 379 5148 sound house 0171 379 5148

E-mail: sales@turnkey.demon.co.uk Fax : 0171 379 0093, 114, Charing Cross Road, London WC2H 0DT E-mail:sales@turnkey.demon.co.uk

FOSTEX

modular hard disk recording comes of age

If 8 tracks aren't enough for you - don't worry ! Multiple D80's can be linked together to provide as many tracks as you want, and they can even be slaved to a DMT8 to expand an existing system !

The DMT8 has revolutionised the 8 track recording market, providing an all in one solution to hard disk recording. Now the introduction of the D80 shows that Fostex have only just started!

The D80 is a 3U rackmount unit, with 8 individual inouts and outputs, a removable front panel which doubles as a remote and meterbridge, and a removable 850 meg hard drive. It slaves to Midi Machine Control, as well as being able to act as a master, all with no track loss, and has SPDIF digital ins and outs to allow backup to a standard DAT machine and direct digital recording. Easy to use editing allows cut, copy and repeat pasting across multiple tracks. Surely this is the replacement for 8 track tape machines that everyone has been waiting for !

- *8 separate analogue inputs and outputs*
- *SPDIF digital I/O for back-up and digital recording*
- *Up to 40 minutes of full 8 track recording*
- *Multiple units can be linked for unlimited tracks*
- *Uses removable caddy IDE drives*

NEW PRODUCT **£1499** INCLUDING **FREE** 2x 8WAY LOOMS

RRP £3526 **£2999** INCLUDING SPIRIT STUDIO 24 & LOOMS

RRP £5025 **£4399** 16 TRK. SETUP INCLUDING SPIRIT STUDIO 24

turnkey PRODUCT
Tel 0171 240 4036
Fax 0171 497 0690

Exclusive !

adat

Fostex CX8 New High Speed ADAT

The CX8 is built for Fostex by Alesis and is basically exactly the same machine as the new high speed ADAT XT. The only differences are the colour and the D-Sub (rather than EDAC) connector on the rear panel.

The new design features a die-cast chassis and as completely redesigned transport, which rewinds and fast-forwards four times as quickly as the old machines. Also BRC style editing can be performed from the front panel with two machines.

Turnkey are the exclusive U.K. suppliers of this machine, and are therefore able to bring it to you at an unbeatable price.

Why pay more?

- Totally interchangeable with ADAT XT
- New 4 times speed transport design
- Absolutely unbeatable price

RRP £2777 **£2195** PACKAGE DEALS AVAILABLE

BUNDLE PRICE **£1799** INC 1 GIG FIXED DRIVE

BUNDLE PRICE **£1999** INC 1 GIG JAZ DRIVE

BUNDLE PRICE **£2149** INC 1 GIG & FX BOARD

Roland VS880 Digital Workstation

Roland

It's an 8 track recorder (each with an additional 8 virtual tracks) and a 14ch digital mixer complete with automation. An additional fx board can be added for under £350 giving RSS and SE70 type effects. The VS880 supports an internal IDE but we recommend an external SCSI drive for better performance and value.

turnkey PRODUCT
Tel 0171 240 4036
Fax 0171 497 0690

NEW Indigo Range

TL Audio

In the production of modern valve audio equipment, the success of TLA equipment has been unrivalled, from the best selling compressor (shown here), to the full blown valve mixer. For those of you who don't quite need the full functionality of the existing range, the new 1U high Indigo range has been designed specifically for your needs. Superb warm and fat valve signal processors at an affordable price. Models include a compressor, EQ, mic amp and overdrive unit. Entire range on demo at Turnkey for direct A/B comparison.

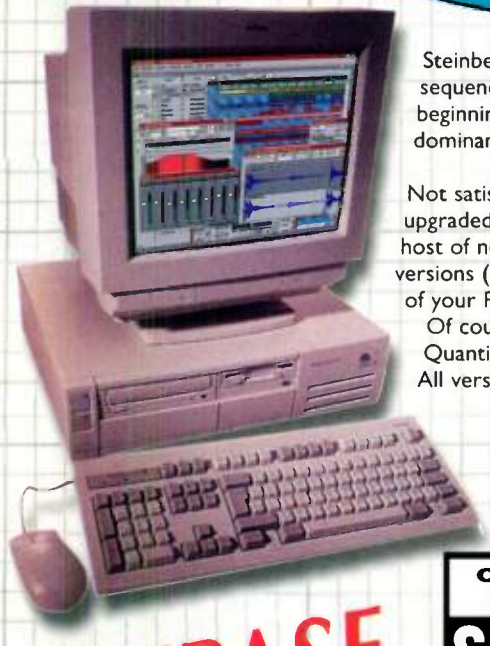
PRICES FROM **£699** CALL FOR DETAILS

turnkey 0171 379 5148 sound house **0171 379 5148**

E-mail: sales@turnkey.demon.co.uk Fax : 0171 379 0093, 114, Charing Cross Road, London WC2H 0DT E-mail:sales@turnkey.demon.co.uk

Steinberg

Cubase For Windows 3.0



Steinberg has made the industry standard sequencer for as long as we can remember, beginning with Pro 24 on the Atari, and now that dominance has been continued on the PC platform.

Not satisfied with this success, Steinberg have upgraded all versions for the PC to version 3.0. It's host of new features include hard disc recording in all versions (the number of tracks limited only by the speed of your PC), pitch shift & time stretch, and on-line help. Of course, Cubase's other great features like Groove Quantise and the MIDI Mixer have all been retained. All versions are in stock now!

- *Hard Disk recording on all versions*
- *Industry stand sequencer*
- *On-line help*

CUBASE

CUBASE 3.0 £329 INCLUDING FREE MIDI INTERFACE

CUBASE SCORE 3.0 £449 INCLUDING FREE MIDI INTERFACE

CUBASE AUDIO XT 3.0 £1299 INCLUDING FREE AUDIOMEDIA 3 PCI

Cubasis & Cubasis Audio

Not ready to jump in at the deep end yet? Then Steinberg have created Cubasis especially for you. An entry level version of the program, it includes 16 tracks of the features that have made Cubase famous: the industry standard arrange page, simple cut and paste editing and much more. Cubasis Audio even integrates hard disk recording with an appropriate soundcard.

CUBASIS £149 INC. FREE MIDI INTERFACE

CUBASIS AUDIO £249 INC. FREE MIDI INTERFACE

Roland

JV1080 Super JV Module

In the same way as the S1000 became the industry standard sampler, Roland's JV1080 has become the industry standard synth module. It's not hard to see the reason why - straightforward operation combined with top flight sound quality and a huge range of useable sounds.

But expandability of the machine is where it really comes into it's own. There are over 10 different expansion boards which can be fitted (up to 4 at once), each one with as much ROM as the original machine, covering sounds from Vintage to Orchestral and Dance to World.

RRP ~~£1199~~ £979 NEW BOXED

At Turnkey we have the full range in stock, as well as an unbeatable price on the machine itself. Check one out today!

RRP ~~£1468~~ £1199 WITH ANY EXPANSION BOARD

MEDIAVISION

Reno Portable CD-Rom Drive

Are you making full use of your sampler? There are now a huge range of CD ROM discs stacked full of library available for virtually any sampler on the market. Each disc can hold up to 650 meg (the equivalent of about 500 HD floppies) and what's more, all the patch data has already been programmed!

The Reno CD ROM drive works with nearly all samplers (please check compatibility when ordering) as well as Mac and PC. Most CD ROM drives can play audio CD's, but require special software on a computer to do so. The Reno though has integral buttons for playback and track search etc, and can even be run off batteries for use as a portable CD player (headphones included). We have managed to secure a quantity of these at a huge discount - order now while stocks last!

RRP £429 £149 INC 'PHONES & CARRY CASE

Roland

MC303 Groovebox

The enduring popularity of the TB303, MC202 and TR909 has just refused to go away but increasing rarity has meant that secondhand prices have been driven up to ridiculous levels. Roland, the creators of these machines, now bring you the MC303 Groovebox which combines all their classic drum machine sounds, a step time / real time sequencer, 303 'acid' bass sounds complete with front panel filter controls and a whole host of other useable sounds (it's 16 part multi-timbral!). This box is an all in one dance music solution, and believe us, it sounds the business! Initial supplies will be very limited, order now to avoid disappointment!

NEW PRODUCT £549 NEW BOXED

NEW PRODUCT £699 WITH PC200 CONTROLLER KEYBOARD

Authorised Dealer | Soundcraft | TRAYNER | MACKIE | Roland | SONY | TASCAM | Fostex | digidesign

Steinberg

Cubase VST for PowerMac

Integrated sequencing and hard-disk recording has always been a great idea, but until now you've had to buy expensive extra hardware, or use the Mac's built-in audio. This might have given you 8 tracks or more but with only two outputs, there was no possibility of individual EQ and effects treatment.

Now Cubase VST redefines music on the Mac platform, and sets a completely new standard - not only can you record up to 32 tracks (Processor dependant), but it also has built in realtime effects and EQ. Effects include reverb, chorus, delay, echo and many more, with the plug-in architecture leaving room for huge future developments, and the EQ is fully parametric (up to 128 bands!).

What's even more incredible is that the VST technology is included in every version of Cubase from the standard version at only £329, through Score for those with more sophisticated printing requirements, to Audio XT, for use with digidesign hardware. Call us now for your copy or to book a demo. Bundles with Power Macs also available, please enquire.

- ***Up to 32 tracks of Hard Disk recording***
- ***Up to 128 bands of EQ***
- ***Built in realtime reverb, delay & chorus etc.***
- ***Pitch shift & time stretch***
- ***Industry standard sequencer***
- ***Ridiculous price!***

CUBASE VST £329 INCLUDING FREE MIDI INTERFACE

CUBASE SCORE VST £469 INCLUDING FREE MIDI INTERFACE

CUBASE AUDIO XT £699 INCLUDING FREE MIDI INTERFACE

DrumStation

novation

Someone had to build this eventually! Despite being discontinued for at least 10 years, Roland's TR-808 and TR-909 drum machines have remained indispensable popular classics ever since. Now, Novation bring you those classic sounds with the original editing parameters, and in the convenience of a 1U rack, with MIDI, and 8 outputs. Initial supplies will be limited and demand, high. We have been guaranteed a significant quantity of the first stock available. Call for further details.

R R P £449 NEW PRODUCT

DTC790 Dat Machine

SONY

We have exclusively secured a small supply of the Sony DTC790 to bring you the cheapest full size DAT machine on the market, but this is not at the expense of features: SPDIF coaxial input and optical in and out, digital and analog recording at all three sampling rates (32 kHz, 44.1 kHz, 48 kHz), as well as all the usual ID functions and a full function infra red remote control.

These machines are brand new and boxed with a full twelve month warranty. Another DAT exclusive from Turnkey!

TURNKEY EXCLUSIVE £499 INCLUDING REMOTE

CS1x

YAMAHA

Here's another fantastic addition to this year's slew of equipment specifically designed for dance music. Not only does it look great, it sounds great too! As well as 480 XG format voices and 11 different drum kits, the CS1x also has 128 special performance sounds especially designed for dance and techno music. Front panel knobs allow instant access to crucial editing parameters like the filter, and 2 are assignable to anything you like. Round this off with top quality effects and an arpeggiator, and you have what has to be the best value keyboard of the year!

R R P £599 NEW PRODUCT

Orbit The Dance Planet

EMU

Emu have taken their wealth of experience in making modules such as the Proteus, Vintage Keys and Morpheus, combined it with the filters from the incredible Emulator 4, and with their usual inovation, come up with the Orbit - especially built for dance music.

The Orbit is stacked full of classic drum sounds, pulsating basses, ambient pads, as well as a huge variety of hits and effects. The inclusion of the E4's 16 different types of 6 pole filters mean that this module has more powerful filtering than any other synth. Finally the 'BEATS MODE' includes a wide selection of loops and grooves, which can have their pitch changed *without* tempo change and vice-versa, and even their sounds too !

The Orbit is already on demo at Turnkey - audition one today !

NEW PRODUCT £849 INCLUDING FREE CABLES

turnkey 0171 379 5148 sound house 0171 379 5148
E-mail: sales@turnkey.demon.co.uk Fax : 0171 379 0093, 114, Charing Cross Road, London WC2H 0DT E-mail:sales@turnkey.demon.co.uk

LOGIC & LOGIC AUDIO NOW AVAILABLE FOR WINDOWS

For some time now, Emagic's innovative approach to the software sequencer has made it the best selling program on the Macintosh platform. Until recently though, development for PC compatibles has lagged behind, but now Emagic have brought the PC version right up to date, with not only full sequencing functionality, but also the long awaited availability of the Audio Module.

Logic is famed for it's timing accuracy, and rightly so - it has a resolution of 960 ppqn, and the tempo is adjustable down to 1/10,000 of a bpm, great for fitting MIDI sequences to sampled loops. The Environment window allows custom development of controllers for any MIDI equipment from a toolbox of user-definable faders, knobs buttons and switches - creating your own editors is a breeze. Of course, descending as it does from the original Notator program, the quality of notation results can be taken for granted.

Finally, with the Audio Module, which can be added at any time (no need to upgrade), you get to use functions like cut and paste editing, groove quantise and the Time Machine on your audio files. Get rid of your tape machine and start recording direct to disc now !

- ***Best Selling Mac sequencer now available for PC***
- ***960 ppqn Timing Resolution***
- ***Audio Module Can Be Added At Any Time***
- ***Top Quality Notation Included***

**Prices are for both Windows & Mac platforms*

LOGIC £349* INCLUDING FREE MIDI INTERFACE

AUDIO MODULE £299* INCLUDING FREE MIDI INTERFACE

LOGIC AUDIO BUNDLE £629* INCLUDING FREE MIDI INTERFACE

Vortex

Despite the first digital effects units being developed almost 20 years ago, they have all followed a familiar path ever since, offering a conventional series of effects. The Lexicon Vortex breaks the mould in allowing effects to be morphed between in real time and in the process, creating new and previously unheard of effects. (This actually changes the effect algorithm continuously - it is not a simple cross-fade between effects) This unit is ideal for dance music, and anybody requiring out of the ordinary effects, and its real time nature make it an excellent choice for live performers such as guitarists. Effects are also affected by the input signal, so that dynamics can control various different parameters within an effect algorithm. Tempo can be tapped in to control delay times etc...Typical Lexicon quality can of course be taken for granted. Exclusive bulk purchase makes this huge reduction possible on the end of the line. First come first served!

- **Totally interchangeable with ADAT XT**
- **New 4 times speed transport design**
- **Absolutely unbeatable price**

RRP £199 NEW PRODUCT

turnkey PRODUCT

PCM-800

PRO 8 TRACK DIGITAL RECORDER

The definitive statement in 8 track digital machines? The Sony PCM800 is based on Tascam's DA88 but has the added advantages of balanced XLR connections and AES / EBU Buying power makes our offer cheaper than the DA88 ! Limited quantities only available at this price. Buy now before stocks are exhausted!

RRP ~~£5349~~ £3499 NEW BOXED

PULSE

Waldorf quality at a previously unheard of price! Their first venture into the burgeoning monosynth market has been universally acclaimed, and rightfully so. The Pulse's three oscillators provide some of the fattest sounds around, and it's modulation matrix allows a far higher degree of programming complexity than anything else in its range. Add to that the fact that editing any parameter sends out a MIDI controller and you have a fantastic all round performer. On demo and in stock now.

NEW PRODUCT £599 NEW BOXED

turnkey 0171 379 5148 sound house 0171 379 5148

E-mail: sales@turnkey.demon.co.uk Fax : 0171 379 0093, 114, Charing Cross Road, London WC2H 0DT E-mail:sales@turnkey.demon.co.uk

EUROPE'S LOWEST PRICES GUARANTEED*

Sound Modules

YAMAHA VL1m & VL7

EXCLUSIVE DEAL OF THE YEAR !!!!

Whilst we've always been well known for bringing you exclusive deals at knock-down prices, this is definitely the deal of the year!

Without doubt the most powerful commercially available synthesizers ever made, the Yamaha VL series have brought the first major break-through in synthesis technology since the advent of FM. Not only that,but Yamaha's implementation of Physical Modelling gives the most breathtakingly realistic acoustic simulations available as well as fantastically powerful lead and bass synth sounds.

Physical modelling takes a completely different approach to sound reproduction than any previous method. Rather than begin with inflexible samples or a simple oscillator, extremely powerful DSP chips simulate in real time characteristics of real instruments such as tube/string length, damping, absorbtion, lip/bow pressure, throat characteristics, tonguing and many others.
Once the basic (or not so basic !) sound has been created, it can then be passed through a powerful multi-mode filter section with resonance, harmonic enhancer, impulse expander, resonator and five-band fully parametric EQ with key-scaling abilities.

Finally, a 32 bit effects section based on Yamaha's top of the line SPX1000 unit provides up to 3 simultaneous effects processors,capable of flanging, pitch-shifting, reverb, delay, distortion etc

If acoustic simulations aren't your thing, then imagine the virtually limitless palette of synthetic sounds the VL series can produce, in fact we have commissioned top programmers at Yamaha's R&D department to produce a "Dance and Techno" sound set which we're giving away with the units (these load via the built-in 3.5" disk drive)

The VL-1m is a 3U 19" rackmount unit and is duophonic. The VL7 is a monophonic, 4 octave keyboard with velocity and aftertouch sensitivity, and comes bundled with the breath controller and expression pedal.

These prices represent 58% and 67% discounts from the RRP and offer a once in a lifetime opportunity to own a classic synth with real character. We have strictly limited quantities of the last ever units and orders will be fulfilled on a first-come, first-served basis. Buy now to avoid disappointment !

VL-7 RRP £2448 **£799** WITH FREE BREATH CTRL + EXPR PEDAL

VL-1m RRP £2399 **£999** NEW BOXED

The UK 4 track Centre

THE turnkey 4-TRACK PACK

Our famous 4 track pack includes everything you need to start making music. Maxell headphones, microphone with cable, chrome tapes, cables, head-cleaning kit and the best book we've yet seen on multitrack recording, taking you through basic track laying, mixdown etc... with sections of everything from mic placement to synchronisation and MIDI. We've obtained some great 4 track pricing AND for a limited period we will give you the 4 track pack (normal price £59.95) absolutely free with the units featured herein

PORTA 03 Mk2

only £199

INC 4 TRACK PACK

New version of a classic portastudio. Improved styling and metering (!)

YAMAHA MT50 Multi-tracker

INC 4 TRACK PACK

RRP £389 **£299** NEW BOXED

High Speed, record on all 4 tracks simultaneously., dbx noise reduction, 2 band EQ on each track, as well as auxiliary send/return.

YAMAHA MT8X PortaStudio

INC 4 TRACK PACK

Best-selling 8 track portastudio now brought to you at even better value by Turnkey. Features 3band EQ, separate cue mix, full LED metering, insert-points, dbx noise reduction, individual tapetrack outputs, 2 aux sends, double speed, logic controlled transport, auto punch-in/out, memory locators and cycle facilities.

RRP £1275 **£899** NEW BOXED

FOSTEX XR-3Multi-tracker

INC 4 TRACK PACK

High speed machine at £249 ! New auto-bounce facility and built in mic - ideal for 4 track recording on the move.

NEW PRODUCT **£249** NEW BOXED

KURZWEIL MicroPiano

SPECIAL PURCHASE

The MicroPiano is the most highly regarded piano module on the market, featuring Kurzweil's breathtakingly realistic true stereo samples - 32 note polyphony means you won't suffer from note-stealing and the wide range of other keyboard sounds and strings make it useful in many other situations. Built in effects including very high quality reverb mean there's no need to be up another effects unit. Strictly limited quantities at this price mean that stocks won't last long. Order today - you won't be disappointed !

RRP £599 **£369** NEW BOXED

NOVATION BASS STATION

BUDGET MONO SYNTHS

If you need to get into analog synths on a budget, then the Bass Station rack or keyboard is for you. But this is no mere toy! Two oscillators, pulse width modulation, two LFO's and knobs that send out MIDI information make this a versatile sound creation tool, capable of a wide range of bass sounds and effects. The ideal addition to any MIDI setup!

FROM ONLY **£329** NEW BOXED

NEW, USED & EX DEMO

Access MATRIX Prog	£ 349	Peavey Spectrum Org	£ 359
Access MicroW Prog	£ 349	Peavey Spectrum Syn	£ 359
Akai SG01K	£ 299	Peavey SpectrumBASS	£ 299
Akai SG01P	£ 299	Roland JV1080	£ 799
Akai SG01V	£ 289	Roland MDC1	£ 349
Alesis DM5	£ 499	Roland MGS64	£ 469
Alesis SR16	£ 150	Roland MKS70	£ 649
Boss DR5	£ 249	Roland MOC1	£ 449
Boss DR660	£ 299	Roland MS1	£ 279
Dream GMX 1	£ 69	Roland MSE1	£ 449
Emu CLASSIC KEYS	£ 299	Roland MV51	£ 349
Emu MORPHEUS	£ 843	Roland P55	£ 299
Emu Procussion	£ 645	Roland SC55ST	£ 365
Emu Proformance	£ 199	Roland SC88VL	£ 529
Emu Proteus 2	£ 699	Studio Elec SE1	£ 1,499
Emu Proteus FX	£ 299	Technics SXWSA1R	£ 1,799
Emu UltraProteus	£ 999	Waldorf MicroWave	£ 1,199
Emu Vintage Keys+	£ 799	Waldorf PULSE	£ 599
Kawai GMega LX	£ 129	Yamaha MU5	£ 179
Korg 05R/W	£ 389	Yamaha MU50	£ 329
Korg X5DR	£ 499	Yamaha MU80	£ 499
Kurzweil K2000RB	£ 1,299	Yamaha QY22S	£ 399
Kurzweil K2000R	£ 1,599	Yamaha QY300	£ 499
Kurzweil KM1	£ 250	Yamaha QY8	£ 209
Marion PRO SYNTH	£ 600	Yamaha RY20	£ 299
Novation Bass Stn R	£ 323	Yamaha RY8	£ 239
Novation Drumstn	£ 419	Yamaha VL1M	£ 999
Oberheim Matrix1000	£ 369	Yamaha VL7	£ 799
Oberheim OBMX2	£ 1,800	Yamaha WT11	£ 329

NEW, USED & EX DEMO

Fostex 380S	£ 400	Tascam 424MK2	£ 499
Fostex DMT8	£ 1,199	Tascam 464	£ 699
Fostex XR3	£ 225	Tascam 488MKII	£ 995
Fostex XR5	£ 335	Tascam Porta03 MK2	£ 179
Fostex XR7	£ 429	Tascam PORTA07	£ 249
Roland VS880	£ 1,499	Yamaha MT4X	£ 379
Roland VS8F1	£ 340	Yamaha MT50	£ 279
Tascam 424	£ 379	Yamaha MT8X	£ 699

TASCAM 424 Mk 2 PortaStudio

INC 4 TRACK PACK

A brand new version of the best selling 424 from Tascam, inventors of the portastudio. Features include 3 band EQ with a mid sweep, records to all 4 tracks at once, 2 independent auxiliary sends (1 switchable pre/post fade). Logic controlled 2 speed transport with built-in memory location points. DBX noise reduction, initial supplies limited

NEW PRODUCT **£499** NEW BOXED

FOSTEX DMT-8 digital multitracker

INC 4 TRACK PACK

The personal digital multi-track is here at last, and at a price you won't believe! 8 separate tracks of CD quality audio recorded to half-gig hard-disk (up to 12 minutes). Record up to 4 tracks simultaneously, jog-shuttle, sync to MIDI without losing a track. The 8 channel mixer accepts up to 4 mics, 2 band EQ and 2 aux sends. Separate outputs and S/PDIF optical output.

RRP £1499 **£1399** NEW BOXED

FOSTEX XR5 Personal Studio

INC 4 TRACK PACK

Stunning new double speed Fostex machine with individual EQ, up to 3 aux sends and 2 stereo returns, 2 inserts & 4 sep. tape outs allowing use with an external mixer

RRP £420 **£335** NEW BOXED

TASCAM Porta07 PortaStudio

INC 4 TRACK PACK

A fantastic new machine from the makers of the Portastudio. Double speed, EQ on each channel, built-in dbx, 4 channel metering system

RRP £399 **£339** NEW BOXED

ROLAND SC88 - VL

64 NOTE POLYPHONIC

Based on the original Sound Canvas module, but with much more of everything, the SC88 is 32 part multi-timbral with two independent MIDI ins, also 64 note polyphony for handling virtually any MIDI thrown at it. Having twice as much sample ROM too, the SC88 is really like two SC55s, except with 18 bit D/A convertors, delivering the same audio quality as the JV-1080 synth. Choose from a GS / GM compatible sound palette of 654 individual sounds, and 24 drum kits. The built-in interface for Mac or fast PC provides further value for money. When used with PC software such as Musicator, you can adjust the vol, pan, reverb and tuning on each individual drum sound. Last ever units, get your order in now !

RRP £699 **£369** NEW BOXED

WALDORF MICROWAVE

TURNKEY FACTORY DIRECT EXCLUSIVE

The Waldorf Microwave has genuine analog synthesis including resonant filters. It has 16 oscillators, 8 part multi-timbrality and 6 individual outputs. Sweep through up to 64 different waves, controlled by LFOs, envelopes etc. Devastating bass, totally unique sound ! Also available on a trial basis, please enquire.- once you've tried this, you won't want to go back !

SPECIAL **£1199** NEW BOXED

M.A.M. MB-33

TB303 CLONE

Hot from Germany - land of techno! The only authentic sounding TB303 clone, with MIDI. 1U rack with 1 knob per function, all the sound controls of the 303 are duplicated. Cutoff, Resonance, Envelope Mod, Accent, Tune and Decay. Waveform is continuously variable from square wave to sawtooth, and an auto tune button is included to retune the oscillator. Filter cutoff CV controllable (convertor box available only £The ultimate analog bass machine - this incredible price means these will fly out of the door! Turnkey Exclusive.

NEW PRODUCT **£249** NEW BOXED

BOSS DR-660

THE BEST EVER DR. RHYTHM !

BOSS have been making Dr. Rhythm drum machines since the early eighties, combining value for money and ease-of-use with the latest drum and percussion sounds. The DR-660 builds on the success of the DR-550 Mk2, but offers 16 full velocity and aftertouch sensitive pads, 4 separate outs (unheard-of at this price), and 255 drum sounds including the best of TR808 / 909. The 660 also boasts the 'human feel' control first introduced on the R8 which allows velocity to control a real-time crossfade between several waveforms (for example, whereabouts the cymbals are hit). Process your sounds with on-board digital reverb and chorus - fully editable, with individual effect-send control for each drum sound.

RRP £459 **£299** NEW BOXED

NOVATION DRUM STATION

BUILT AT LAST !

Someone had to build this eventually! Despite being discontinued for at least 10 years, Roland's TR-808 and TR-909 drum machines have remained indispensable popular classics ever since. Now, Novation bring you those classic sounds with the original editting parameters, and in the convenience of a 1U rack, with MIDI, and 8 outputs. Initial supplies will be limited and demand, high. We have been guaranteed a significant quantity of the first stock available. Call for further details

NEW PRODUCT **£449** NEW BOXED

ACCESS PROGRAMMER

FOR MATRIX 1000 OR MICROWAVE

There's no doubt that the Oberheim Matrix 1000 and Waldorf MicroWave deliver powerful analog sounds. However, when it comes to programming your own sounds, top producers have tended to go for older synths like the Minimoog and Super Jupiter, because their knobs and sliders make for easy creation of new sounds. The Access programmer gives you the best of both worlds - now you can freely experiment with your modern analog synth using the same intuitive front panel, and better still, record every tweak of a parameter into your sequencer.

SCOOP EXCLUSIVE **£369** NEW BOXED

OBERHEIM MATRIX 1000 EXCLUSIVE

Now almost 10 years old, and still sounding as fresh as the day it was released. The Matrix 1000 is essentially a Matrix-6 in a rack - 6 note polyphonic, 2 oscillators per voice, true analog VCF filters with 8 modes, "Matrix™" modulation with 20 sources and 32 destinations, raw gutsy analog sounds. Why 1000? The 1000 presets were generated by Matrix6 owners worldwide in reponse to a competition to find the best analog sounds on the planet. You're sure to find the perfect patch for virtually any application. Group mode allows chaining of up to 6 units to create a true monster! Fully editable via MIDI. Mac, PC or Atari editor (available for only £49)

FACTORY DIRECT RRP £599 **£369** NEW BOXED

Keyboards

ALESIS QUADRASYNTH + PIANO

UNDER HALF PRICE !

Unbelievable clearance deal on this top of the range synth brings you a huge range of features and serious performance at a bargain price. The Alesis Quadrasynth Plus Piano features: 76 note synth weighted action keyboard, 64 note polyphony, a huge range of up to the minute sounds and large area of the ROM given over to top quality piano samples, the ability to download samples onto PCMCIA RAM cards, 4 simultaneous multi effects processorsbased on the Quadraverb 2, huge screen for easy editing and great overall styling. Limited quantity available - first come, first served!

RRP £1449 **£699** NEW BOXED

YAMAHA SY35

UNBELIEVABLE CLEARANCE DEAL

The SY35 has been in Yamaha's catalog for some time, and with good reason - its unique combination of sample playback, FM synthesis and vector control make it a great buy even at the RRP. Yamaha have now decided that it is the end of the line for the SY35, but have no replacement in the range, indeed, no other manufacturer has a professional synth for less than £599

The SY35 features 128 presets, but editing is a breeze with the unique vector control joystick, designed by Dave Smith, creator of the legendary Prophet VS. Movements in sound can be recorded and played back exactly - a huge variety of synth sounds balance the stock piano, string, drum etc presets. If that's no easy enough, the vector randomisation feature will automatically generate unlimited quantities of new and surprising sounds in a second ! 8 part multi-timbrality and 32 element polyphony mean you can create whole arrangements from just one keyboard

The keyboard itself has 5 octaves of full-size keys and is velocity and aftertouch sensitive making it an ideal mother keyboard (the synth is virtually free !). Built in effects including reverb, delay, and distortion round off a great all-in-one package. This exclusive end of the line clearance deal represents unbelievable value for money. Order now to avoid disappointment.

RRP £599 **£349** NEW BOXED

HAMMOND XB-2

83 LIVES AGAIN !

If you need an authentic Hammond sound, there is currently only one place to turn: Hammond's XB2 has been specifically made to recreate the sound of the legendary B3, with 128 presets, 9 drawbars for easy programming, built in Leslie simulator, overdrive and reverb, nothing else comes close.
You can even connect a genuine Leslie via the 11 pin connector (reconditioned Leslies also available), and best of all, it weighs only 30 pounds! Exclusively available through Turnkey

EXCLUSIVE **£1399** NEW BOXED

Sampling

TIME & SPACE

THE BEST EVER DR. RHYTHM !

We have two Time & Space Jukeboxes in store, each fully loaded with the current top 100 CDs. There are choices to cover everything from straight instrumental sounds through sound effects, to loops and breaks. We carry virtually the full range in stock and can also supply most disks in CD-ROM format for direct loading into your sampler. Come and check out the latest sounds today

FROM ONLY **£1.9** NEW BOXED

NEW, USED & EX DEMO

Akai CD3000	£ 1,199	Emu E4	£ 4,800
Akai EXM003	£ 189	Emu E4 Keyboard	£ 2,849
Akai EXM006	£ 129	Emu E64	£ 1,999
Akai EXM008	£ 499	Emu ES32	£ 899
Akai EXM01	£ 99	Emu ES32 SCSI	£ 1,199
Akai EXM3002	£ 179	Kurzweil K2500	£ 2,799
Akai EXM3008	£ 499	Kurzweil SMP R	£ 894
Akai EB10A	£ 19	Kurzweil SMPK	£ 894
Akai EB208P	£ 399	Roland DA400	£ 420
Akai EB30S	£ 99	Roland JS30	£ 499
Akai EB302D	£ 349	Roland OP760 1P	£ 100
Akai EB303T	£ 149	Roland S760	£ 999
Akai EB304P	£ 349	SIMM 1 MEG 30 PIN	£ 29
Akai MPC3000	£ 2,599	SIMM 16 MEG 30 PIN	£ 499
Akai S1100	£ 1,199	SIMM 16 MEG 72 PIN	£ 449
Akai S2000	£ 949	SIMM 4 MEG 30 PIN	£ 129
Akai S3000XL	£ 1,699	SIMM 4 MEG 72 PIN	£ 129
Akai S3200XL	£ 2,977	SIMM 8 MEG 72 PIN	£ 299

£1,800 OFF !

YAMAHA P300

MASTER KEYBOARD / 32 note polyphonic PIANO

The P300 combines an 88 note, master keyboard based on the industry standard KX88, with the best piano samples we've ever heard - identical to, and developed for the ground-breaking P500, (rrp £5,500, used by Chick Corea etc.)

32 note polyphonic stereo multi-sampled sounds through SPX990 equivalent editable multi-effects. Compre-hensive sound edit parameters including Microtuning, ADR envelopes etc. As many as four separate MIDI paths can be used tc independently control external MIDI instruments. It also boasts four fully assignable MIDI controllers - 2 data sliders and 2 control wheels. You can connect any mix of 4 foot controllers, either momentary, toggle switch or continously variable pedals, and assign to almost any function including sostenuto.

Store up to 32 voice and MIDI settings in any desired order, using the performance / chain feature, MIDI merge, Local On/Off for individual path. 40 character backlit LCD and dedidated Help button make editing a breeze. 40w stereo amplifier and built-in monitor speakers with 2 x line-in. 5 band graphic and loads more - call for a brochure

SAVE £1,800 ! RRP £3199 **£1399** NEW BOXED

Unbelievable amount of hardware for the money. If you're contemplating a master keyboard or digital piano this year, get one of these before they all go

ROLAND PC 200-II keyboard

IDEAL ENTRY-LEVEL MIDI CONTROLLER KEYBOARD

Compact touch sensitive master keyboard offering full control over pitch bend and mod, data slider assignable to reverb, pan or any controller, sustain pedal input, transpose over 2 octave range, send psech & bank change messages. Check out our unique package prices with these modules

PC200

£149 NEW BOXED

PC200 PLUS PROTEUS FX	PC200 PLUS AKAI VINTAGE	PC200 PLUS D-50 / W	PC200 PLUS SC88 VL
£649 NEW BOXED	**£399** NEW BOXED	**£539** NEW BOXED	**£459** NEW BOXED

NEW, USED & EX DEMO

Alesis QS6	£ 749	Roland A33	£ 369
Ensoniq SQ1 PLUS32	£ 899	Roland AX1	£ 399
Evolution MK10	£ 60	Roland EP 5	£ 239
Fstar CMS61	£ 169	Roland EP3	£ 149
Fstar Studio 1100FC	£ 1,100	Roland JV 50 EX	£ 569
Fstar Studio 49	£ 89	Roland PC200GS	£ 159
Fstar Studio 610+	£ 299	Roland RD500	£ 1,699
Fstar Studio 900	£ 599	Roland SPD11	£ 399
Fstar Studio 1100	£ 799	Roland XP10	£ 499
Fstar Studio 2001	£ 1,099	Roland XP50	£ 1,099
Fstar Studio 2001FC	£ 1,299	Roland XP80	£ 1,799
Fstar Studio 61	£ 139	Sequent. Prophet VS	£ 1,199
Fstar Studio 610	£ 199	Technics SXWSA1	£ 1,599
Fstar Studio 900FC	£ 830	Ultimate keybd stand	£ 110
Goldstar GMK 49	£ 129	Viscon PK1000	£ 899
Hammond XB2	£ 1,399	Waldorf Wave	£ 6,845
Hammond XB3	£ 8,630	Yamaha CBX K3	£ 129
Kawai K11	£ 399	Yamaha CBXK1	£ 125
Korg PROPHECY	£ 675	Yamaha KX5	£ 199
Korg Trinity	£ 2,395	Yamaha P300	£ 1,199
Korg Trinity PLUS	£ 2,299	Yamaha PF85	£ 899
Korg Trinity PRO	£ 2,999	Yamaha QS300	£ 999
Korg Trinity PROX	£ 3,195	Yamaha SY35	£ 349
Korg X3	£ 699	Yamaha SY85	£ 765
Korg X5D	£ 699	Yamaha VL7	£ 799
Kurzweil PC88	£ 1,395	Yamaha W7	£ 899
Novation BassStation	£ 199	Yamaha WX11	£ 299
Roland A30	£ 275		

EMU E64

COME FRO A DEMO AND HEAR THE DIFFERENCE!

64 note polyphonic. Uses the same operating system as the E-IV (new version includes around 15 different filter types). 16 part multi-timbral, 8 balanced outputs, SIMM memory, 2 SCSI ports, AES/EBU and SP/DIF digi I/Os.

WITH 8 MEG & HARDDRIVE RRP £3297 **£2348** NEW BOXED

EMU ESI-32

VERSION 2.0 SOFTWARE

Featuring 32 note polyphony, 4xpolyphonic, G-chip resonant filters, huge quality library, (Akai and Emaxii compatible) Time-stretch, doppler FX, parametric EQ, exciter etc.... All E-mu samplers come with free access to our enormous sample library (we have all the EIII library on CD-ROM) and excellent tech support (many staff are owners)

WEST END EXCLUSIVE RRP £1199 **£999** NEW BOXED

ROLAND S760

WITH FREE CD-ROM DRIVE & DISK

MEGADEAL! - incredible new low price from Turnkey including free SCSI CD-ROM drive and disk. Everything you need to get started with plenty of usable library. Also available packaged with OP1 video/digital board at £1699, or with OP1 plus DA408 8-output convertor for £1999.

RRP £1699 **£1399** NEW BOXED

PRICES INCLUDE 17.5% VAT
Uk mainland carriage £9.99

*We will beat any genuine quote from a UK or European dealer. We must be able to substantiate the quote and the goods must be available and in stock

turnkey 0171 379 5148 soundHouse 0171 379 5148
Fax : 0171 379 0093, 114 Charing Cross Rd, London WC2H 0D
E-mail : sales@turnkey.demon.co.uk

Authorised Dealer | Soundcraft | DRAWMER | MACKIE | Roland | SONY | TASCAM | FOSTEX | digidesign

EUROPE'S LOWEST PRICES GUARANTEED*

Outboard

VISCOUNT
EFX10 Studio Multi-effects
HALF RACKMOUNT EFFECTS

We've just received stocks of Viscount's entry into the fully professional effects market, and it sounds great ! The unit features audiophile sound quality delivered by 24 bit processors with 128x over-sampling Delta / Sigma convertors. True stereo -20/+4 dB connections. Realtime MIDI control, large backlit display, huge range of effects including reverbs, delays, chorus, flanging, pitch-shift, wah, phasing, leslie simulations, etc . The price of £249 makes the EFX10 probably the best value for money effects unit on the market - 7 day money back guarantee if not satisfied!

FACTORY DIRECT
NEW PRODUCT
£249
NEW BOXED

SPL STEREO VITALIZER
BULK PURCHASE

The Vitalizer is the Rolls Royce of enhancer / exciter processors. Using a significantly different process to other such products the effect deals with the full frequency range and is substantially smoother and richer. Also included is a "surround" effect which varies the width of the stereo field - massive bulk purchase allows this unbelievable price - check one out now - we guarantee you'll be impressed

RRP £599
£349
NEW BOXED

DIGITECH TSR-12
FEATURES 'S-DISC' PROCESSING

With the introduction of the Studio Quad, Digitech have decided to stop production of the TSR12 as it is too expensive to make. We have stock of the last ever units available at a bargain price. Features include S-DISC processing, up to five effects at once including several different types of reverb, delays, chorus etc. Full MIDI spec allows realtime control of individual effect parameters. Limited stocks only

RRP £399
£299
NEW BOXED

DIGITECH STUDIO QUAD
4 CHANNEL STUDIO EFFECTS PROCESSOR

At last - Midi effects as they should be! The new Digitech Studio Quad features not only their custom designed and ultra-powerful 'S-DISC' chip, but also 4 independent inputs and outputs, which using the built-in sub-mixer, can be configured as 4 mono ins feeding 4 effects processors, feeding 4 stereo outputs. Huge screen, and new intuitive operating system make editing a breeze. 20 bit convertors give greater than 90 dB signal to noise ratio. Effects include reverbs, delays, detuning, chorus, flanging etc. Hundreds of other features too numerous to mention. Very limited retail stocks, order now to avoid disappointment !

NEW PRODUCT
SHORT SUPPLIES
£499
NEW BOXED

Monitoring

ABSOLUTE 2
Studio Monitors by SPIRIT
PHONE FOR BEST PRICE

Here at last ! Stunning sounding and looking monitors from the UK's leading mixer manufacturer. Incredible bass extension and power handling at a killer price. In stock now, come in and audition them ASAP !

RRP £249
POA
NEW BOXED

CONTROL 5
JBL
NEW LOW PRICE

These classic monitors from JBL have been a standard in studios for several years and still stand up very well against more recent competition. The solid build quality you can expect from JBL comes as standard and the ported design gives fantastic bass response. Internal fuses help to prevent blown tweeters and a separate sub-woofer is also available. Exclusive to Turnkey

RRP £499
£249
NEW BOXED

PRICES INCLUDE 17.5% VAT
Uk mainland carriage £9.99

"We will beat any genuine quote from a UK or European dealer. We must be able to substantiate the quote and the goods must be available and in stock.

SEE PAGE 229 FOR REST OF AD

LA AUDIO DEALS
Exclusive Turnkey Deals

CX2 : Dual Compressor Limiter De-esser with half-band compression.

GX2 : Dual Frequency Conscious Noise Gate

CX2/GX2
£199
RRP £249

ZOOM 1202
SPECIAL OFFER

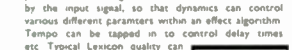
Our tremendous buying power makes this the only sub £200 effects unit to look at ! True stereo and the quality of the reverb alone make it worth the price, but there's lots more of one of the 512 presets doesn't suit exactly then using the two parameter knobs will allow you to tweak the program until it does. The addition of 2 band EQ will further tailor the sound to your mix. Other effects include delay, chorus, phasing, flanging etc... and all this in a full 19" 1U rack. No need to look elsewhere !

RRP £199
£159
NEW BOXED

LEXICON Vortex
SPECIAL OFFER EXCLUSIVE

Despite the first digital effects units being developed almost 20 years ago, they have all followed a familiar path ever since, offering a conventional series of effects. The Lexicon Vortex breaks the mould in a blowing effects to be morphed between in real time and in the process, creating new and previously unheard-of effects. (This actually changes the effect algorithm continuously - it is not a simple cross-fade between effects) This unit is ideal for dance music, and anybody requiring out of the ordinary effects, and its real time nature make it an excellent choice for live performers such as guitarists. Effects are also affected by the input signal, so that dynamics can control various different parameters within an effect algorithm. Tempo can be tapped in to control delay times etc. Typical Lexicon quality can of course be taken for granted. Exclusive bulk purchase makes this huge reduction possible on the end of the line. First come first served!

RRP £499
£199
NEW BOXED



BEHRINGER Composer
WORKHORSE COMPRESSOR

A natural sounding and fully featured compressor at a give away price ! Built-in gate removes any unwanted noise, soft-knee action makes compression much less obtrusive, "auto" mode makes quick setup a doddle and side-chain access means it can also be used for de-essing etc.

RRP £349
£229
NEW BOXED

LEXICON Alex and Reflex
SPECIAL OFFER

If You're looking for a straight reverb unit, Lexicon have a reputation that's hard to beat ! These are the cheapest units to offer the famous 'Lex' sound - The Reflex has the additional benefit of dynamic MIDI, allowing real time control of multiple effects parameters. Huge discount at Turnkey !

RRP from £899
POA
NEW BOXED

ABSOLUTE ZERO
SPIRIT
NEW NEARFIELDS

The latest additions to Soundcraft Spirit's monitor range are the Absolute Zero's. For those of us with slightly less demanding monitoring applications, they make the ideal choice

R R P
£199
NEW BOXED

OMNIPHONICS FOOTPRINT
Power Amplifier
FLYING OUT OF THE DOOR

Superb quality 75w per channel power amp from top studio amp manufacturer omniphonics. Balanced inputs, emergence cut-out and bridgeable to mono. 1U rack-mount case. These are flying ! RRP £399.

SCOOP
RRP £399
£279
NEW BOXED

CONTROL 1c
JBL
NEW LOW PRICE

These superb compact monitors (RRP £289) are ideal for accurate monitoring on a budget. Sturdy impact resistant casing makes them the only choice for location work. Bundle them with the Peavey PM400 power amp for only £299

RRP £289
£139
NEW BOXED

NEW, USED & EX DEMO

Alesis 3630	£ 150	Klark Teknik DN405	£ 727
Alesis MEQ230	£ 159	Klark Teknik DN410GE	1,175
Alesis MICROVERB3	£ 165	Klark Teknik DN500	£ 939
Alesis MICROVERB4	£ 249	Klark Teknik DN501	£ 979
Alesis MIDIVERB4	£ 275	Klark Teknik DN510	£ 939
Alesis QUADZ	£ 350	Klark Teknik DN514	£ 856
AMEK 9098	£ 1,050	Klark Teknik DN6000GE	3,237
Aphex 104	£ 175	Klark Teknik DN716GE	1,232
Aphex 105	£ 399	Klark Teknik DN726GE	1,749
Aphex 106	£ 399	Klark Teknik DN728GE	2,100
Aphex 107	£ 549	Klark Teknik DN7730GE	2,130
Aphex 108	£ 269	Klark Teknik DN775	£ 1,999
Aphex 320A	£ 1,818	Klark Teknik DN800GE	1,433
Aphex 720	£ 1,818	LA 4G2	£ 395
BBE 322	£ 149	LA 4G2	£ 395
Behringer EX2100J	£ 149	LA 4X4	£ 299
Behringer EX3100	£ 199	LA C8	£ 699
Behringer MDX2100	£ 239	LA CX2	£ 199
Behringer MDX2400	£ 299	LA GX2	£ 199
Behringer MDX8000	£ 2,199	LA MX2	£ 249
Behringer XR2400	£ 370	LA V8	£ 817
BOSS RV70	£ 399	Lexicon 300L	£ 4,641
BOSS VT1	£ 399	Lexicon 480L	£ 10,569
BSS DPR402	£ 849	Lexicon ALEX	£ 245
BSS DPR901	£ 849	Lexicon DUALFX	£ 249
DBX 150X	£ 149	Lexicon JAMMAN	£ 349
DBX 160A	£ 449	Lexicon LARC	£ 1,512
DBX 165A	£ 1,426	Lexicon LXP15II	£ 799
DBX 166A	£ 499	Lexicon PCM80	£ 1,979
DBX 168A	£ 1,028	Lexicon PCM90	£ 2,589
DBX 266	£ 229	Lexicon REFLEX	£ 349
DBX 274	£ 539	Lexicon VORTEX	£ 450
DBX 290	£ 410	Maxxtech. GLIM200	£ 3,319
DBX 296	£ 417	Maxxtech. GLIM900	£ 5,046
DBX 760X	£ 383	Neve 33609C	£ 2,192
Denon DRM550	£ 159	P+R DB 1 DI	£ 29
Denon DRM640	£ 199	Peavey Analog Filter	£ 359
Denon DRS810	£ 299	PHONIC PCL3200	£ 179
Denon DRW580	£ 200	Roland RSS10	£ 2,199
Denon DRW760	£ 249	Roland SDE330	£ 649
Digitech DHP33	£ 699	Roland SDX330	£ 799
Digitech DHP55	£ 999	Roland SRV330	£ 449
Digitech MIDIVocalist	£ 450	Samson E30	£ 219
Digitech RPM1	£ 550	Samson E62	£ 299
Digitech StudioVocalist	999	Sony DPSV77	£ 1,299
Digitech TSR12	£ 299	Sony MRGP5	£ 499
Digitech TSR24S	£ 699	Sony MRMP5	£ 499
Digitech VOCALIST II	£ 999	SPECK EQ316	£ 699
DOD 231	£ 450	SPL CYXLR	£ 822
DOD 830	£ 260	SPL EQMAGIX	£ 1,175
DOD 834	£ 250	SPL MIKEMAN	£ 469
DOD 835	£ 200	SPL OPTIMIZER	£ 1,173
DOD 866	£ 250	SPL SVLXLR	£ 645
Drawmer 1960	£ 1,169	SPL Vitaliser Stereo	£ 325
Drawmer 1961	£ 1,169	SSL 834	£ 2,358
Drawmer DF320	£ 499	Summit DCC2000	£ 3,113
Drawmer DL231	£ 550	Summit EQF100	£ 2,526
Drawmer DL341	£ 441	Summit EQF200	£ 2,345
Drawmer DL251	£ 550	Summit TLA100A	£ 1,610
Drawmer DL441	£ 617	Summit TPA200	£ 2,229
Drawmer DS201B	£ 220	Symmetrix 402	£ 699
Drawmer DS301	£ 617	Symmetrix 420	£ 381
Drawmer DS404	£ 617	Symmetrix 421	£ 499
Drawmer LA12	£ 288	Symmetrix 422	£ 599
Drawmer LX20	£ 220	Symmetrix 425	£ 499
Drawmer M500	£ 911	Symmetrix 488	£ 599
Ensoniq DP/4+	£ 999	Symmetrix 501	£ 329
Ensoniq DP2	£ 799	Symmetrix 501/01	£ 379
Eventide DSP4000	£ 4,694	Symmetrix 528	£ 649
Eventide H3000B	£ 3,402	Symmetrix 566E	£ 995
Eventide H3000DSE	£ 2,299	Symmetrix 571	£ 799
Eventide H3000DSXL	£ 1,991	Symmetrix 572	£ 699
Eventide H3500DFXL	£ 3,701	Symmetrix 601	£ 1,939
Focusrite BLUE 230	£ 2,932	Symmetrix 602	£ 1,939
Focusrite BLUE315	£ 2,932	Symmetrix 620	£ 1,095
Focusrite BLUE245	£ 2,879	Symmetrix SC1	£ 20
Focusrite BLUE315	£ 4,653	Symmetrix SC2	£ 30
Focusrite BLUE330	£ 5,076	Symmetrix SX201	£ 258
Focusrite RED0	£ 118	Symmetrix SX202	£ 258
Focusrite RED1	£ 2,262	Symmetrix SX204	£ 258
Focusrite RED2	£ 2,344	Symmetrix SX208	£ 258
Focusrite RED3	£ 2,579	TC 2290 32D24	£ 2,080
Focusrite RED4	£ 2,344	TC M5000 SADF	£ 3,496
Focusrite RED5	£ 2,056	TLA CL1	£ 999
Focusrite RED6	£ 1,756	TLA EQ1	£ 1,050
Focusrite RED7	£ 1,756	TLA EQ2	£ 1,521
Focusrite RED8	£ 1,299	TLA M1	£ 3,819
Frontline DOS 20	£ 99	TLA M2	£ 4,994
Furman LCX	£ 349	TLA PA1	£ 1,882
Furman PL8 PLUS	£ 235	TLA PA2	£ 405
Furman PLBE	£ 175	TLA V1I	£ 464
Furman QN44	£ 399	Viscount EFX 1	£ 179
Joe Meek Voice Chan.	£ 589	Viscount EFX10	£ 249
Klark Teknik DN300	£ 939	Waldorf 4 Pole Filter	£ 299
Klark Teknik DN301	£ 939	Waldorf EQ27	£ 249
Klark Teknik DN320	£ 611	XRI 300	£ 159
Klark Teknik DN330	£ 646	Yamaha DS000	£ 1,279
Klark Teknik DN332	£ 891	Yamaha PRO3R	£ 1,056
Klark Teknik DN360	£ 1,479	Yamaha Q2031A	£ 589
Klark Teknik DN3600	£ 2,345	Yamaha REV100	£ 199
Klark Teknik DN3610	£ 1,820	Yamaha SPX1000	£ 749
Klark Teknik DN3698	£ 1,880	Yamaha SPX990	£ 699

NEW, USED & EX DEMO

AKG LSP50	£ 89	JBL CONTROLSBI	£ 269
Alesis monitor 1	£ 269	JBL CONTROLSBS	£ 339
Alesis MONITOR2	£ 699	KRK 6000	£ 699
Alesis RA100	£ 275	KRK 6000S	£ 817
AR Powered Partners	£ 149	KRK 7000B	£ 1,169
ATC SCM10	£ 995	KRK 7000B/S	£ 1,286
ATC SCM100	£ 4,034	KRK 9000B	£ 1,874
ATC SCM100A	£ 5,659	KRK 9000B/S	£ 1,991
ATC SCM20	£ 1,505	KRK KROK	£ 351
ATC SCM20A	£ 11,287	KRK SUBOKS	£ 469
ATC SCM300A	£ 11,994	Omniph Footprint	£ 279
ATC SCM50	£ 3,480	Otis power station x 2	£ 199
ATC SCM50A	£ 4,865	Peavey CS200X	£ 389
Behringer HA4000	£ 299	Quested H108	£ 904
Chameleon 11005	£ 849	Roland MA20	£ 99
Denon PMA2500MK3	£ 159	Roland MA7	£ 150
Dynaudio BM10	£ 734	Samson SERVO150	£ 220
Dynaudio BM15	£ 999	Samson SERVO240	£ 299
Dynaudio BM5	£ 494	Samson SERVO500	£ 399
Dynaudio M1	£ 1,761	Tannoy Centra Series	£ 99
Dynaudio M2	£ 3,759	Tannoy PBM 6.5 MkII	£ 219
Furman HA6	£ 389	Tannoy Sys 10MK2	£ 1,139
Genelec 1030A	£ 1,320	Tannoy Sys 12MK2	£ 1,605
Genelec 1031A	£ 2,298	Tannoy Sys 215MK2	£ 4,000
Genelec 1032A	£ 2,600	Tannoy Sys 6MK2	£ 449
Genelec 1092A	£ 1,308	Tannoy Sys 8MK2	£ 669
Genelec 1094A	£ 2,196	TannoySys 15MK2	£ 1,643
Goodmans ACTIVET5	£ 99	Waldorf EMESRed	£ 939
JBL 4206	£ 249	Waldorf EMESWhite	£ 579
JBL 4208	£ 279	Yamaha A100	£ 159
JBL 4412A	£ 929	Yamaha A100A	£ 289
JBL CONTROL 5	£ 516	Yamaha MS101II	£ 116
JBL control micro	£ 99	Yamaha MS202II	£ 205
JBL control one	£ 199	Yamaha NS 10M	£ 150
JBL CONTROL1+	£ 399	Yamaha NS10MSTUDIO	£ 259
JBL CONTROL1C	£ 175	Yamaha YST M10	£ 49
JBL CONTROL5+	£ 575	Yamaha YSTM10	£ 69

Computer Music

MUSICTIME
Notation arranger
VERSION 15 FOR PC WINDOWS AND TOSH

Why is MusicTime our best selling music package when it has no arrange page, no piano roll, no drum grid and no MIDI Manager. All editing is done on the score itself - it's what we call a 'pure' score program. This makes it much simpler & quicker to use, and ideal for educational situations. New advanced version - Rhapsody - £249

BEST SELLER
PASSPORT
£99
PC OR MAC

SOUND FORGE
New XP version just released
ALSO SOUND FORGE 3.0 - £499

Sound Forge XP is a low-priced, general purpose sound editor which replaces the often unusable editors commonly bundled with most sound cards. It provides a wide range of Audio Processing functions including Fades, Pans, Normalize, Reverse, Smooth, Volume Control, and Stereo/Mono Conversion. Audio effects include Delay/Echo, Chorus, Distortion, and Reverb. Sound Forge supports most common real-time audio compression formats, and is fully 32 bit native in Windows 95 and NT

XP VERSION
£149
WINDOWS 95

MIDIQUEST 5.0
Universal PC Editor Librarian
OVER 200 DIFFERENT EDITORS

MIDIQuest is the most powerful, flexible and comprehensive editor librarian around, with support for the widest range of MIDI devices including XP50, JV1080 series, Morpheus / UltraProteus, MU50, MU80, Quadraverb Plus / GT, Classic Keys, TD-7, KT76 / KT88, Korg X5, DPM3 and many others. Driver upgrades are generally free of charge, so MIDIQuest will last for as long as MIDI is around ! It's a really good investment. For people who'll only ever need one editor we also do SoloQuest, which for £69 provides unparalleled value for money

RRP £285
£175
OR £99 SOLOQ.

Mac and Atari version 4.0 is still available at only £165.95

MUSICATOR AUDIO
16 track digital audio sequencer
AVAILABLE RIGHT NOW!

Supports simultaneous use of multiple sound cards including the ability to record multiple audio tracks at the same time. Simultaneous recording and playback of audio files. Full-featured mixer integrates all operations for MIDI and audio tracks. Input and output meters for each sound card, individual meters for each audio track. Fully automated and recordable real-time control over volume and pan for all Audiotracks as well as MIDI. Audio and MIDI data are viewed, edited, and mixed side-by-side at the same time. Powerful editing operations include Mixdown, Crossfade, Gain Adjust, and Fit Time. Editing of recorded and imported wave files is non-destructive. Drag/drop sub-regions of audio into your song in wave view, measure/track overview, or the notation window

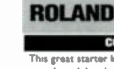
Also, 1 audio track version for £199.00

NEW PRODUCT
£299
WINDOWS 95

VOYETRA
Digital Orchestrator +
DESIGNED FOR WINDOWS95

"D.O.P." allows recording or playing of independent digital audio tracks synchronised with MIDI tracks. The number of digital tracks is limited only by a user's hardware. Full drag and drop digital audio editing features are provided, as well as unlimited bouncing of tracks and support for multiple sample rates, import & export of WAV files. Audio Transforms include digital delay, chorus and flange to fatten up tracks, noise gate, limiter and compressor controls to remove unwanted noise and alter dynamics, and echo, reverb, reverse and fade/crescendo. Humanize adds greater realism to step entered parts, while any performance aspect can be quantized including start times and note durations for perfect rhythms

NEW PRODUCT
£129
WINDOWS 95



ROLAND SC7
bundle with Cubase Lite
COMPUTER MUSIC STARTER PACK

This great starter kit includes a Roland SC-7 General MIDI sound module which is basically a Sound Canvas 24 note poly, 16 part multi-timbral, 8 drum kits, and on-board reverb & chorus controllable for each channel separately. A great money saver is the built-in MIDI interface for Mac or fast PC, which works via the computer serial port (cable included). The package also includes Steinberg's famous Cubase Lite (PC version) free, to get you off to a great start with software from one of the world's leading music software houses. Strictly limited quantities 1st come first served!

RRP £407
£139
NEW BOXED

Web : http://www.demon.co.uk/turnkey
now includes full credit-card security

BAND-IN-A-BOX
Intelligent Arranger version 6
FOR PC OR MAC. (Atari v.5.0)

Highly sophisticated composition aide which combines editable styles and a chord list to provide computer generated backing tracks in seconds. Export into Cubase too!

#1 SELLER
£89
NEW BOXED

SIBELIUS 7
Music Notation
Now v3.0
EXCLUSIVE LONDON SHOWROOM

Why do so many music academies use a program which doesn't work on the PC or Mac?! Because for professional notation type-setting, nothing else comes close. "In a totally different league from anything else" - Paul Patterson, Royal Academy of Music. Future Music Platinum award.

We are now an Acorn Authorised Dealer, we stock and demonstrate the exciting new RiscPC computer, running RiscOS/3 powered by the ARM Processor, and with optional 486 or 586 board for running Microsoft Windows software native if required

CALL RICHARD FINCHER ARRANGE A FULL COMPARATIVE DEMO !

FROM ONLY
£499
PLUS VAT

TURTLE BEACH
NEW TBS-2000 only £169 inc VAT
CALL FOR TOTALLY UNBEATABLE PRICE

16 bit sound card with ICS General MIDI synth and spacial ability to record and play simultaneously. Works with all digital audio sequencers including Musicator, Cubasex Audio and Cakewalk Pro Audio. Optional MIDI cable for use as a MIDI interface. Audio quality same as the Tropez.

ALSO NOW IN STOCK - NEW TROPEZ PLUS - £299
Features twice the size of synth ROM, plus digital effects

APPLE Stylewriter 1200
TOP QUALITY PRINTOUT

Unbelievable price for a quality inkjet printer! 360 dpi resolution, compatible with virtually any Mac, includes Apple's GrayShare software for superb quality greyscale printing, and networking facilities. Very limited supplies available - brand new and boxed with a full 12 month warranty!

Bundle with Performa 630, 14" Colour monitor, Passport Encore Notation DTP software, MIDI interface and Stylewriter 1200, all for only £1499 !

R.R.P. £285
£129
NEW BOXED

DIGIDESIGN AudioMedia II
STEREO HD RECORDING CARD

Turn your Mac into a Hard-disk recording system with the AudioMedia II, which comes with Sound Designer II non-destructive editor software. Features stereo in and out (both digital and analog), and SMPTE sync, as well as realtime compression / Parametric EQ / Pitch Shift and Time Stretch

R.R.P. £1095
£399
APPLE MAC

DIGIDESIGN Sample Cell II
EXPANDABLE TO 32 MEG OF RAM

If you have a PC or a Nubus Mac, this has to be the ideal sampling system. 32 note polyphony, up to 32 Meg of RAM, 8 outputs, multiple cards can be used in one machine, standard file formats supported, SDII, AIFF, WAV, comes with 2 CD-ROMs stuffed full of library and of course ease-of-use is unrivalled, with all editing is done on computer screen. Incredible value for money when compared to similarly features 19" rack samplers, with the added convenience of an all-in-one system solution. Also available for Macintosh - £849 (Additional hardware may be required to record new samples)

R.R.P. £1495
£399
PC WINDOWS

NEW, USED & EX DEMO

MIDI TRANPRO	£ 130	MIDI transpronyc	£ 230
ALTECH MacLX	£ 49	MIDIMAN Syncman	£ 99
Apple Performa450	£ 399	MOTU FREESTYLE	£ 149
Cakewalk Audio	£ 339	MOTU MIDI EXP PC	£ 349
Cakewalk Audio CD	£399	MOTU MIDIEXP	£ 349
Cakewalk Express	£ 69	Musicware PIANO2	£ 89
Cakewalk Home St	£ 99	Opcode STUDIO	£ 299
Cakewalk Pro	£ 169	Opcode STUDIO4	£ 549
Cubase 2.8PC	£ 275	Opcode STUDIO5LX	£ 399
Cubase 2.8Mac	£ 335	Opcode VISIONPC	£ 249
Cubase Audio Mac	£ 675	Passport Alchemy	£ 500
Cubase Score Mac	£ 425	Passport Encore	£ 450
Cubasis	£ 149	Passport MT Pro	£ 150
Cubasis Audio	£ 249	Passport MusicTimeL	100
Emagic AV Extn.	£ 75	Passport Rhapsody	£ 250
Emagic EXPORT	£ 85	Peavey PC1600	£ 329
Emagic LOG2 Mac	£ 65	Ricoh Scanner	£ 149
Emagic Logic Audio	£269	Roland CMU 800 R	£ 29
EmagicLogicAudioP	£649	Roland MCS0MK2	£ 349
Emagic LogicMac	£ 180	Roland RAP10ATB	£ 159
Emagic LogicPC	£ 199	Sotinberg Wave Lab	299
Emagic Micrologic MC	99	Steinberg Cubase 3	£ 329
EmagicMicrologicPC	£ 99	Steinberg Midex +	£ 475
Emagic Notator SL	£ 199	Steinberg MUSICPC	£ 149
Emagic UNITOR II	£ 199	Steinberg ReCycle	£ 175
EmagTDM exten	£ 149	Steinberg TimeBandle	£399
Fostex Mixtab	£ 99	Steinberg WAVE	£ 20
Goldstar GSE X21	£ 60	Studio Vision PRO 3	£ 799
JLC syncmaster Mac	£ 29	Turtle Beach Maui	£ 169
Key MP128N	£ 129	Turtle Beach Tahiti	£ 299
Key MP128S	£ 199	Turtle Beach Tropez	£ 239
Key MP128X	£ 129	Viscount RD 800	£ 349
M Quest MQX32M	£ 230	Voyetra Sound Suite	£ 140
Midi Express Nota	£ 379	Voyetra V22	£ 100
Midi Time Piece II	£ 579	Voyetra V34S	£ 250

SyQuest EZ135

Removable External SCSI Drive

Where can you store all those long samples and audio files? PAUL WHITE checks out one possible answer.

With the proliferation of 'MIDI plus audio' sequencers, and also the increased use of samplers with large memory capacities, hard drive storage space has become a major issue. Recently, low-cost removable drives have appeared on the market, such as the Iomega Zip and Jaz drives (see the *SOS* review of the Zip drive in last December's issue), and the SyQuest EZ135 reviewed here. The SyQuest EZ135 is of particular interest, because it is fast enough to use for direct-to-disk audio recording, and it also seems the ideal medium for storing samples. Even if most of your samples come from CD-ROM, there will be occasions on which you want to edit the sounds in some way, and then resave them.

THE EZ LIFE

Unlike the early 44Mb and 88Mb SyQuest drives, the EZ135 is smartly styled, affordable and, most importantly, the 135Mb disks are only just over £17 each. A rear panel switch allows easy selection of the SCSI ID, and a SCSI terminator and lead are supplied. Power comes from an external adaptor — also bundled with the drive — that automatically adapts to the local mains voltage. The only complaint I have here is that it's too easy to insert the PSU plug incorrectly into the drive! Mine wouldn't work until I unplugged it and plugged it back in the right way around. A better mechanical keying system would solve this.

Bundled with the drive is a floppy disk containing the necessary PC installation software, while the Mac equivalent comes on the included cartridge. The vital bit for Mac users is *Silver Lining Lite*, which enables your computer to mount the disk; it can also be used for formatting, though new 3.5-inch disk cartridges (which have a mechanical write-protect switch) come ready-formatted and with duplicates of all the original software on them. The software includes a limited copy of *Virtual Disk*, which allows you to keep a catalogue of your removable disk contents on your internal hard drive, plus several games that seem to involve rampaging through blood-splattered corridors.

IN USE

The drive worked just like any other hard drive with my ProTools II system and with Emagic's *Logic Audio*, but best of all, it proved to be really quiet in use; previous SyQuests I've owned have been like sharing the studio with a dishwasher! On shutting down the computer, the disk unmounts and the eject lever pops out, so if you want to use the disk next session, you have to remember to push the lever back in.

When connected to an Akai S2000 sampler, the disks can be formatted directly from the sampler, and again, no problems were experienced. The drive seems every bit as fast as a typical fixed hard drive — except you don't get fan noise. The disk cartridge packaging is also rather nice; as well as being very protective, there's also a transparent outer sleeve beneath which you can fix your own label.

At the price, the Syquest EZ135 is a bargain that's hard to resist — and incidentally, I didn't! It may not have the capacity for album editing or long multitracking sessions, but when you just want to add the odd guitar solo and vocal line to a MIDI composition, it's just the ticket. What's more, the disks are affordable enough to archive at around twice the price of a DAT tape. SOS

pros & cons

EZ135 EXTERNAL SCSI DRIVE £194

pros
- Quiet and fast.
- Inexpensive drive and media.
- Works with Macs, samplers and IBM SCSI systems.

cons
- Power supply plug is too easy to connect in the wrong orientation.

summary

If you have a SCSI sampler or a hard disk recording system, you'll have to look a long way for a reason not to buy one of these drives.

SOUND ON SOUND

info

£ EZ135 external SCSI drive, £193.88 (plus £9.40 UK carriage costs). This price includes a SCSI terminator, Mac and PC software, and a 25-50 pin SCSI cable; 135Mb cartridges cost £17.04 (plus £1.76 UK postage). All prices include VAT.

A SyQuest Technology Ltd, Spitfire House, Edinburgh Airport Cargo Village, Turnhouse Road, Edinburgh EH12 0AL.

T 0131 339 2022. Technical Support Line 0131 338 0102.

F 0131 339 6765.

Fatar Studio

MIDI Master Keyboard

This Italian master keyboard may be completely dumb soundwise, but it's pretty clever in other departments. DEREK JOHNSON & DEBBIE POYSER just love being in control.

Fatar master keyboards have been widely available in the UK for three or four years now, and seem to be doing well with the support of distributors Arbiter. At the top of the current range is the 88-note Studio 2001, with four independent MIDI outputs, eight keyboard zones and six controllers; next in line is the Studio 1100 (see *SOS* review, December 1994), also featuring 88 notes and a slightly curtailed spec. The latest entry in Fatar's Studio series takes the 1100 as its starting point, and places it in a more compact 76-key package — hence the name, Studio 1176.

COVER STORY

The operating surface of the Studio 1176 is clean and uncluttered: the Pitch Bend and Mod wheels are on the left above the keyboard, to save space, and the editing controls and 3-character LED display are in the middle. There are two sliders next to the display: one is an overall volume control, and the other an assignable slider that does duty as a data entry control when editing. Several black keys on the keyboard also double as a numeric keypad, for entering parameter values and Program Change numbers directly. A recessed back panel hides the connections — in addition to the MIDI In and two parallel MIDI Outs, there's a sustain pedal socket, plus an assignable control pedal socket. There's also a mini-jack power socket, since power is supplied by a 9V external supply.

FATAR FACTS

The 1176's keyboard is velocity- and aftertouch-sensitive and can be split into four Zones, which can be layered (up to four sounds playing at the same time) or given separate key ranges (so, for example, you could have a bass patch assigned to the lowest zone, a pad sound to the next, a piano to the next, and so on). Each Zone can have its own MIDI channel, Program Change number including Bank Select (to select a patch on your sound source), volume setting, and transposition value. The above parameters are set and edited using the four buttons labelled Preset/Function, and the four labelled Zones. It's easy to do: select one of the four Zones with its button, press one of the Function buttons, and you're in edit mode. Now cycle through the three parameters available under each of the Function buttons, using the Control/Data slider to alter values, which are shown in the 3-digit LED display. When you've finished editing, your settings are automatically saved as a so-called Preset. There are 32 of these memory locations.

pros & cons

FATAR STUDIO 1176 £750

pros
- Excellent keyboard feel.
- Good MIDI control options.
- Good value for money.

cons
- Only one MIDI Out.
- Limited display.
- Only a single control pedal input.

summary
Sufficient MIDI control options for most people, coupled with 76 notes of excellent keyboard quality, at about the right price.

SOUND ON SOUND

1176

and when these are full, the memory can be dumped to an external MIDI storage device.

While creating a Preset, you can also define whether each Zone will be able to transmit aftertouch, pitch bend and mod wheel information, and set the keyboard's velocity response in each Zone — so you could have a different keyboard 'feel' for a piano patch than for a string pad, for example. Velocity customisation can also allow you to create a velocity 'crossfade' between two layered Zones. In addition, the Control/Data slider and the Control Pedal input can both be assigned to any MIDI Continuous Controller between 0 and 120 — on a per-Zone basis, naturally.

Usefully, there are one or two things you can do with Zones without even having to go into edit mode. If you no longer want a Zone you've set, you can mute it simply by pressing its Zone button (active Zones are indicated by a yellow LED), and if you want to change the sound assigned to a Zone, pressing the Zone button and keying in a Program Change number selects a new patch on the attached MIDI sound source.

ZONE RANGER: EDITABLE FUNCTIONS FOR EACH ZONE

The following functions are available under the four Preset/Function buttons on the front panel:

- LOW KEY/HIGH KEY: define the key range of a Zone; key ranges for two or more Zones can overlap.
- PROGRAM: selects the sound to be played on the connected MIDI sound source for each Zone; includes Bank Select.
- CHANNEL: sets the MIDI channel over which a given Zone transmits data.
- WHEELS: turns the Pitch Bend and Mod wheels on or off, per Zone.
- VOLUME: sets the volume level of the selected Zone
- VELOCITY: allows you to customise the keyboard velocity response for each Zone.
- AFTERTOUCH: turns aftertouch on or off for each Zone.
- TRANSPOSE: sets the transpose value (+/-24 semitones) for each Zone.
- CSL: assigns the control slider to any MIDI Continuous Controller between 0 and 120.
- PEDAL: as above, for the control pedal.

ACTION, MAN

Fatar keyboards feature some of the best simulations of piano feel around. The company's 'patented hammer action' is once again used on the Studio 1176, and the result is an eminently-playable weighted keyboard. For those reared on plastic synth keyboards, an action such as the Studio 1176's will probably be hard work until you get used to it. For pianists moving in the opposite direction, there should be no such problems.

Other controller keyboards, including Fatar's own 2001, offer more Zones, more Controllers, more keys, and more independent MIDI outputs — but they also cost more. The Studio 1176 is a straight-ahead, high-quality MIDI master keyboard, with convincing piano action and a sensible level of MIDI control, at a reasonable price. If that's what you're after, your search may be over. SOS

£ £749.95 inc VAT.
A Arbiter Group plc, Wilberforce Road, London NW9 6AX.
T 0181 202 1199.
F 0181 202 7076.

Spirit Folio SX

20-Input Mic/Line Mixer

First observed by the SOS team at the bottom of an aquarium at this year's Frankfurt Musik Messe, Spirit by Soundcraft's new Folio SX mixer has now arrived. PAUL WHITE dries it off and removes the goldfish droppings from the insert points...

The no-nonsense Folio SX has an external power supply so you can make it work, there are sockets so you can connect things to it and there are controls — so you can control things [*been watching that Toyota advert again, have you? — Assistant Ed*]. There's no driver's airbag, or air conditioning, but you do get 12 fully-functional Mic/Line channels, two comprehensive stereo channels, and a two further general-purpose stereo inputs with a choice of Main or Sub mix buss routing. Add these 20 inputs to lots of powerful EQ, a generous aux send system, and a convenient carrying handle (which also serves to prop the mixer up at a jaunty angle when in use), and you have a mixer quite obviously designed to muscle in on the Mackie 1402VLZ market (check out the review of the Mackie in last month's *SOS*).

CONTROLS AND FEATURES

Because of its topography, the Folio SX is well suited to simple multitracking, live recording, PA or keyboard use. All the channels are controlled by full-length faders, and there's global phantom power for capacitor mics, plus phono inputs for a 2-track recorder such as a cassette deck or DAT machine. Each mic/line input has a switchable 100Hz, 18dB/octave low-cut filter, a gain Sensitivity control, and a TRS jack insert point. Channels 1 to 8 are fitted with ground-compensated (pseudo-balanced) direct output jacks. Recessed switches next to the fader enable the direct output to be set pre- or post-fader. Post-fader is the default option, but you can switch to pre-fade if you prefer.

There are three aux sends in all; Aux 1 is fixed pre-fade, and Aux 3 is fixed post-fade. Aux 2 may be switched to pre- or post-fade operation via a master switch, and all three sends have master level controls. The 3-band EQ fitted to all 12 mono channels has a sweep mid control providing up to 15dB of cut or boost over the range 240Hz to 6kHz, plus HF and LF shelving controls operating at 12kHz and 60Hz. There's no EQ bypass, but the controls are centre-detented. Routing comprises a conventional Pan control (or Balance on the Stereo channels) and Mix/Sub switching, which sends the channel signal either to the Main stereo buss or to the Sub stereo buss. Separate channel On buttons are provided in a fetching shade of lilac, and ample scribble space is provided below the fader. All input channels have PFL buttons, aside from the phono inputs (channels 13,14 and 17,18).

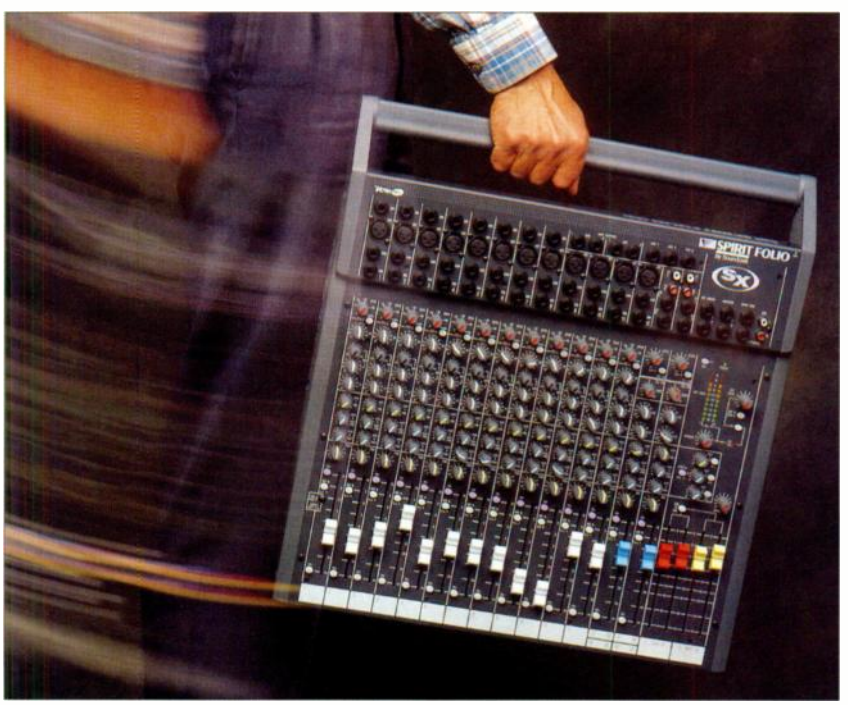
The aux sends have AFL soloing, and, as usual, the channels input gains can be set up using the PFL buttons and the meters. A master Solo LED indicates when one or more channels are solo'd, and any solo'd sources are heard in isolation over the Monitor output and the headphones. Plugging in headphones disconnects the Monitor output, which I feel is a trifle restrictive. At any time, the tape input can be monitored by selecting the 2Tk button.

The Stereo channels are similar to the mono channels, except that they have no mic inputs, no insert points, and no mid-band EQ. At the very top of the channel strip are Level controls for the final pair of stereo inputs, which are on phonos, and these may be routed to either the Main or Sub mixes. As these have only level controls and no access to EQ or sends, they are probably best used as effects returns, though they can handle any line-level signal.

CONNECTIONS

The XLR mic inputs, TSR jack line inputs, aux sends and main outputs are all electronically balanced, although unbalanced connections can also be used with the right leads. The Direct channel outputs employ a pseudo-balancing system know as ground compensation, whereas the phono connections are obviously unbalanced.

A rather light-duty, moulded non-locking 3-pin socket connects the power supply to the rear panel of the mixer — all other connections, including the Phones output, are at the top of the front panel. The power lead does have a moulded locking lever, but this doesn't seem to work — you can still pull the power cable out quite easily. The headphone output should be used with phones of a 200Ω impedance or greater.



pros & cons

SPIRIT FOLIO SX £611

pros

- Sensible range of features.
- Clean sound.
- Clear, well-thought out manual.

cons

- External PSU.
- Using headphones mutes the Monitor output.

summary

A well-specified mixer offering simple 4-buss operation with very few restrictions.

SOUND ON SOUND

MASTER SECTION

Separate fader pairs are used for the Main Mix and Sub Mix output, while the Monitor output and Phones level are set using the same rotary control. A separate level control is provided for the 2-track return. Metering is via simple 10-section peak-reading LED ladders. A Mix/Sub switch swaps the meters and phones output from monitoring the Main mix to monitoring the Sub mix, and for simple subgrouping, the Sub mix can be fed into the Main mix using the Sub to Mix button. Separate insert points are provided for the Main Mix, and there's also a mono, summed output for mono PA applications, governed by a separate rotary control. With the exception of the inserts, direct outputs and phono inputs, all the signal connections are electronically balanced, with a nominal operating level of +4dBu. Status LEDs are fitted adjacent to the 48V Phantom Power switch and a green LED shows when the mixer is powered up. A further red LED shows that one or more channels are solo'd.

OPINIONS

Interestingly, surface-mount technology has been employed in this model to optimise both size and cost, and the performance of the SX is typical of the rest of Spirit by Soundcraft's Folio range. The signal path is quiet, the EQ is positive (and about as musical as you can get in this price range), and the routing options are adequate to meet a number of different requirements. The dual buss system isn't quite so flexible as true 'something into four into two' routing, but by using both the Sub outs and the Direct channel outputs, multitrack recording is quite possible.

Physically, the console is both compact and light, but it isn't in any way cramped, and the use of full-length faders gives it a very professional feel. The old knob wobble syndrome has clearly been consigned to the past, though some controls are noticeably stiffer than others; perhaps they'll run in with use?

I also like the rather bold colour scheme, which somehow works, unlike some competitors' attempts to be visually distinctive. The manual is worthy of mention too, as it is refreshingly concise yet very informative, with practical examples of wiring systems for PA, recording and so on. There's also a useful section on cable wiring conventions.

As I've said before, I don't know how long mixer manufacturers can go on exploiting what was originally a niche market for small mixers, but as long as there's a demand, Spirit look set to remain somewhere close to the top of the pile. The SX is a neat addition to the Folio range in all senses of the word. SOS

info

£ £611 inc VAT.
A Spirit by Soundcraft, Cranborne House, Cranborne Industrial Estate, Cranborne Road, Potters Bar, Herts, EN6 3JN.
T 01707 665000.
F 01707 660482.

BRIEF SPECIFICATION

Mic Input Impedance	1.8kΩ
Line Input	10kΩ
Outputs	75Ω
Headphones	150mW into 200Ω
Frequency Response (any input to any output)	25Hz to 30kHz within 1dB
THD @ 1kHz, (+20dB at all outputs)	0.006%
RMS Noise (16 inputs routed, faders down)	better than 85dBu, 20Hz to 20kHz
Overall dimensions	479 x 511.5 x 80mm

dynaudio acoustics®

Monitoring Quality

From The Orb & the Finnish National Opera....

Introducing the BM Series

It took 15 years, 100 Danes, a few million Kroner and an englishman with attitude to come up with the BM Series. Fortunately it was all worthwhile! We wanted to make a monitor which not only reproduced sound balances accurately but also enabled anyone to hear the difference between good and bad sources. Many low to mid priced systems simply do not reveal the subtle distortions and resonance's which creep into a multitrack recording because they are hidden by the coloration of the speaker itself.

So how do we do it?

Dynaudio Acoustics has produced monitor systems for some of the worlds finest studios and they have used the same uncompromising engineering standards in the BM Series. High volume cabinet production and the automation of component manufacture has produced massive cost reductions without compromising quality at all.In fact the BM Series could sell for twice the price, but don't worry, that's a job for our competitors.

....To The Chemical Brothers & Metallica

Dynaudio Acoustics is distributed in the UK by:
Unity Audio. Tel:01920 822890 Fax: 01920 822892

UNITY AUDIO LTD

Dynaudio Acoustics, Unit 21 Riverside Workshops, 28 Park Street, London SE1 9EQ UK
Tel: +44 (0)171 403 3808 Fax: +44 (0)171 403 0957 Compuserve: 100072,2302

Shure Beta Series

Dynamic & Back-Electret Microphones

Shure have recently updated and augmented their 7-year old Beta microphone range. PAUL WHITE assesses the newcomers alongside the rest of the range.

Just like the manufacturers of Coca-Cola and their world-famous 'brain tonic', mic manufacturer Shure have to be very careful of any changes they make to their classic SM58 dynamic mic — otherwise hordes of purists rush to say that it's no longer as good as the original. The dynamic models in the latest Shure Beta range of mics are based on a Neodymium magnetic system which promises a higher output level and an extended frequency response when compared with other dynamic mics, but other than that, Shure seem to have tried their best to keep the family sound intact.

BETAS NOW EVEN BETTER

The Beta series hypercardioid mics were originally launched in 1989, but Shure have recently updated the range by making minor alterations to the design of the Beta 57 and Beta 58 dynamic mics (resulting in the addition of an 'A' to the model number of these two mics). In addition, there are two completely new mics, the Beta 56 drum mic, and the Beta 52 bass drum mic. We received a complete set of Beta series mics for review, which comprises the four above-mentioned mics plus the odd one out, the Beta 87. This differs from the other, dynamic mics in that it is a back-electret capacitor mic intended for hand-held vocal use or studio recording. Cosmetically, all the mics have a family styling with heavy cast bodies finished in metallic blue/grey paint and matt-chromed mesh grilles sporting a light blue trim. All have balanced XLR outputs, supercardioid response patterns, and none are fitted with on/off switches. Soft carry cases and standmounting clips are provided as standard.

The Shure Beta series (l-r): The 58A, 57A, 87 (centre top), 56 (centre bottom) and 52.

pros & cons

SHURE BETA MICS £187/£382

pros

- Tough construction.
- Classic Shure sound.
- A model for virtually every application.

cons

- The Beta 87 capacitor mic may be too insensitive for making quality recordings of quiet acoustic instruments.

summary

A sensibly compact range that covers virtually all live applications and meets a number of studio requirements, especially in the areas of drum miking and instrument amplifier miking.

SOUND ON SOUND

THE BETA 58A &57A

The equivalent Beta to the classic SM58, the Beta 58A, is exactly the same shape as the regular SM58, the main outward difference being the blue trim and the bluish tinge to the body colour. A pneumatic shockmount is used to minimise handling noise, and the frequency response is designed to suit close-miked vocals, though some engineers also like to use 58s on electric guitars and even drums. With a useful frequency range extending from 50Hz to 16kHz, the mic has a falling bass response below 500Hz to compensate for the proximity bass boost that results when the mic is used up close. The top end features a dual peak presence rise at around 4kHz and 10kHz which helps to produce a sound capable of cutting through a loud backing track. Because all these mics have a supercardioid pattern, they are slightly more sensitive to sounds coming directly from the rear than cardioid mics, so stage monitors are best placed between 60 and 30 degrees off axis.

Almost as famous as the SM58 is the SM57, and this too has its equivalent in the Beta 57A. Designed for miking drums (mainly toms), amplifiers and brass/woodwind, the 57A also holds its own as a vocal mic, making it an excellent choice for somebody needing a high quality all-rounder. The frequency response is very similar to that of the Beta 58A, and the mic can be distinguished by its barrel-shaped grille.

THE BETA 56 & 52

The Beta 56 has a slightly less pronounced presence peak than the Beta 57A, but is again a general-purpose model especially suited to drum and instrument amplifier miking. The mic has a very short body and an integral swivel stand adaptor which makes it particularly good at getting into tight spots, such as between drums and cymbal stands. It is well suited to miking snares as well as toms and also works well with brass and woodwind.

Until recently, Shure haven't had a high-profile bass drum mic to compete with the likes of the AKG D112, but the new Beta 52 now seems to fit the bill nicely. Again equipped with an integral swivel stand adaptor, the Beta 52 has a large body, and can accommodate the very high SPLs encountered inside kick drums. The maximum SPL is calculated as being 174dB at 1kHz — evidently Shure couldn't find anything loud enough to actually test it with! The frequency response plot extends from 20Hz to 10kHz and shows this to be anything but an honest mic — it is specifically designed to bring out the deep kick and the high-end impact sound of the kick drum. Used up close, the proximity effect results in a hefty boost in the 30 to 50Hz region, and the top end features an almost violent presence peak at 4kHz which really helps bring out the head impact 'click'. This, coupled with a lower mid-range dip results in a very confident tone, with bags of edge and minimal 'muddying'. No doubt somebody will want to use this as a vocal mic because of its looks, but my guess is that it's best reserved for miking kick drum or bass guitar amplifiers.

THE BETA 87

Finally, there's the back-electret Beta 87, which has a barrel-shaped grille similar to that of the Beta 57. Like the dynamic mics in the range, this model has a robust capsule suspension system and manages a useful frequency range of 50Hz to 18kHz. The presence peak is similar to that of the Beta 58, but because of the extended frequency response, the sound is noticeably more 'open' than you get from a dynamic mic. A phantom power source of between 12 and 52V can be used to power the microphone. The maximum SPL when running into a 150Ω input is 134dB. Surprisingly perhaps, the Beta 87 isn't a great deal more sensitive than the dynamic mics in the range, but as it's designed for close use, perhaps this isn't a bad thing. It does, however, make the mic less suitable than some other capacitor and back-electret models for recording acoustic guitar. On the plus side, this mic has a rich warmth which combines the punch and presence of a dynamic with the top end clarity of a capacitor.

SUMMARY

Overall, this is a well-designed series of microphones which combines quality of sound with seriously heavy-duty construction. The range is obviously designed primarily for live performance, but all the models would be equally at home in the studio. The Beta 87 is a strong vocal performer, while the Beta 57A and 58A deliver the classic sound but with a slightly enhanced edge. The Beta 57A is a fine tom mic, and if I had to choose an all-rounder from the range, it would probably be the 57A. Having said that, I'm glad to see Shure building mics like the Beta 52 and Beta 56 for specific drum applications, especially the Beta 52 kick drum mic.

Finally, if you decide to go for one or more of these mics, be sure to check it out carefully to make sure it's exactly what you want — because knowing Shure's build quality, it'll still be going strong in 20 years' time!

SOS

£ Beta 52 £264.38; Beta 56 £205.63; Beta 57A £186.83; Beta 58A £229.13; Beta 87 £381.88. All prices include VAT.
A HW International, 167-171 Willoughby Lane, London N17 0SB.
T 0181 808 2222.
F 0181 808 5599.

NEWCASTLE ON TYNE'S LEADING MUSIC STORE

Sounds Live

• MAIL ORDER A SPECIALITY •
• GREAT PRICES • FAST DELIVERY •

0191 230 3422

SECONDHAND EX DEMO AND SOME NEW BARGAINS

Akai S2000	£939	Korg AX30G	£249
Alesis S4 Module	£699	Kurzweil K2500R	£LOW
Alesis QS6	£CALL	Roland P55 Piano Module	£299
Alesis DM5 Drum Module	£399	Roland D10	£299
Alesis SR16	£159	Roland XP10	£449
Behringer Eurodesk	£1799	Roland D20	£459
Boss DR5 Drums	£249	Roland Juno 106	£299
Boss DR660Drums	£249	Studiomaster Power House 8/2 600w Mixer	£639
Boss MEB	£275	Studiomaster Diamond 8/2 Mixr	£195
Casio VZ10m	£169	Studiomaster Diamond 16/2 Mixr	£329
Digitech Studio Vocalist	£779	Studiomaster Vision 10/2 700w Powered Mixr	£859
Digitech Midi Vocalist	£379	Soundtracs Topaz Maxi 24	£1699
Emu Proteus XR	£349	Yamaha PF150	£1389
Emu Vintage Keys Plus	£799	Yamaha MT8x	£799
Emu Proteus FX	£469	Yamaha MT50	£279
Emu Morpheus	£899	Yamaha MT4X	£379
Emu ESi32	£899	Yamaha DX7	£279
Emu E64	£2099	Yamaha W7	£899
Emu Proformance	£239	Yamaha SY85	£699
Emu Darwin	£2399	Yamaha SY35	£299
Fostex XR7	£399	Yamaha Promix 01	£1549
Kawai G. Mega 1X	£159	Yamaha RY8	£169
Korg X3	£869	Yamaha RX5 Separate Outs	£149
Korg i3	£1259	Yamaha RY20	£269
Korg X5	£599	Yamaha PSR7000	£VERY LOW
Korg 05R/W	£389		

KEYBOARDS AND MODULES

Alesis QS6 New Budget Quadrasynth	£739
Alesis S4 Plus Piano Module	£679
Emu Orbit The Latest And hottest Dance Module	£CALL
Emu Ultra Proteus	£1139
Emu Proteus FX	£459
Emu Proformance 1 Plus	£269
Emu Vintage Keys Plus	£799
Emu Morpheus	£899
Emu Classic Keys	£489
Emu ESi32 Std And SCSI. Plus Huge Free Library	£999
Emu E64 Turbo(New Product) 8mb,270mb	£LOW
Emu E4K	£CALL
Ensoniq TS10	£1399
Ensoniq TS12 Weighted Version	£1499
Ensoniq ASR10 Keyboard Or Rack + Huge Free Library	£1499
Ensoniq ASR88 Keyboard	£CALL
Ensoniq MR Rack(JV1080 Beater For Much Less)	£899
Fatar Studio 900 Mother Keys(Full Fatar Range In Stock)	£549
Fatar Studio 610 Mother Keys	£199
Kawai G. Mega LX Great Low Priced Module	£169
Korg Prophecy	£VERY LOW
Korg Trinity	£UK LOWEST
Korg OASYS Open Architecture Synthesis System	£CALL
Korg X3 Plus Free Sounds Plus Free Video Manual	£859
Korg X5D New Powerfull synth	£689
Korg X5 Plus Free Sounds Plus	£589
Korg i3 Plus Free Sounds	£1369
Korg i4S	£879
Korg i5S New Version Of i4s	£899
Korg i5M New Module Version Of i5	£CAL
Korg 05R/W	£399
Korg X5DR Amazing New Module	£499
Korg i4l Harmoniser And Vocorder	£319
Kurzweil K2500R	£CALL
Novation Bass Station	£289
Novation Bass Station Rack	£339
Nord Lead Virtual Analog Synth	£CALL
Quasimidi The Raven	£CALL
Quasimidi Quasar	£CALL
Quasimidi Technox	£CALL
Quasimidi Cyberg-6 Incredeble New Mother Keys	£CALL
Yamaha SU10 New Entry Level Sampler At Ultra Low Price	£299
Yamaha W7 Plus Free Sounds, Plus Free Sound Board	£889
Yamaha QS300 Brilliant New Low Priced Workstation	£939
Yamaha SY85 I Loads of Free Extra Sounds!	£775
Yamaha CS1x Amazing New Analogue Control Synth	£599
Yamaha MU80	£519
Yamaha MU50 New High Spec Low Priced Module	£339
Yamaha MU5	£179
Yamaha P50-en New Piano Module based on P500	£339
Yamaha P150 Amazing New Stage Piano	£CALL
Yamaha PFP100 Piano New Low Price	£1169
Yamaha PSR620	£539
Yamaha PSR520	£409
Yamaha PSR420	£269
Yamaha PSR7000	£CALL
Yamaha PSR4000	£CALL

"We wont be beaten on deals or services. So check us out!"

MIKES & RADIO SYSTEMS

AKG WMS100	£LOW
AKG WMS50	£349
AKG D655	£39
AKG C1000S	£179
AKG C3000	£279
Beyer TGX40	£137
Beyer TGX60	£165
Beyer TGX80	£199
Beyer M300	£79
Beyer S150G Guitar System	£169
Beyer S150H Mic System	£269
Beyer S250H Mic. System	£349
Beyer Boom Mike Stands Complete Crazy Price	£35
Quicklock Boom Mike Stands Crazy Price	£25
Sennheiser MD504 Amazing New Bass Drum Mike	£79
Sennheiser 1051 Diversity System New Crazy Price	£499
Shure SM58	£CALL
Shure ETV/58S	£299
Shure EC23/Beta 58S	£LOW
Shure ETV/58D	£399

"SHURE, BEYER, SENNHEISER, AKG, MIKES AND HEADPHONES ALL ON GREAT DEALS"

RECORDING AND EFFECTS

Alesis ADAT XT + Studiomaster P7 16:8:16	£3999
Alesis ADAT XT+ Soundtracks Topaz 24:8:2	£3899
Alesis ADAT + Mackie D Buss	£LOW
Alesis Microverb 4	£249
Alesis Quadraverb 11	£499
Alesis Monitor 1	£299
Alesis Midiverb 4	£339
Aesis ME0230 Graphic	£209
Alesis 3630 Compressor	£219
A. Heath GS1 Brilliant Mixer	£689
ART X15 Foot Controller	£198
ART Tube Pre-Amp	£CALL
Barcus Berry BBE 462 Maximiser (FULL RANGE OF BBE IN STOCK)	£269
Behringer Eurodesk	NEW LOW PRICE
Behringer Composer	£239
Behringer Autacom	£159
Behringer Duadfex	£125
Behringer Ultrafex	£199
Digitech Studio Vocalist	£LOW
Digitech Midi Vocalist	£NEW
Digitech Studio Quad	£CALL
Digitech RP6	£259
Digitech TSR24	£LOW
EMU Darwin Amazing Stand Alone Hard Disk Recording	£2399
Fostex DMT8	£UK LOWEST
Fostex RD-8 Digital 8 Track	£CALL
Fostex D-5 digital Mastering	£CALL
Fostex XR3	£225
Fostex XR5	£299
Fostex XR7	£429
Korg AX30G	£259
LA Audio 4X4 Comp/2x Gates(Full Range In Stock)	£289
LA Audio 4C 4x Comps	£319
LA Audio 4G 4x Gates	£319
Lexicon Alex	£319
Lexicon Reflex	£375
Mackie 8 Bus Mixers Ring For Best Prices And Packages	£CALL
Mackie 1404 VLZMixer	£CALL
Mackie 1202 VLZ Mixer	£349
Phillips DCC730 Pkg Inc Tapes & Remote	£249
Samson MPL 1604 Mixer Great Spec	£439
Soundtracs TOPAZ Maxi 24	£1599
Soundtracs Solo/Midi With Midi Mute	£LOW
Soundtracs Topaz Mini And Macro Mixers	£LOW
Studiomaster Gold	£639
Studiomaster P7 16/8 Or 24/8	£UK LOWEST

"EXCLUSIVE DEAL ON YAMAHA MIXERS, RING NOW FOR YOURS"

Yamaha MX200 8/2RRP 599	£419
Yamaha MX200 12/2 RRP 749	£525
Yamaha MX200 16/2 RRP 899	£629
Yamaha MX200 24/2 RRP 1199	£839
Yamaha MM14020 8/2 RRP 429	£429
Yamaha ProMix 01	£1599
Yamaha ProMix 02R	£CALL
Yamaha MD4 Mini Disk 4 Track Coming Soon	£999
Yamaha MT50 Amazing New 4 Track Great Features	£299
Yamaha MT8X New 8 Track In Stock	£859
Yamaha MT4X The Best Around In All The Four Tracks	£399
Yamaha NS10M Monitors Pair	£C259
Yamaha REV100 Digital Reverb	£199
Yamaha Pro R3 Serious Digital Reverb From J2RComing Soon	£1199
Yamaha GW10	£239
Zoom 2020 New Low Price	£185
Zoom 3030	£219
Zoom 1202	£159
Zoom 4040	£249
Zoom 1010	£119

DRUMS & SEQUENCERS

Alesis SR16	£199
Alesis D5R New Version Of The Popular D4	£LOW
Novation Drum Station	£CALL
Roland/Boss DR5	£259
Roland/Boss DR660	£299
Yamaha MDF2	£299
Yamaha RY20	£299
Yamaha RY8	£199
Yamaha QY22 New General Midi Version Of QY20	£CALL
Yamaha QY300 Plus Free Video Manual	£549
Yamaha QY700 Massive Spec New Sequencer/Module Coming Soon	£999

SOFTWARE AND SOUNDCARDS

Steinberg Cubase Score	£CALL
Steinbase Cubasis	£135
Notator Logic V2.0	£279
Procyon	£30
Jazz Guitarist	£49
ST85Discs(Various)	£25
W7 Discs(various)	£25
Gem S2 Sample Translator	£20
Yamaha SY85 Vintage Boards	£49
Yamaha Sound Edge	£CALL
Yamaha DB50XG Daughter Board	£149
VIDEO MANUALS. For most things available at low prices	£CALL

27-29 DEAN STREET, NEWCASTLE ON TYNE NE1 1PQ
TEL: 0191 230 3422 FAX: 0191 222 1663
SURF SOUNDSLIVE: E-MAIL. 100422.3716 @ compuserve.com

STEEL APPEAL

As Mackie's new 1402VLZ goes a long way to bridging the gap between their original 1202 and 1604, it comes as no surprise that the new 1604VLZ has evolved a whole new range of features. PAUL WHITE checks out the update of this steel-clad classic...

MACKIE CR1604VLZ 16-CHANNEL MIXER

Mackie's original 1604 (reviewed way back in *SOS* December '91) put the company squarely on the map as a serious mixer manufacturer, but since then their range has expanded considerably, with the new 1604VLZ occupying pride of place at the top of the 'small but cute' general-purpose mixer range. The 1604VLZ retains the trademark Mackie sheet steel casing, as well as the original 1604's ability to convert the mixer from table-top to rackmount mode, by adding rack ears and reorientating the rear-panel connector pod, so that the connectors appear on the top panel rather than on the back. This seemingly complex feat takes only a few minutes and requires nothing more than a Philips screwdriver.

ACROSS THE CHANNEL(S)

The 1604VLZ is still very much a general-purpose mixer, with 16 mono mic/line channels and four stereo effects returns, but unlike its VLZ-less forebear, the VLZ version now has true 4-buss routing in addition to L-R routing. Faders are used to control the channel gains, the four buss output levels and the main stereo output. Each channel sports a switchable 75Hz, 18dB/octave, low-cut filter, as well as a TRS jack insert point.

Like a full-size console, each channel kicks off with a gain Trim control. The Solo system offers both AFL and PFL modes, so you can use the meters in PFL mode to set up the trims properly. The 3-band EQ has a swept mid-range control, but no bypass button. The high control operates at 12kHz, while the low control comes in at 80Hz, and I'm pleased to see that the mid sweep range goes from 8kHz right down to 100Hz, which means you really can use it to get to grips with bass EQ problems. There are four aux sends per channel, and sends 3 and 4 can be switched as a pair to aux busses 5 and 6, which makes this a very flexible mixer for serious music production work. What's more, both Aux 1 and 2 may be switched, as a

pros & cons

MACKIE CR1604VLZ £949

pros
- Excellent sound quality.
- Great features, especially the EQ and the number of aux busses.
- No external PSU.
- First-class manual.

cons
- No EQ bypass.

summary
This must be one of the most desirable compact mixers around!

SOUND ON SOUND

BRIEF SPECIFICATION

Frequency Response (any input to any output):	20Hz to 60kHz +0dB/-1dB. Up to 100kHz at -3dB
THD @ 1kHz, (measured at +14dB)	0.005%
Common Mode Rejection (CMR) mic Input to insert send:	better than -80dB
Equivalent Input Noise (150Ω):	-129.5dBu unweighted
Dimensions:	442 x 455 x 140mm
Weight:	9.1kg approx

pair, to pre- or post-fade operation. The second pair of sends are dedicated post-fade effects sends.

Routing is achieved via three buttons: 1-2, 3-4 and L-R, with the Pan control being used to move the signal between odd- and even-numbered busses. Green signal LEDs come on when the channel signals exceed the -20dB level, and red overload LEDs warn of impending clipping. When a Solo button is pressed, the Signal LED stays illuminated, and when a channel is muted, the red Overload LED stays on. When one or more channels are solo'd, they're heard in isolation over the Control Room/Phones output, and their levels are shown on the meters.

MASTER CONTROLS

Considering that this is a compact mixer, it has a very grown-up master section with just about every facility you'd expect on a mixing board, apart from talkback. It even has a BNC socket for a gooseneck lamp. Aux send output level controls are provided for sends 1 and 2 only; the rest go directly to the outside world, so you have to use the input gain on your effects units if you want to boost the signal, though that shouldn't present a problem. All four stereo aux returns have gain controls, and whatever effect signal is coming in on Return 1 can be fed to Aux Send 1, making it possible to add effects to foldback in live or recording applications. Similarly, a second control allows Aux Return 2 to be fed into the Aux 2 send. Note that although the send and return numbers correspond, you wouldn't generally use them that way. When recording or setting up a PA, Aux 1 and 2 would generally be used for foldback, and the effects would be connected to sends 3 to 6.

Aux Return 4 may be routed to the main mix or to either of the Group pairs (which Mackie call Subs), while the fourth return may be routed into the control room/phones feed only if required, which makes it easy to add 'comfort' reverb to the headphone mix if you're recording in the same room as your mixer. A single Solo button allows all the returns to be solo'd together, and sends 1 and 2 also have their own Solo buttons.

Faders are provided for the Main Mix and Group levels. Each Group may be assigned to the stereo buss using separate Left and Right buttons (used in combination for left, right or centre panning) and the headphone output follows the control room output, the level of which is controlled by a knob. The control room feed can be taken from either an external 2-track tape machine, Groups 1-2, Groups 3-4 or the main stereo mix. The tape input has its own level control, and phono connectors are fitted to provide tape in and out connections. A further button routes the tape return into the main mix, which means the tape return can be used as yet another stereo line input, bringing the total of simultaneously mixable sources up to 26.

Two 12-section, LED bargraph meters follow the control room source selection, though if you press any Solo buttons, these signals take priority on the meters. There is sufficient headroom for -10dBV and +4dBu operation, and like the other Mackie VLZ mixers we've looked at, the meter scale is such that 0VU = 0dBu rather than +4dBu (or -10dBV, if that's the level your mixer works at). Personally, I like this honest approach, because you know what your true output signal levels really are at all times.

The Solo mode may be switched from AFL to PFL, and a separate Solo level control means you can solo a channel without being deafened. A bright green Solo master LED flashes whenever a channel is solo'd. Why this is green when it is red on all the other Mackie mixers I've tried is one of life's little mysteries...

OPINIONS

The more you look at the CR1604VLZ, the more you realise what a super little desk it is. It has more than enough facilities to be used as an 8-track recording console, and the signal path is clean enough to do justice to the modern generation of digital multitrackers. What's more, you could rack up one of these mixers with an Alesis ADAT or Tascam DA88 and have a brilliant, portable live recording setup in one flightcase. Even though there are only four Group outs, you can take direct outputs from the insert points just by plugging in an unbalanced jack lead. See the 'Socket Set' box on connections for more details.

Though some of the controls get pretty close to being cramped (especially the buttons between the faders), there's very little to criticise about this mixer — about the only thing I really miss is not having EQ bypass buttons. However, you do get low-cut filters, and unlike those fitted to some desks, these really work, and seem to come in at exactly the right frequency.

The EQ is extremely positive yet very musical, adding a lovely sizzle at the top end, and a warm punch at the bottom. As you'd expect from a well-designed modern mixer, the noise floor is extremely low, and the '60kHz plus' frequency response helps maintain clarity at high frequencies and on transients. On balance, this is a very worthy successor to the original 1604, and incorporates significant advances. SOS

info

£ £949 inc VAT.

A Key Audio Systems Ltd, Unit D Chelford Court, Robjohns Road, Chelmsford CM1 3AG.

T 10245 344001.

F 01245 344002.

MAKING Z LINES — MORE ON VLZ

For those who missed the 1202VLZ and 1402VLZ reviews in February and June this year, the VLZ in the name of all the new Mackie compact mixers is more than just an imposing bunch of letters — it stands for Very Low Z design, with Z denoting impedance. Console mix buss noise is caused by the need to add multiple signals using virtual earth mixing amplifiers, and the more channels you use, the greater the noise. Another major factor in mixer noise is the circuit impedance where the channel signal feeds into the virtual earth mixing point; the higher the impedance, the higher the noise. However, this impedance can't be made too low, otherwise the virtual earth amplifier will be unable to provide sufficient feedback current to maintain its own virtual earth input, and the signal will distort. How low you can go depends on the design of the mix amplifiers themselves — and Mackie have managed to drop the value of the mix resistors to around a third of what you might normally expect without overtaxing their mix amplifiers. This measure produces a worthwhile improvement in noise, and is being applied to all the new Mackie desks. Other circuit changes have also been made to increase the internal headroom of the VLZ mixers.

THE SOCKET SET — CONNECTIONS

The XLR mic inputs and all the TSR jack line inputs and outputs are electronically balanced. All insert points are, of course, unbalanced, and require the use of a Y lead or patchbay. There's also a mono output which has a rear-panel gain trim adjustable anywhere from fully off to +6dB of gain.

To obtain a direct channel output, plug a mono jack into the insert point. This will also mute the channel signal. To take a direct feed without muting the channel, plug a mono jack in half-way or make up a lead with a stereo jack, where the tip and ring terminals are linked. The 2-track tape connections are on phonos, and phantom power is available globally via a control adjacent to the mains switch.

Rock of

PAUL GOMERSALL • RECORDING GEORGE MICHAEL'S *OLDER*

With years of record label legal wrangles finally behind him, George Michael set about making an album to put him back at the top of the charts and consolidate his status as serious artist/producer. Working the desk on the* Older *sessions at SARM West was engineer Paul Gomersall, who tells MARK CUNNINGHAM about the making of the album.

Twelve years ago this summer George Michael and Andrew Ridgeley as Wham! were bouncing around in their white shorts, singing 'Wake Me Up Before You Go-Go' to a worshipful *Top Of The Pops* audience. Back then, there was little to suggest that Michael would make it big, then bigger still as one of Britain's premier pop songwriters and solo performers. The emotional ballad 'Careless Whisper', from that same summer, was the first sign that Michael had ambitions above Wham!'s apparent disposability, and his debut solo album, *Faith*, displayed clear indications of a burgeoning maturity. But it was in 1990, with *Listen Without Prejudice (Volume One)* and quality songs such as 'Praying For Time', 'Soul Free' and the beautifully-textured 'Cowboys And Angels' that critics began to favourably compare Michael's writing skills with those of Elton John.

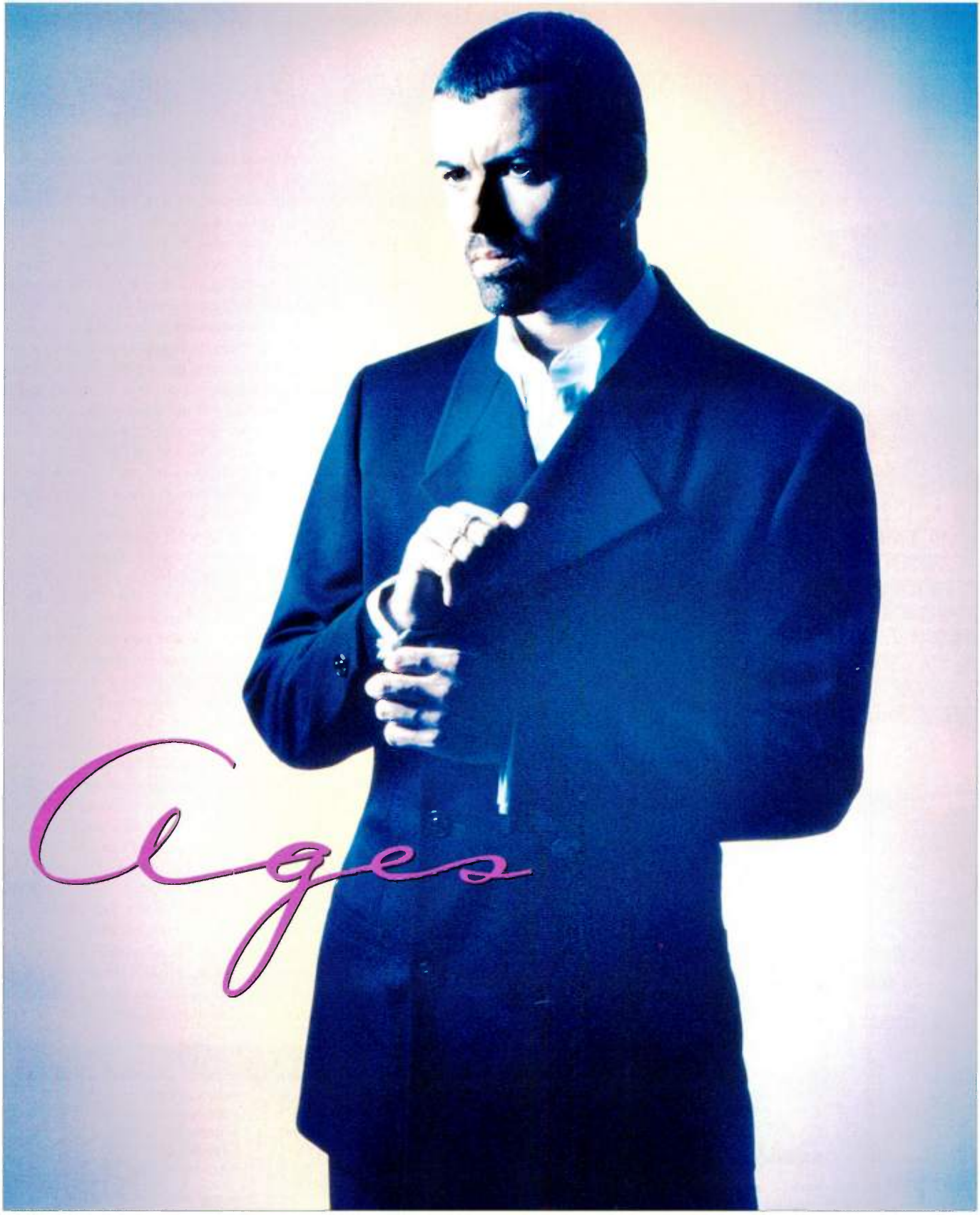
Owing to well-publicised legal fisticuffs with his former label, Sony, Michael was unable to release new product for six years, but the public never lost interest, and the response to his recent dance hit, 'FastLove', and its new parent album, *Older*, has been little short of ecstatic.

RENEWAL OF FAITH

The recording of *Older*, largely in SARM West's Studio Two, occasioned a reunion with engineer Paul Gomersall, who assisted producer Chris Porter on several Wham! records, as well as engineering sessions in Denmark's PUK studios for *Faith*, back in 1987. Not only did *Older* herald the launch of Michael's new regime following his split with Sony, which sees the formation with cousin Andros Georgiou of his own North London-based record label, ÆGEAN, it was also notable for the artist's first use of a hard disk recording system, namely the Otari RADAR.

Gomersall saw little of Michael during his withdrawal from the public eye in the early '90s and was pleasantly surprised to receive a call to start work on *Older*. He says: "George likes to keep a regular team together and, having done so much with him over the years, it was great to be back in the frame. When we started on this album, Chris Porter made the decision to move strictly into production with people like Gary Barlow, so he quit the project

Picture courtesy Stirling Audio.

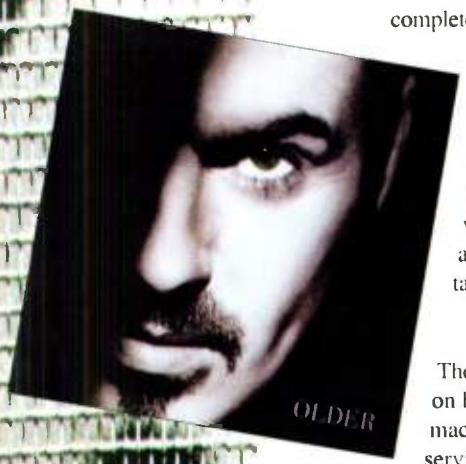


and it created the space for me to work in.

"Compared with what I experienced on the *Faith* sessions at PUK in Denmark, it was very different this time around, with George a lot more in control, and playing most of the keyboards and bass guitar. We've used a lot more computers and synths on this album than George was previously accustomed to, and now that the technology has improved so much, along with his grasp of it, he's doing a lot more himself, as opposed to bringing in a lot of musicians. On *Faith*, the musicians were around all day, every day — Deon Estus on bass, Chris Cameron on keyboards and Hugh Burns on guitar. But he has always appreciated that his listening audience wants to hear George Michael, so he now tends to do most of the work himself. So the programmer, Steve McNichol, got the sounds up for him on the keyboards and helped to streamline a creative environment. Chris Cameron was called in occasionally if George got stuck on certain chord progressions and he played a few takes into the computer, so that we could cut, paste or copy the sections George liked best. Steve Sidwell also came in to do some horn tracks but ▶

apart from a few other contributors, the album consists mostly of George's performances."

The sessions for *Older* took almost a year to complete, in fits and starts, and, unlike many artists conscious of the high costs involved in block-booking a studio of SARM's stature, Michael did not demo his songs in advance. Gomersall observes: "He arrived with the songs in his head, and whenever he was ready to lay something down, he would call the guys into the studio and spend a few hours getting a basic backing track on tape, and then they'd leave."



HARD DISK BENEFITS

The recording of Michael's new album began on his own Mitsubishi X850 32-track digital machine which, due to its reliance on regular servicing and tendency to emit strange noises, was beginning to wear the patience of the studio team. It was clearly time for a change and when good reports were received of Chris Porter's purchase of the Otari RADAR hard disk recorder, the team were keen to try out a system.

Gomersall: "Stirling Audio lent us one 24-track RADAR for three weeks and we slaved it to the 32-track machine. We found that there were certain aspects of the system that proved invaluable and, compared to the Mitsubishi's somewhat harsh sound, the RADAR's playback response is very faithful to what is recorded. So when it came to the end of the loan period, I said to George that it would be great if we could have one. He replied that we should have two! So that was when we stopped using the Mitsubishi, and we transferred everything onto the two RADARs."

Michael's favourite room in London, SARM's Studio Two, features an SSL E-Series 48-channel console, and in addition to the Yamaha NS10 and Auratone monitoring, his own Dynaudio monitors were installed for occasional beefier playbacks. Despite the fact that parts of *Older* display some rare, dry-sounding vocals, the production of Michael's voice on torch ballads such as 'Jesus To A Child' has been traditionally notable for the use of long, lush reverbs. Debate over the processing used on that track in particular continues on the pro audio sectors of the Internet, but Gomersall provides the definitive answer. "It used to be the old EMT plate on the Wham! records, but we don't even plug it in any more. It hums too much. So we now put his vocals through a range of Lexicon gear — the 224X, 480 and PCM80. I prefer the 224X to the 480 because it sounds a little warmer, and the PCM80 is from the same family. George's favoured vocal mic is a Neumann U49: we got it from PUK Studios when we did 'One More Try' for *Faith*. He liked the sound of the mic so much that when we left, Chris Porter asked if we could buy it from them. He now takes it to every session."

The sessions also saw Michael engineering his own vocal drop-ins on around half of the tracks. Says Gomersall: "An artist can get terribly frustrated when he is trying to direct someone in the control room about places in a track where he wants to replace a vocal, and when an artist is cooking, he wants to act *now*. Almost from the word go, the desk was in mix mode because George writes his lyrics and melodies as he is recording the song. In the past, he has sung a line and then asked me to drop him in on one of the words in that line that I've only just heard for the first time! So I've often asked 'which line?' But having the RADAR, we were able to set up the remote controller on a speaker stand in the studio just by the microphone and George used it to literally drop himself in and out."

Two of the main flightcases in George's home studio facility. Top case, from top to bottom: Opcode Studio 4 MIDI interface, Emu Procussion drum module, and Emu Vintage Keys, Emu Ultra Proteus, Yamaha TG500, Roland MVS1, Kurzweil K2000R and Roland JV1080 synth modules. Lower case, from top to bottom: Akai S3200, S3000i (x2), DAC hard drive.

GEORGE MICHAEL'S STUDIO

Within George Michael's newly-acquired and highly attractive London office suite is his new writing studio, which is filled with the best of today's technology and maintained by his assistant and new programmer, Niall Flynn. Gomersall comments: "George realises the benefits of leaving your house every day to go to another place to do your work. So Niall has been getting the studio up and running, and ready for George to start work on his next projects."

Michael's studio includes the following equipment, with much of the same processing hardware used at SARM West for *Older*. Items marked with a star are in George's home studio, but were not used in the making of *Older*.

RECORDING
- AKG LSM50 cube monitors
- Aphex Expressor compressor
- Denon tape deck *
- Dynaudio Acoustics M1 monitors
- Lexicon PCM80 effects
- Lexicon LXP15 effects
- Mackie 32•8 32:8:2 8-buss console
- Otari RADAR 24-track hard disk recorders (x2)
- Tascam DA20 DAT *
- Yamaha NS10 monitors

SOUNDS
- Akai S3000i samplers (x2)
- Akai S3200 sampler *
- Emu Procussion percussion module
- Emu Vintage Keys Plus module
- Emu Ultra Proteus synth module
- Korg Prophecy keyboard synth
- Korg Trinity Plus keyboard synth
- Kurzweil K2000 sampler/synth
- Roland JV1080 synth module
- Roland Juno 106 analogue keyboard synth
- Roland Vintage Synth MVS1 sound module
- Studio Electronics SE1 synth module *
- Yamaha SY77 keyboard synth
- Yamaha TG500 synth module

MISCELLANEOUS
- DAC hard drive *
- Opcode Studio 4 MIDI interface (x2)
- Powermaster drive *

The two Otari RADAR hard disk recorders used to make Older.

Millennium Music Software

Digital Only Card D

- S/PDIF Digital I/o card for PC
- 48 kHz, 44.1 kHz, 32 kHz sample rates.

£379

Iomega Jaz drive

- 1 GByte removable hard drive. (SCSI)
- Up to 190 minutes of digital audio on 1 removable cartridge.
- Record direct to your Jaz from any of the Hard Disk Recording products on this page.

£539

- Helpful service • Over 3 years dedicated service to computer musicians worldwide
- Academic orders welcome • Fast delivery into Europe • Studio installation available

Steinberg Wavelab

- Complete stereo audio editing
- Crossfades
- TimeStretch
- Harmonizer
- Sample Rate Converter
- Batch processing

£299

Midi Interfaces

We stock all types of midi interface for your computer. Call for the best advice at the best price.

Turtle Beach Tahiti Card

- 16 bit 44.1 kHz recording
- 20 MIPS Motorola 56001 DSP
- Industry standard daughterboard connector
- 1 in 2 out multi port Midi interface

£295

Yamaha DB50XG

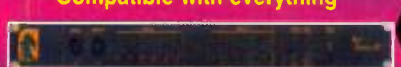
Experience over 600 stunning XG sounds you can simply snap on to your existing PC sound card.

Now Only **£125**

Midi Express for Mac/PC

- 6 in 6 out midi interface
- SMPTE
- 1u Rackmount
- Easy to install
- Compatible with everything

£POA



Special Offer Packages:-

Package 1 Cubase V3.0 or Cakewalk Pro Audio, Turtle Beach Tahiti, Yamaha DB50XG

Deposit £200 then 10 monthly payments of just £50

Package 2 Complete Digital Recording System

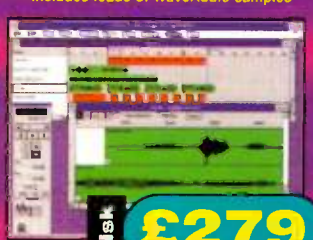
Millennium P120 computer with 16 MB RAM, 1.2 GB E-IDE Hard Disk, Quad CD ROM, 14" SVGA, Win 95 on CD, Mouse etc. AudioMedia III Session Software, Cubase V3.0, Midi interface.

Deposit £500 then 10 monthly payments of just £230

Finance offered subject to status

Cakewalk Pro Audio for Windows

- 256 Midi tracks
- 8 Audio Tracks
- Customized instrument definitions and patch names
- Sysex Librarian included
- CD Deluxe version includes loads of WaveAudio samples

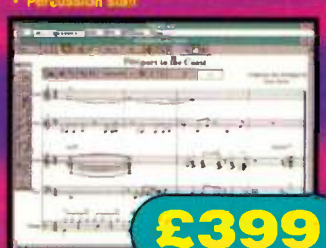


Disk **£279**

CD **£319**

Encore V4.0

- Professional Notation software for Windows and Mac
- 64 Staves
- Cross staff beam
- Guitar Tab
- Part Extraction
- Percussion staff



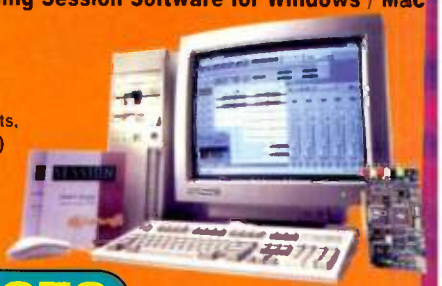
£399

A REVOLUTION IN PC HARD DISK RECORDING

Digidesign AudioMedia III

PCI digital audio card including Session Software for Windows / Mac

- 4-track simultaneous audio record
- 8-track simultaneous playback
- 16-bit, 11.025 kHz, 22.050 kHz, 44.1 kHz, 48 kHz sample rates
- 2 analogue inputs, 2 analogue outputs, stereo-digital inputs/outputs (S/PDIF)
- Motorola 5600X series DSP



Card only **£699**

Total system inc Card and Session software **£879**

digidesign®

Steinberg Cubase 3.0 VST for Power Mac

A complete recording studio environment for your Power Mac including upto 32 tracks of Digital Audio with no extra hardware required. Automated mixing, eq, and realtime Reverb, Chorus, Delay, Time Stretch, Pitch Shift etc. etc. etc.

£329

Evolution Music Creator Pro

Complete PC music system with full size midi keyboard, sequencing software & Soundcard Midi adaptor. Sequencer features include:

Piano Roll and Drum Editor
Score Editing & printing
Wave Audio Support and much more !

Only **£119.95**

Steinberg Cubase V3.0 for Windows

- Digital recording as standard.
- Integrated AVI playback
- StyleTrax - Fully configurable auto styles
- Full Colour Support

Only **£329**

Soundscape

Soundscape digital recorder in stock and on demo

Reverb Module now available with V1.18 software

£275

Coming Soon

Logic Audio EMAGIC

V2.5 for PC
Supports PC Soundcards for 8 tracks of digital recording.

Hurts Yard, Nottingham NG1 6JD
Fax: (0115) 952 0876

(0115) 955 2200

RECORDING GEORGE MICHAEL'S *OLDER*

GOMERSALL GOES TO HOLLYWOOD

It was while attending a music electronics course at the London School of Furniture in Whitechapel that Nottinghamshire lad Gomersall first set eyes on a recording studio — SARM East in nearby Osborn Street — and decided an engineer's life was for him. He recalls: "A group of us from the college went there on a day trip, and I saw all these buttons and knobs, which immediately impressed me. As a kid, I had a Grundig reel-to-reel tape recorder, and I'd always played around with cutting up bits of tape and doing my own version of editing, as well as fiddling with short-wave radio. I knew deep down that this was something I wanted to do, so I applied for a position there. At the first interview, I was faced with Trevor Horn, Jill Sinclair and Gary Langan, sitting in a row in front of me like the hanging committee! Even when I got the job, nobody ever told me what was expected of me, so I literally played it by ear and learned 80% of the job within the first three months just through enthusiasm and asking people things."

Gomersall joined the SARM team in 1984 and was almost immediately posted to a session with Trevor Horn and Yes after accidentally nudging a flight case and crushing the original assistant engineer's foot. "I filled in while he went to hospital! But I must have done something right, because I continued as an assistant, and went on to work with Steve Lipson and Trevor on Frankie Goes To Hollywood." His training was fortified by working alongside Horn and also a fresh-faced, 21-year-old George Michael. The differences between the approaches of the pair were at the time, he says, worlds apart. "I worked with Trevor on 'Two Tribes' for about a month, trying lots of different variations of a song. Even when he was mixing it, he still wondered what it would be like if it was done in a slightly different way. Digital recording was just coming in, and it allowed him to save a lot of alternate takes and compile them with the computers. Of course, having lots of options means it takes longer to make decisions. Meanwhile, when George did Wham!'s 'Wake Me Up Before You Go-Go', he walked in with everything clearly planned in his head and completed the task within a day and a half. I had assumed through working with Trevor that three months was what it took, so it was quite a shock to discover the vastly different approaches to creating Number One singles. I quickly learned that there are no rules in record production!"

Working for SARM may have been an excellent starting point for Gomersall, but after five months, the long hours became unbearable. "As a young assistant, you are out to prove yourself, and you go out of your way to do whatever is asked, otherwise you feel you are risking your job. But, in the long term, it is a very negative, self-perpetuating situation, and one that I had to get out of. There were a couple of people who had gone freelance as assistant engineers, so I thought I'd break away and try my hand as a freelancer."

Twelve years down the line, Gomersall has engineered for some of the most successful names in the business, including Kate Bush, Phil Collins, Genesis, Blur, and Cast.

"After working alongside a producer and an artist on many occasions, I find it very refreshing to work on a purely one-to-one basis, as I have done with George. The artist is effectively producing and I have a direct line to him. It's always healthy for an artist in George's position to listen and react to a second artistic opinion, and I do offer such words of wisdom, but because he has always known exactly what he wants, especially in terms of vocal and musical phrasing, he generally ignores me! I think most people would agree that his track record more than suggests George is his own best producer."

DIGITAL RECORDING: "THE ONLY WAY"

Paul Gomersall strongly believes that the evolution of more intelligible, user-friendly hard disk systems is at last contributing to the eventual breakdown in the argument between analogue and digital formats. Gomersall says: "I tend to find that the people who support analogue and criticise digital are the ones who have never used digital. For me, digital is the only way now. I know about the arguments over the bandwidth thresholds of digital, that it can't record anything past 20kHz, but in my experience, playback from digital is 100% faithful to the performances I record. When you start recording on hard disk, there is something psychologically strange about not seeing a tape moving, but once your brain becomes accustomed to watching a screen display move instead of the tape transport, you forget all about it.

THE PROGRAMMER: STEVE McNICHOL

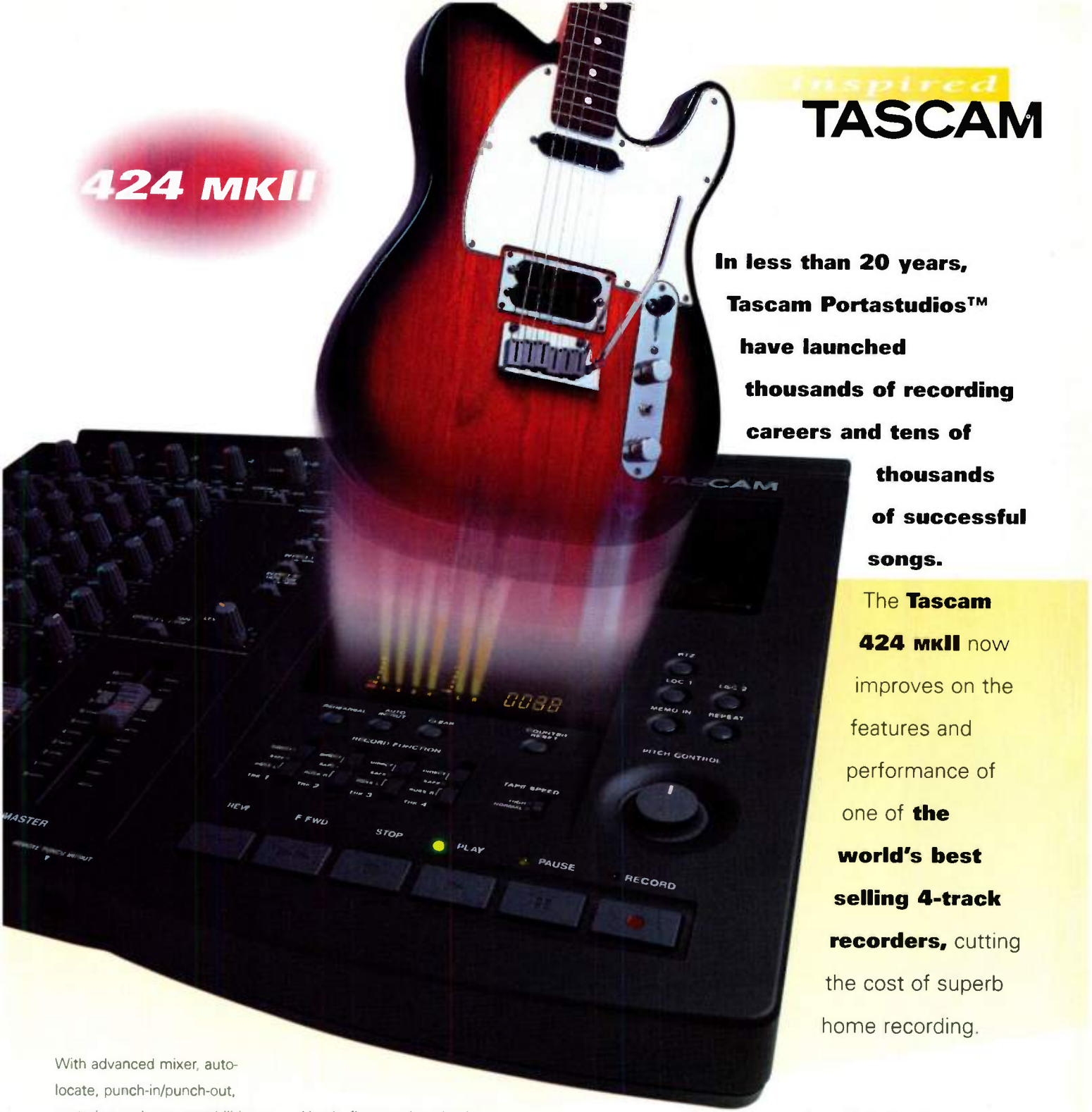
Having worked as a programmer for the likes of Diana Ross, the Pet Shop Boys, Genesis and Take That, as well as *Confidential*, the new Tina Turner/Pet Shop Boys collaboration, Steve McNichol was able to offer George Michael the ideal balance of experience for the making of *Older*, while also augmenting Michael's equipment with several pieces of his own. He says: "George is a lovely guy to work for. He's very direct about the sounds he wants, and excellent at communicating those thoughts. I left most of my stuff at home because George asked me to recommend a lot of stuff for him to buy, so I drew up a list for him, and he now has a freight load of gear!

"I'm very pleased with the results we got with the strings for the title track, 'Older'. It was a mixture of samples and edited sounds on modules, with tons of controller information. We took a lot of time over volumes and pans to get the strings to sound as wonderful as they do, which is very Burt Bacharach. Chris Cameron contributed the string lines for that track, which has a feel of 'Cowboys And Angels' [from *Listen Without Prejudice*] about it, but that's probably down to Chris's very stylistic playing.

"We were starting on the last track, 'Free', and it was going to be an overture containing all of the main themes, riffs and hooks from the tracks, worked into a groove. The plan was to take elements from the sequences and import them into a new file. But then it evolved into something quite different when Chris went away with a copy of the album, so that he could form a blended arrangement of these melodies based on this overture idea. So if you listen to that, there are bits of 'The Strangest Thing', one of the lead melodies from 'Older', and all sorts of little segments that won't instantly be recognised."

Gomersall comments: "'Free' was originally twice as long as it appears on the album, and then it was hacked to bits on the RADAR, with chunks taken out and redirected throughout the piece. It was done mostly as an experiment, but it worked so well that the result sounds wholly intentional from the outset." Some work on *Older*, in particular the track 'Doesn't Really Matter', was carried out by Gomersall at his own home. While working on one of Michael's vocal tracks at SARM, the threshold setting on the compressor was accidentally knocked and although Michael liked its effect on his voice, the distracting saliva noises within the actual singing needed to be removed using Emagic's *Logic Audio* — "a very time-consuming process," says Gomersall.

One of the remixes of 'FastLove' on the CD single features snatches of Wham!'s 'I'm Your Man' and Patrice Rushen's 'Forget-Me-Nots', but the original version of the track was a straightforward, uncomplicated affair in comparison. McNichol says: "George met up with Jon Douglas (producer of Lisa Moorish's version of 'I'm Your Man') one day at SARM, and he liked a lot of Jon's ideas, so he got him to add some extra touches to 'FastLove' in Studio Four. That version was then sent down to us in Studio Two for more input from George before mixing. The guys in Studio Four were using *Cubase*, whereas we had *Logic*, and it was interesting to see how the MIDI data from *Cubase* came back and booted up into *Logic*. You can import a *Cubase* song file or arrangement into *Logic*, and it keeps all the parameters set by *Cubase*, but it doesn't work the other way around, because *Cubase* cannot load *Logic* files."



In less than 20 years, Tascam Portastudios™ have launched thousands of recording careers and tens of thousands of successful songs.

The **Tascam 424 MKII** now improves on the features and performance of one of **the world's best selling 4-track recorders,** cutting the cost of superb home recording.

With advanced mixer, auto-locate, punch-in/punch-out, metering and sync capabilities at your fingertips, the 424 MKII is both a recording note pad and full-blown production centre.

No-one else makes Portastudios™ and there's nothing to match the 424 MKII for price and performance.

Use it, fire your imagination and take your musical creativity to new heights.

- 8 input mixer – 4 mono, 2 stereo
- 4 balanced XLR mic inputs for use of studio-quality condenser microphones
- 3-band EQ with sweepable mid
- 2 speed, variable pitch, logic controlled transport with 2 programmable locate points and RTZ function
- auto punch-in/out with rehearsal mode
- 2 fully dedicated sends
- FSK sync loop for locking to external drum machines and sequencers
- large FL display shows transport status, tape position, 4-track and stereo output metering
- 4 track simultaneous recording and individual track outputs

TASCAM 5 Marlin House, The Croxley Centre, Watford, Herts, WD1 8YA. Call Gill Walker on the **Brochure Hotline 01923 819630**

The Symbiosis Studio (250 ° panorama)

Digital DIY

DIGITAL TECHNOLOGY AND THE MODERN MUSICIAN

Computers helped former BBC engineer CLIVE WILLIAMSON and his band Symbiosis through all the stages of CD production, right through to finished discs and artwork. In the first of a two-part series, he explains how he brought digital technology and traditional musicans together to create atmospheric ambient music.

Digital technology has been at the heart of most home-based and professional recording studios for about 10 years now, but only recently has it become feasible to carry out every stage of making an album with help from computers. In this two-part article, I'll be looking at the way computer technology has helped our group Symbiosis improve the scope of our writing and the sound of our recordings, to master our own CDs, and even to create our sleeve artwork.

The long-term potential of computers in music is enormous. They can offer creative freedom, ways to fine-tune a performance and — eventually — financial savings too! But things don't always work as they should. The falling cost of hi-tech equipment has brought many exciting tools into the price-range of the average musician, but it can be a time-consuming and frustrating business to learn how to use them. Hopefully, our experiences will be helpful to others planning to follow a similar route.

ANALOGUE DAYS

When we began Symbiosis, we needed to record concert flute played by John Hackett; acoustic, electric, and STEPP guitars from Rick Bolton; and my own voice, ethnic flutes, and hand percussion. Much of what we do is 'ambient' music in Eno's sense of the word — so our natural instruments were blended with atmospheric soundscapes and sampled percussion from synths. Our modest studio underwent rapid growth as I learned about MIDI. We moved quickly from a borrowed Tascam Porta 2 4-track cassette to a Fostex M80 8-track linked via a SMPTE timecode stripe and a synchronising unit to an Atari 1040 STFM computer system running C-Lab's *Notator* sequencing software. Pieces were mastered onto ▶

"The UK's best up and coming Pro Audio & Hi-Tech Dealer...."

WAY OUT WEST MUSIC COMPANY

47 London Road, Twickenham, Middlesex TW1 3SA
Tel: 0181 744 1040/1050 Fax: 0181 744 1095

Professional Service | We buy used gear & P/X | FREE Parking | 1 Minute from Twickenham station | Express Nationwide & overseas Delivery | W.O.W Mobile nationwide installation service | Educational Discount - £

ANALOGUE

All portastudios include free "WOW Pack" Call!

TASCAM — WAY OUT £BEST PRICES
Porta 03 £199
Porta 07 £339
New 424 II £399
464 £699 488 II £995

FOSTEX — WAY OUT £BEST PRICES
X18 £299
XR3 £249
XR5 £335
XR7 £449
280 £449 380S, £599
R8, G16S, G24S
OPEN REEL MACHINE SALE

YAMAHA — WAY OUT £BEST PRICES
MT 50 £299
MT4X £399
MT 8X £895

DIGITAL

The Big Three ! | W.O.W. Best Advice ✓

TASCAM DA-88 £BEST

Roland NEW VS880 £1499

FOSTEX DM3 + D80 MODULAR 8 TRACK DIGITAL HARD DISK RECORDER £1499

MIXING DESKS

- ALESIS ✓
- BEHRINGER ✓
- FOSTEX ✓
- SAMSON ✓
- SOUNDCRAFT ✓
- SOUNDTRACS ✓
- STUDIOMASTER ✓
- TASCAM ✓
- YAMAHA ✓

ALL IN STOCK

OUTBOARD

ALESIS
D4 Digital Drum module
New Microverb IV
Midiverb 4
Quadroverb II
Q2, MEQ 230
J630 Compressor
Monitor one
£WOW

BEHRINGER
Dualfex II £129
Ultrafex II £215
Autocom £179
Composer £259
Multicom £259
Intelligate £259
Autoquad £349
£BEST

DIGITECH
TSR 12
TSR 24
New Studio Quad
Vocalist II
Studio Vocalist
£WOW

LEXICON
Vortex (new)
Jamman (new)
Alex
Reflex
LXP 15 II
PCM 80
£BEST

YAMAHA
Rev 100 (new)
EMP 100, EMP 700
SPX 990, SPX 1000
D5000 (new), REV 5
MU5 new tone module
MU 80 new tone module
TG500 tone module
£WOW

OTHERS
Aphex C2 Exciter £239
BBE Sonic Maximiser
SPL Vitaliser
"All the sound you've never heard"
£BEST

MIDI & H/D RECORDING

NEW Alesis QS6 Synth £CALL

E-MU Systems
Call for best deals
ESI-32
MORPHEUS
VINTAGE KEYS
New Orbit

ATARI ✓ COMPAQ ✓ MAC ✓ STEINBERG ✓ EMAGIC ✓ J. COOPER ✓ P. REES ✓

Way Out West = Way Out £Best

PACKAGES

ALESIS — A-DAT XT + MIXDOWN CLASSIC — STUDIOMASTER — WOW £CALL

TASCAM — DA-88 + TOPAZ II 24:8:2 — SOUNDTRACS — WOW £5199

FOSTEX — 812 + R8 — FOSTEX — WOW £CALL

BARGAIN BASEMENT

More Ex-Demo and Used Equipment Every Month

Fostex G24S with 8330 Sync Board (Boxed A1)	£6450
Tascam MSR 24 dbx	£3999
Fostex 812 12:8:2 desk	£650
Fostex Model 80 1/4" 8 Track	£575
Korg X5 (Boxed)	£625
Tascam 2600/24 24:8:2 desk (Boxed)	£1699
Roland MT 100	£275
Roland CS155 Sound Canvas	£399
Philips DCC's	£249
Roland RS202 String Machine	£199
MTR SLM 8:2 Rackmount	£95
Korg 01W/FD Workstation	£950
Roland D20 Workstation	£450
Tascam 244 Portastudio (Boxed)	£295
Roland RD250s Master Keyboard	£950
Oberheim DPX-1 Sample Player	£250
Peavey K100 8:2 Desk	£150
Sansui MX12 Desk + MR6 6 Track	£499
Rockman X100	£95
Roland MC500 Sequencer	£295
Emax Sampling Keyboard	£450
Akai S2000 Sampler with 10 Meg (Boxed)	£995
Alesis D4 Drum Module (Boxed)	£225
JBL Control 5 Monitors (Boxed)	£265
Mackie 1202 (Boxed)	£250
Tascam 688 (Boxed)	£1095
Fostex X15 Portastudio	£150
Soundtracks MR Series 24:8:2	£1299
TL Audio dual valve mic pre amp di	£275
Mackie 1604 (Boxed)	£625
Steinberg Midex +	£299
E-MU Proformance piano module	£150
Yamaha QX21 sequencer	£45
Ibanez DD700 digital delay	£125
Korg XEC 42 Compander	£175
Audio Logic PA 88A Exciter	£199
Akai XE8 Drum expander with cards	£250
Aiwa XDS 1100 3 head DAT (boxed A1)	£699
Deep Bass 9	£350
Fostex E16 + 4050 auto locator (excellent)	£1999
Yamaha FB 01 synth module	£99
Fostex 160 Portastudio	£250
Alesis Midiverb XT	£165
Tascam 38 with 8 tk dbx noise reduction	£750
Rockman Smartgate	£69
Yamaha EMP 700	£375
Beyer DT190 Headphones	£140
Studio Research 12:2 Mixing Desk	£199
Teac X3 Open Reel Mastering Machine	£275
Aphex Aural Exciter type B	£175
Yamaha QY10 Portable Sequencer	£150
Yamaha EMT10 Piano Module	£95
Roland P330 Piano Module	£250
Yamaha RX17 Drum Machine	£125
Allen & Heath Mod 3 12:8:16:2 Mixing Desk	£699
EMU Proteus 1	£395
Yamaha FX 500B	£199
Yamaha GEP 50 Guitar Processor	£250
BBE Maximiser	£175
Yamaha GC2020 Compressor	£175
DBX 224 X DS Tape NR	£135
DOD R830B 2x15 graphic	£130
Yamaha DPM7 mixer RTC 1 Remote	£699
Atari Software 100's of titles, Crazy Prices	Call for List
Tascam M1016 Mixing Desk	£499
Yamaha TQ5 Tone Module	£150
Fostex R8	£799
Atari 1040 computers and monitors(choice available)from	£199
Aiwa ADF 270 cassette mastering machine(boxed A1)	£75
Fostex 4050 synchroniser/autolocator	£299
Great British Spring reverb	£99
Roland Pad 80 Octopad II	£375
DBX SNR 1	£145
Korg M3R	£395
Yamaha TG 55 (boxed)	£299
Casio VZ8 + 1 RAM card	£199

DAT

TASCAM NEW D20 & DA30 II £WOW

FOSTEX D5, D10 & D20 £WOW

☎ 0181 744 1040 MAIL ORDER HOTLINES ☎ 0181 744 1050

▶ a Revox A77 via a Seck 18:8:2 desk, and as the synth and digital effects collection grew, we bolted on an Alesis 1622 mixer for extra inputs.

After our first two albums, we moved to digital mastering on a number of portable DAT recorders, before finally settling on a Sony DTC1000ES modified for 44.1kHz operation. This DAT recorder also served to back up early experiments on Digidesign's Sound Tools system on a Mac IIcx.

Live instruments have always been a vital part of our sound, and although the M80 multitrack recorded acoustic and electric guitars well, and could manage the odd fretless bass, it really struggled with wind instruments like flutes, oboe and cor anglais. The sustained, pure waveforms of these instruments, which contain hardly any harmonics, often triggered an uncomfortable low grinding noise called bias bubble, and this was especially problematic in our gentlest, most ambient work, so I began to look for digital alternatives. As an interim measure, we improvised direct to DAT, editing the recordings in *Sound Designer II* on the Mac, then adding effects at the mixdown stage. But we soon tired of playing solos and duets, and it was then that the Alesis ADAT system came along and saved the day!

Rick Bolton.

THE MOVE TO DIGITAL

ADAT was a major turning point. Here at last were perfect drop-ins, longer recording times, the possibility of making digital clones as backups or for alternative takes, and great sound. ADAT's clean recordings were a real joy, but soon began to highlight weak areas in studio acoustics and monitoring, revealing with perfect fidelity all the hiss, thumps, breathing, rumble and ambient noise that had previously been masked by the relatively high noise floor and distortions of analogue tape. To get around these problems, we had to make do with careful microphone placement, closing the double glazing, disconnecting the phone, and never recording during the rush hour, or when Concorde was due to fly over!

The most immediate effect of introducing the ADAT was to make me much more aware of the sound quality of the other components in the recording chain. Fortunately our mics were well up to the task: an old AKG C414 EB still sounded great on acoustic guitar and voice; and a newer C460 with a hypercardioid capsule was clean and noise-free for recording a full flute sound without too much of the room's acoustics. The Seck and Alesis mixers had minimal EQ, but perfectly acceptable sound quality. The weakest links turned out to be:

- The sound of the recording room.
- Our monitor speakers (an old pair of IMF ALS 40s).
- High-frequency losses in a long loom between the Seck mixer and the ADAT.

My engineering method in the Symbiosis studio has always been to record the instruments as cleanly as possible, and then add reverb later, using units like the Alesis Microverb II and Quadraverb. The ADAT recordings made it clear that there were far too many HF reflections in our 13-foot square room, colouring the sounds of some natural instruments before they even

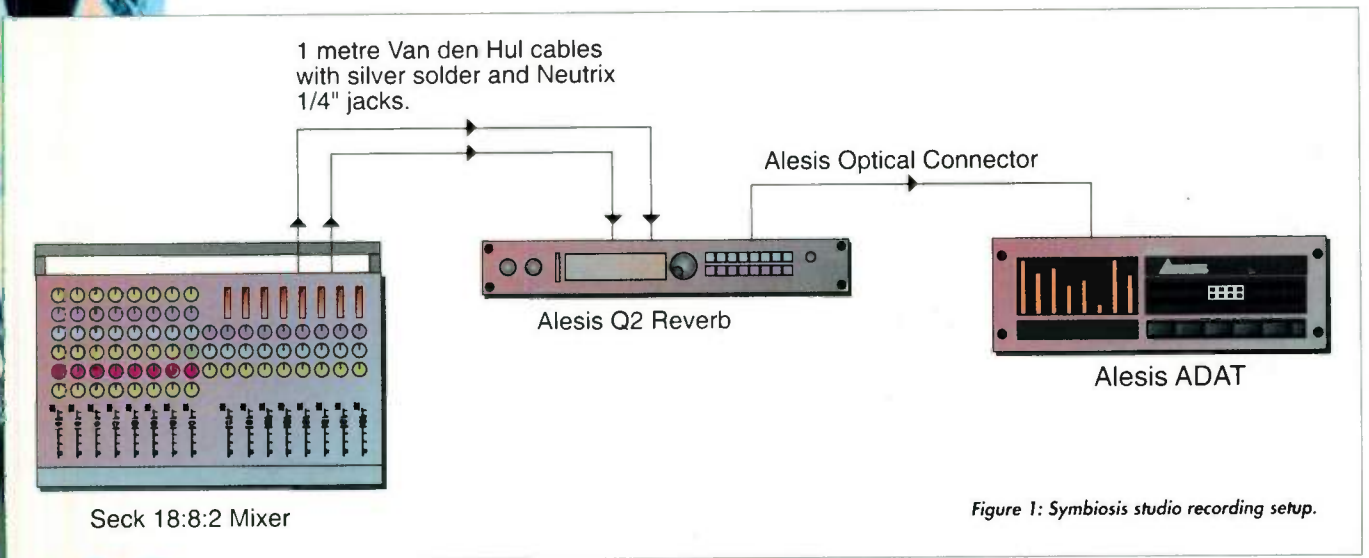


Figure 1: Symbiosis studio recording setup.

SYMBIOSIS LINEUP

- **RICK BOLTON**
  Acoustic & electric guitars, STEPP synthesizer, guitar and cello.
- **JOHN HACKETT**
  Flutes and keyboards.
- **EMILY WILLIAMSON**
  Flute and vocals.
- **CLIVE WILLIAMSON**
  Keyboards, wind synthesizer, autoharp, ethnic flutes, hand percussion, voices and whistling.

With help from: Ashley Drees (cittern, mandolin, mbira, percussion); Michèle Drees (drums and percussion); Rupert Flindt (fretless bass); Maloviere (violin and tsimbala) and Ian Ritchie (soprano sax).

reached the digital effects. I placed an order for some acoustic tiles, and we velcro'd these around all the available wall space to reduce high-frequency ringing and spurious reflections.

Studio monitoring was also improved by the addition of the foam tiles, but I felt we could go further. After many listening tests, we purchased a pair of the Professional Monitor Company's AB1 loudspeakers. Mixes on these speakers seem to sound superb on most other equipment; after the ADAT, they are definitely the best things we've bought for the studio. Room acoustics and speakers dealt with, that just left the loom problems to be sorted out.

MAKING THE RIGHT CONNECTIONS

One of the most exciting developments in music technology in recent months has been the shift towards fully digital mixing desks, led by the Yamaha 02R, but I realised that we couldn't possibly justify buying one, so I started to look for cheaper ways to maintain recording quality. Going digital as early as possible in the recording chain seemed to be the order of the day. The release of the Alesis Q2 reverb provided the perfect answer, and solved our loom problems at the same time.

Besides offering really clean reverb and effects, Q2 was designed from the start to link in digitally with the ADAT. Our current recording setup (see Figure 1) uses hi-fi cables (kept as short as possible) between the Seck 18:8:2's Track 1 and 2 outputs and the Q2, and a direct optical link from the Q2 to the ADAT. Once the recorder is switched to Digital In, the Q2 in bypass mode (Preset 99) acts as a switching matrix to any two of the eight available tracks, and the analogue signal only has to travel down one metre of high-quality cable!

Recordings made this way sound much sweeter and clearer at the top end, with the bonus that the Q2's settings can be edited to provide instant digital EQ on recordings. Used as a high-pass filter, low-frequency rumble can be rolled off before it gets to the ADAT, and much more precisely than with the low filters built into our AKG mics. The Q2 can also store a range of 'instant EQs' for any instrument regularly used by the group. Major equalisation changes are still left for the final mix, but the results going to tape are much more controlled. It's just a shame that the Q2 doesn't have any compression or peak limiting functions to prevent accidental clipping — but you can't have everything. Results through the mixing desk were further enhanced by throwing out our old 16-way loom altogether, and making up short-run good quality cables to get signals back from the ADAT's outputs to the desk.

ADAT TO ADAT XT?

Another important reason for getting a Q2 reverb was its ability to act as a digital router for track-bouncing on the ADAT without the greater expense of buying a BRC. The unit is relatively easy to use in this way with a single ADAT recorder, needing only a two-way optical link to be established (see Figure 2). The ADAT must act as the clock source for the Q2, which is achieved by the following switching sequence:

- Set Q2 to Preset 99 'Bypass' and make sure the direct signal is ON (Global menu);
- Set ADAT clock source to Internal;

DIGITAL — A CHANGING PERSPECTIVE

One of the major bonuses of combining real instruments and MIDI gear in our original analogue studio was that most of the sound sources went through the desk 'live' at mixdown. So it was relatively easy to master tracks to a very high standard. Now we are working with the clarity of digital recordings on the ADAT and better reverbs like the Q2, some of the old synthesizers are being shown up by their quantising noise, or lack of high-frequency sparkle. (I'm thinking now of our much-loved D550 and TX7 modules, and even the Korg M1R.) We've had the chance to try the Alesis Quadrasynth Plus Piano, the Yamaha VL7 and the Roland JV1080, all of which really do 'shine' in a mix, but I can't help wishing that more instrument manufacturers had followed Alesis's lead and begun to put digital outputs on their products sooner. In a few years — when we're all using digital consoles — I bet we'll all be sorry!

midiman
GUARANTEED FOR LIFE
MORE SOUNDS
LESS POUNDS
£199 rrp inc VAT

Hot off the production line from MIDIMAN comes GMan, which with or without a computer is arguably the best GM/GS compatible sound module in its class. With incredible sounds and effects just look at these features and compare it with the competition.

GMan offers the ideal low cost solution to multimedia users, home enthusiasts, MIDI file users and anyone wanting a great GM/GS expander at an affordable price.

* Fully GS / Sound Canvas compatible
* Built in Mac interface with serial thru
* When connected to a PC sound card (cable not included) GMan becomes an external wave table synthesizer for your PC
* Built in Stereo MIX IN and MIC IN
* Stand alone module with MIDI out
* Standard stereo Outs and multimedia 1/8" output
* Steel construction. Lightweight but built to last.

£69 inc VAT

Running out of inputs? MIDIMAN'S Multimixer 6 could be the answer to your problems. An ultra compact, ultra quiet 6:2 line mixer that fits in the palm of your hand. All for an amazing £69

£199 inc VAT

Also available is the Micromixer 18 line level mixer, with a massive 18 inputs, 2 sends and an ultra quiet signal path. Rackmountable (on optional rack tray) it is amazing value at £199

"Sturdy build quality, low-noise performance... plenty of inputs for their modest price tags"
Derek Johnson Sound On Sound May'96

ALSO FROM MIDIMAN
PC INTERFACES, MAC INTERFACES, SYNCHRONIZERS
MIDI ACCESSORIES AND MORE

Call us for full information or contact your nearest dealer.
MIDIMAN UK. Hubberts Bridge House, Hubberts Bridge, Boston, Lincs PE20 3QU.
Tel: 01205 290680. Fax: 01205 290671

Digital DIY

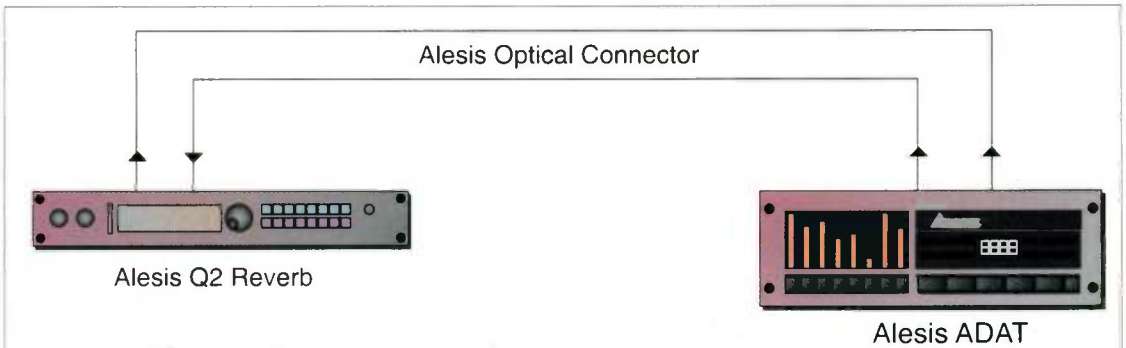


Figure 2: Track bouncing on the ADAT using a Q2 reverb.

- Set ADAT to Digital In;
- Alter Q2 to Optical Input and optical clock source (Global menu);
- Select incoming and outgoing tracks for ADAT on Q2 (Global Menu);
- Prime 'record ready' on the relevant tracks, and check signal.

Once this is done, you can bounce signals from track to track cleanly, one or two at a time. You can also select any Q2 patch to add EQ, effects, or delay during the bounce. It's important to know that the Q2's meters only display anything sourced from channels 1 and 2 when used this way, so it's best to look at the ADAT's input metering to check things are working properly. Anyone owning the newer ADAT XT won't be so interested in these features, but for the thousands of original ADAT users, the Q2 really is a sensible upgrade, especially as its A/D converters are better than those in the first-generation ADATs, and match those of the XT, being 18-bit and 128x oversampling.

Clive Williamson.

DIGITAL BUILDING BLOCKS

After ADAT, we added an Alesis AI-1 digital interface and sample rate converter to allow sound to be transferred digitally from any source, or moved between the 8-track and *Sound Designer II* software via an Audiomedia II card on the Mac. This instantly gave us the freedom to improvise onto the ADAT, then edit two adjacent tracks in *Sound Designer*, pass them back digitally and use that as the starting point for new pieces. Used this way, Digidesign's software often reverts to its original function — that of sample editor — giving us the chance to alter pitch, edit, blend and even turn sound round without any quality loss. Interestingly, it has proved possible to use the AI-1's sample rate conversion facility over a very wide range, and signals fed out of the Audiomedia II at a playback rate as low as 1kHz (a drop of over five octaves!) are still converted to 48kHz on the ADAT without any problems.

Audiomedia's co-axial S/PDIF outputs have

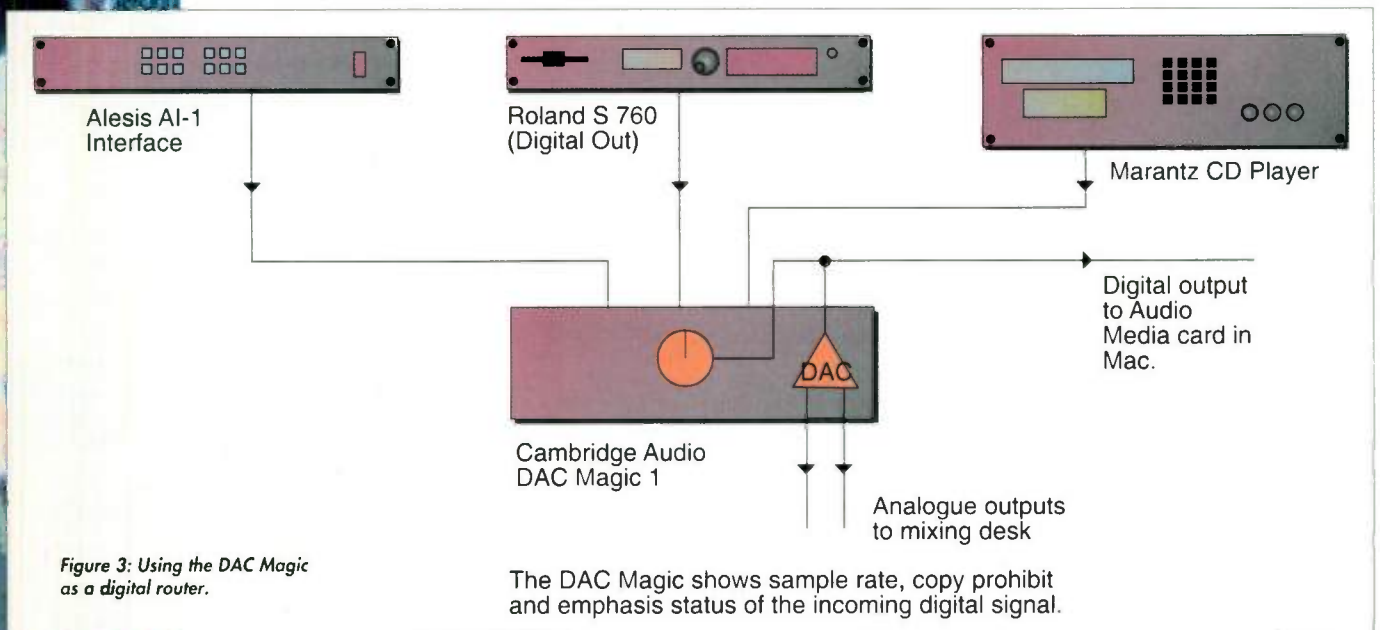


Figure 3: Using the DAC Magic as a digital router.

The DAC Magic shows sample rate, copy prohibit and emphasis status of the incoming digital signal.

SYMBIOSIS STUDIO TIPS

PERSONALISE YOUR MUSIC

We're all using the same synthesizers, so...

- Don't just use your synthesizer's presets! Collect the largest palette of sounds possible, and create or edit your own voices for your instruments.
- Don't restrict yourself to a five-octave keyboard — get a larger one, transpose, or tie two together through a sequencer.
- Use keyboards and drum pads with a sensitive velocity response, and if necessary use your sequencer to edit the response to suit you!
- Take care when using sampled sounds, especially in loops or as the lead line.
- Remember that many synthesizers have a greater variety of tone and modulation than samplers, and session players — especially percussionists — can add even more 'human touch'.
- Make full use of MIDI controllers — Mod wheels, aftertouch, MIDI volume.
- Use more expressive synths (especially a wind synth with breath control).

THE BEST FROM DIGITAL EFFECTS

Acoustics can have a tremendous influence on how we play...

- Make notes of reverb and effects settings for live players, so you can re-create the space they heard whilst recording when you do the final mix, to make full sense of their performance.
- Commit complex sounds to tape, so as not to lose the special quality that you spent hours working on (thanks to Nick Magnus for reminding me of this one!).
- Be aware that digital effects often sound very different in mono, so check their mono/stereo compatibility.
- Remember that most effects units can be controlled by MIDI during mixdown!

THE HUMAN TOUCH

Digitally-generated sound can have a sterility which tires the ear, so...

DIGITAL TIPS

- Always master at the final sampling rate for the product (eg. 44.1kHz for an Audio CD, 48kHz for a mix to be transferred to ADAT).
- As digital systems become more complex, you need to develop 'Clock Awareness' (ie. know which equipment should generate the master digital clock, and which should slave to it — horrible clicks or the ADAT changing speed are signs that you've got it wrong!).
- Watch for equipment noise build-up when making multitrack mic recordings near a hard disk or computer-based system.
- Check your mixes on headphones if you think equipment noise in the mixing area might be masking low-level problems.
- Always back up your computer work.
- Try creating a MIDI backing mix on two tracks, then record instruments elsewhere, using 'real' acoustics.

Symbiosis flautist John Hackett in an anechoic chamber at the BBC's Research Establishment at Kingswood Warren. The complete lack of reflections from the walls makes it very difficult to play, and shows how useful digital reverbs can be to create a good acoustic environment in the studio.

proved useful for interfacing directly with equipment such as DAT recorders and a Roland S760 sampler with the OP760/1 output board fitted, and also with another handy building block in the Symbiosis digital studio: a Cambridge Audio DAC Magic 1. This is actually a hi-fi component offering a very good quality D/A converter at a reasonable price (under £200 from some outlets) with three switchable co-axial inputs, one co-axial digital output and line outputs from the D/As on both phonos and XLR sockets. We use DAC Magic as a digital signal router and listening point, saving lots of re-plugging, and augmenting by two the existing four separate outputs from the excellent S760. One of the two extra digital outputs from the 760's I/O board is ▶

midiman
GUARANTEED FOR LIFE
SYNCHRONISATION SOLUTIONS

SYNCMAN £99

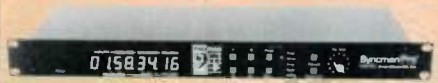
Full SMPTE Synchronisation for under £100. SMPTE/MTC, Jamsync, Merge, Duplicate, all frames.

When it comes to Synchronisation, MIDIMAN have got all bases covered. Smart FSK, SMPTE, Rack mounted SMPTE, VITC for video, PC cards with VITC + SMPTE. Since 1988 MIDIMAN have grown through providing high quality products at affordable prices all backed by a lifetime guarantee. Check out what we have to offer.

VIDEO SYNCMAN £399

Worlds first Universal Timecode Translator supports VITC, LTC, MTC. Even has a built in screen burner. Professional features at an affordable price. Settings can be controlled through the included Mac & PC utility software. Half rack size.

SYNCMAN PRO £299



Comprehensive professional rack mount Sync Box, with SMPTE Regeneration, Spotlock™ Videosync, built in SMPTE display, 768 MIDI Foleyhit map and much more.

VIDEO PRODUCER £179

New PC VITC card that allows any MTC Sequencer to be locked to any Video Recorder. Many other facilities including screen burn & CUE catcher software.

WINMAN 4X4S £199

NEW

4 Independent Midi ins & 4 Independent Midi outs (64CH) + MIDIMANS acclaimed SMPTE synchronisation chip all for £199

SMARTSYNC £79

Ultra reliable smart FSK Songpointer Sync Box with built in merge & Jam Sync

ALSO FROM MIDIMAN
PC INTERFACES, MAC INTERFACES, COMPACT MIXERS, SOUNDMODULES, MIDI ACCESSORIES

Call us for full information or contact your nearest dealer.
MIDIMAN UK. Hubberts Bridge House, Hubberts Bridge, Boston, Lincs PE20 3QU.
Tel: 01205 290680. Fax: 01205 290671

SYMBIOSIS GEAR

KEYBOARDS & CONTROLLERS
- Alesis QuadraSynth Plus Piano
- ARP Odyssey
- Casio CZ1
- Roland Octapad II
- Yamaha MCS2 + footpedals
- Yamaha WX11 wind synth

SYNTH MODULES
- Kawai K1m
- Korg M1R
- Roland D550
- Roland D110
- Roland S760
- Yamaha TG77
- Yamaha TX7
- Yamaha WT11

DRUM MODULES
- Alesis HR16
- Alesis SR16
- Roland R8M

EFFECTS
- Alesis Microverb II
- Alesis Midiverb II
- Alesis Quadraverb +
- Alesis Q2
- Roland VP70
- Yamaha SPX90
- Zoom 9001
- Zoom 9002
- Zoom 9050

COMPUTERS & SOFTWARE
- Apple PowerMac 8100/80 AV
- Atari STE (2Mb of RAM)
- C-Lab *Notator*
- C-Lab Unitor-N
- C-Lab Combiner
- Yamaha YSTM10 speakers

RECORDING
- Alesis ADAT
- Alesis AI-1 Interface
- Alesis 3630 Compressor
- Alesis 1622 Mixer
- JL Cooper SyncMaster
- JL Cooper dataMASTER
- Seck 18:8:2 Mixer
- Sony DTCA8 DAT
- Sony DTCD7 DAT

MONITORING
- PMC AB1 loudspeakers
- Quad 4052 amp

DIGITAL EDITING
- Cambridge Audio DAC Magic 1
- Digidesign AudioMedia II
- Digidesign *Sound Designer II*
- Emagic *Logic Audio*
- Marantz CD52SE CD player
- OSC *Deck II*

▶ permanently plugged to a DAC Magic input, and the D/A outputs appear on two channels of the mixing desk (as shown in Figure 3).

The final elements in our digital studio are a JL Cooper SyncMaster (for synchronising the Mac to SMPTE timecode), a JL Cooper dataMASTER (which generates SMPTE from the ADAT without wasting a track to record it) and a Sony DTCA8 DAT machine, replacing our DTC1000ES. All our music is now mastered onto the A8 using its Super Bit Mapping option, which seems to impart a richer, 'firmer' quality to the work, and provides a much better sense of space at low listening levels. As we bought one of the first A8s in the country, even our supplier didn't know that the machine suffered from the dreaded SCMS (Serial Copy Management System), but copies can still be made via the digital inputs of Audiomedia or the AI-1, both of which strip off the copy-protection flag set in S/PDIF signals!

Ashley Drees and John Hackett.

I should also mention that I've also upgraded the Mac IIcx to a PowerPC 8100/80 with a 1Gb AV hard drive to cope with digital image-handling for album cover design, and we have recently obtained OSC's *Deck II* and Emagic's *Logic Audio* in the hope of further integrating MIDI recording with hard disk editing and mixing.

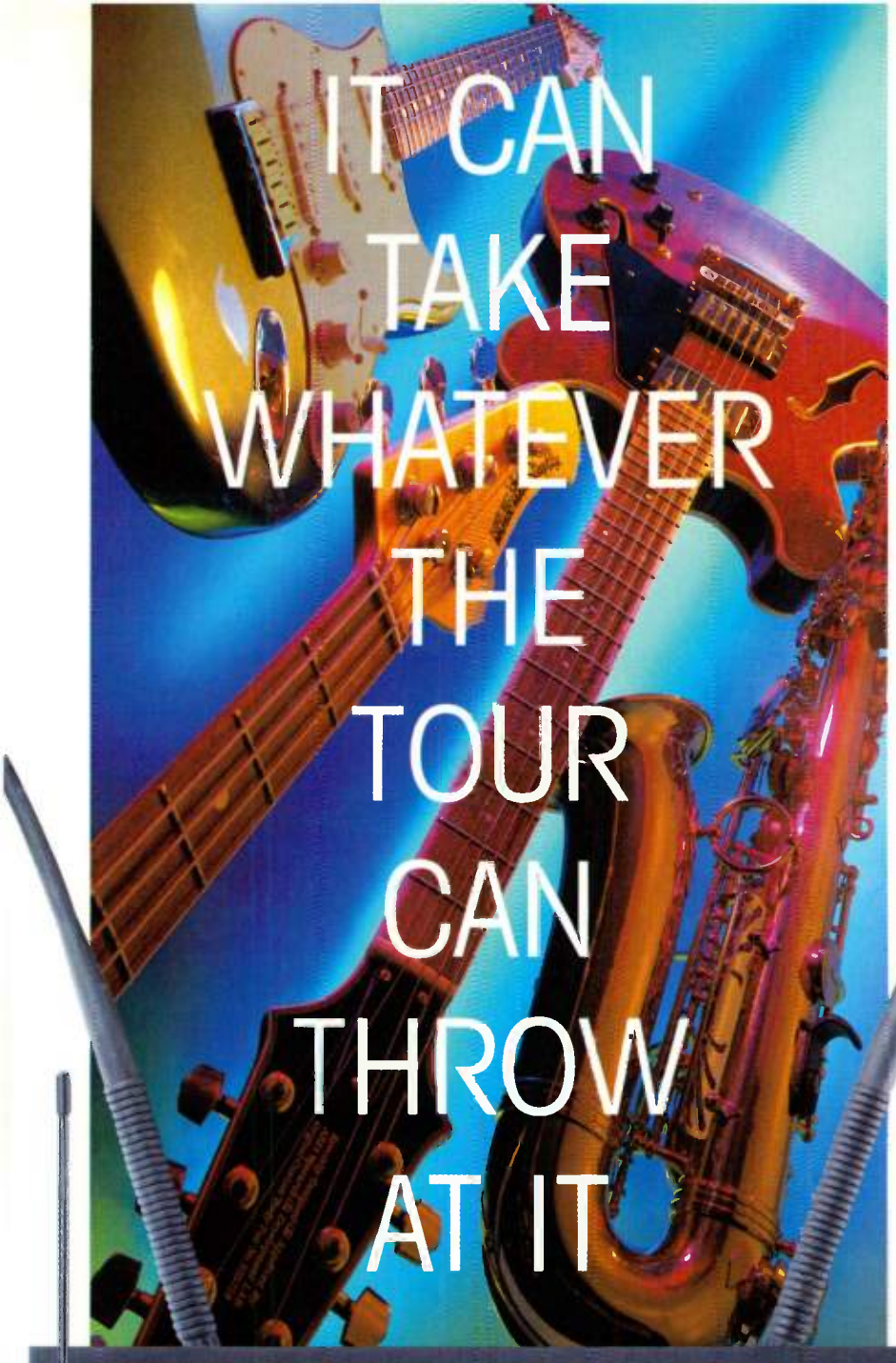
CREATIVITY & THE DIGITAL STUDIO

Recording studios have always been places where things can go horribly wrong, and the more complex we make them — with MIDI and digital connections — the more frustrating the problems can become. We're trying to link pieces of equipment from so many different manufacturers to make them do something new and wonderful with sound, only to discover that often the system doesn't work as it should, and no-one can tell us why! One major snag with today's technology is that it develops so fast that there is barely enough time to assimilate the possibilities offered and techniques required by one bit of gear before we have to move on to the next. The only answer seems to be to alternate technical 'learning and editing' sessions with creative 'writing and recording' ones, so that the frustrations of the former don't taint the exciting potential of the latter. Above all, we need to test equipment well before we buy it, and make sure that we can work easily and intuitively with it.

A word of caution on the subject of the potential offered by today's technology was once offered to me by Bob Moog: "Everybody has certain reservations about how easy it is now to make sounds, and put sounds together into something that appears to be music. But it's just as hard as it always was to make *good* music. One always has to remember where the garbage pail is." SOS

Next month, Clive Williamson describes the processes of preparing a CD master, burning recordable CDs, and designing album sleeves for Symbiosis with the help of computers.

A Symbiosis Music, PO Box 2000, Richmond, Surrey TW9 3JH.
T 0181 948 5880 (10-6pm Mon-Fri).
F 0181 255 7102.



AKG

The new WMS 300 brings breathtaking UHF radio microphone performance to the road at a breakthrough price. With instant flexibility no other radio mic system can touch.

Three interchangeable dynamic and condenser heads; a choice of handheld transmitter or beltpack; and vocal, instrument or lavalier systems, let you match the microphone to the production every time.

To make life easier on the move a simple adjustment on the receiver allows you to switch to any one of 16 spot frequencies within a UHF TV channel, with the ability to run up to eight systems simultaneously without intermodulation. You get a total system solution that includes active antenna splitters and boosters and a receiver that can be run on either AC or DC voltage.

Then take a look at the exceptional features. Up to 12 hours' battery life from three AA cells, a compact ½U true diversity receiver unit and, of course, AKG's precision audio quality, rugged durability and backup as standard.

Based on the hugely successful WMS 900 system (tours include Peter Gabriel, Rod Stewart, Wet Wet Wet and 1996's Simply Red dates), the WMS 300 is a total solution at a brilliant price with the handheld system starting at £869·00. Truly a radio microphone system to take anything a tour can throw at it.

wms 300 UHF
RADIO MICROPHONE SYSTEM

TO HEAR HOW ACOUSTIC PERFECTION IS NOW WITHIN YOUR REACH, LISTEN TO US ON 0181 236 7247

WMS 300 FEATURES

- SR 300 RECEIVER: Switchable to 16 UHF frequencies for multichannel capability • Half 19" rack width • True diversity operation • Removable antennas.
- PT 300 HANDHELD TRANSMITTER: Interchangeable microphone heads • Highly efficient helix antenna for wide range • Extremely rugged construction • Special capsule suspension minimising handling noise.
- PT 300 BODY-PACK: Accepts dynamic and condenser microphones • Mic, mute or line selector for guitar, sax or lavalier options • Locking microphone input • Exceptional operating time.

WRH

WMS 300

FROM **£869.00**

WITH
HARMAN ASSURANCE
PREMIUM QUALITY
FULL TECHNICAL SUPPORT
RELIABLE SERVICE

H A Harman International Company

Harman UK Ltd. – International Industries Limited
Unit 2, Borehamwood Industrial Park, Rowley Lane, Borehamwood, Herts WD6 5PZ, England
Tel +44 181-207 5050 Fax +44 181-207 4572

MUSIC CONNECTIONS

ALL PRICES INCLUDE VAT.

novation

£449

NOVATION
The DrumStation features authentic TR808 & TR909 sounds, 12 note polyphony, Front cut edit, Switchable Note off recognition, Distortion effects, DIN Sync trigger output and the list goes on.
The Bassstation has Oscillator control, envelope editing, filter and Portamento to add deep and tight bass. 100 memories are available, 60 for the user and 40 for factory presets. For ease of use and quality output the Bassstation is the height of analogue technology.

DIRECT FACTORY PRICES

PROTONE
Will this possibly become the MINI MOOG of the future and the product of the decade? For the player who wants to get back to basics we believe there is no finer product made today. The new PROTONE from Switzerland gives you all the versatility of synthesizers from a bygone age with none of the unreliability. If you know your synthesis you certainly won't want to miss this one. CALL FOR DETAILS

PROTONE

£599

£CALL

GROOVEBOX
448 sounds-12 drum kits-16 part multitimbral 28 voice multieffects-8 track, 10 song sequencer & so on. If you think your groovin' you haven't started until you try the new MC303.

Roland

£CALL

SG01

£CALL

JV-1080

AKAI

SG01
Who would have thought a company as young in the Music Industry as AKAI could come up with a vintage module? Well they have and it's brilliant, and it's only £299.

Roland

JV1080
The roland JV1080. What can one say about this industry standard piece of kit. Except that it is a must for any serious musician.

YAMAHA CS1

£CALL

CS1x Control Synth.
480 voices-21 Drum kits-128 Presets-128 user performances-4 simultaneous effects-arpeggiators with 20 patterns-all this for £599. Sorry, we forgot 6 real time controller knobs. Now that's what we call control!

YAMAHA W7

£999

INCLUDING VINTAGE BOARD

All you need for your composing, arranging and performing is delivered in one powerful, flexible and easy to use instrument. 100, 000 note sequencer, large LCD display, 8 meg of top quality AWM2 sounds, advanced 3 insertion and 3 system effects. Bundled with the popular 4 meg Vintage board.

Roland

£CALL

XP-10
An ideal entry level synthesizer with an extensive range of basic functions to enhance performing and creating music at home. With built-in computer interface, combination palette, advanced arpeggiator and X-dual key mode this is unbelievable machine not to be missed!

Roland

£CALL

XP-50
64-voice music workstation that can accept up to four SR-JV80 series wave expansion boards at one time. Brilliant response from a 32-bit RISC chip for more realtime potential and expressive power needed for recording and performance.
New model now available: XP-10
CALL FOR DETAILS

£1099

S2

£1299

S3

General Music S2 & S3
At this price you can't afford to buy any other workstation. This keyboard includes so much specification it's possible that a keyboard of this capability will never be available again.
DON'T BE DISAPPOINTED STOCKS ARE LOW CALL TODAY!

WE WILL NOT BE BEATEN ON PRICE!

THE UK'S ULTIMATE RECORDING & MIDI SPECIALISTS

MUSIC CONNECTIONS

Music Connections direct factory policy.

As music connections has grown foreign manufacturers have realised that we sell so much hi-tech equipment that we might as well sell their equipment direct for them.
so when you see the sign, direct factory prices you are buying the equipment at prices normally offered in their home market, more importantly there is no distributor profit margin on this product, as a customer you really are getting exceptional value! so look for our direct factory prices logo.

KORG

£CALL

TRINITY NOW AVAILABLE

TRINITY
New from KORG 4 new expandable keyboard-workstations. Touchview graphical user interface. Access and Moss sound sources. Ability to load AKAI samples intergrated Hard disk recorder. Great effects and controllers. Must be seen & heard to be believed! Great sounding prophecy board available.

QUASIMIDI

RAVEN
32 Midi channels, Arpeggiator, 2 built-in DSP effects, 512 single sounds, 200 ROM performances, 50 RAM performances, 400 Grooves built-in across 8 assignable parts and interactive control of muting. Unbelievable to hear!

MIDI Solutions Inc.

DIRECT FACTORY PRICES

MIDI SOLUTIONS
Whether you need to merge 2 MIDI ins together or provide 2 MIDI thrus, MIDI SOLUTIONS has a unit for you. CALL FOR DETAILS.

2 * MERGER	£49
QUADRA MERGE	£79
2 * THRU	£29
QUADRA THRU	£39

KORG

THE PROPHECY
Uses the new Multi-Oscillator Synthesis System providing 7 oscillator types created through five different synthesis techniques including analogue and physical modelling. 7 built-in effects including Distortion, Wah, Delay and reverb. Can you keep up with it?

nord lead

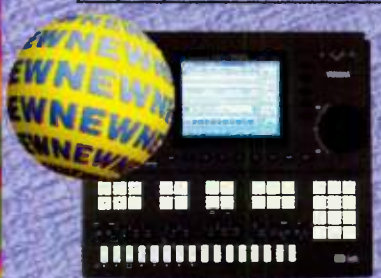
THE NORD LEAD
The Prophecy's rival in synthesizers. Using virtual analogue sounds the Nord Lead is fast becoming the industry standard. Also soon to arrive is the 8-voice expansion card that expands your Nord to 12 voices. On demo in all of our stores!
UPGRADE YOUR NORD TO VERSION 2.0-More arpeggiator effects, additional midi features, new filter option, echo effect, 100 new performances etc.

ORBIT
- 512 [illegible] (256 Rom, over 600 samples)
- 32 6-pole digital resonant filters (16 types; low, high, and band pass, phaser, flanger, EQ, Morphing and more)
- MIDI synched LFO's
- Beats mode (with control over tempo, transposition, preset and more), loops that aren't going to sound like everybody else.
- 16 part multi-timbral, 32 voice polyphony and 6 audio outputs
- Launch pad ready

TOTALLY NEW. TOTALLY AWESOME!
WE KNOW, WE'VE HEARD IT!

MR RACK
- 64 Voices
- 12 Meg Wave ROM Expandable to 84 Meg
- 2nd generation Transwaves
- 44.1 kHz Output
- 4 Outputs
- All new ESP-2 effects
- Soundfinder
- GM Compatible

ensoniq



YAMAHA QY700

Roland A90/EX

A90-EX
8 keyboard zones (4 internal/4 external)
Patch name display contains patch lists of the ROLAND JD-800, JV-80, Sound Expansion Series, JV series, SR-JV80 series expansion boards as well as GM/GS sound sources.
Sequencer control section allowing control of selection, tempo, and other parameters.
Global Transpose transposes all connected sound sources without changing the transpositional relationship between individual devices.
Multiple controllers and Total Volume Slider etc...
CALL FOR AN UNBELIEVABLE DEAL!

Chelsea

MUSIC CONNECTIONS
202NEW KINGS ROAD,
CHELSEA,
LONDON, SW6 4NF.
t: 0171 731 5993
t: 0171 736 4771
FAX: 0171 731 2600

Chelmsford

MUSIC CONNECTIONS
ROBJOHNS ROAD,
CHELMSFORD,
ESSEX,
CM1 3AG.
t: 01245 354 777
FAX: 01245 355 007

Birmingham

MUSIC CONNECTIONS
CROSBY COURT,
GEORGE STREET,
BIRMINGHAM,
B3 1QG
t: 0121 212 4777
FAX: 0121 212 4877

Southampton

MUSIC CONNECTIONS
KINGSGATE,
ST. MARY'S ST,
SOUTHAMPTON,
SO1 1NF
t: 01703 233 444
FAX: 01703 233 266

Bristol

MUSIC CONNECTIONS
21 THE MALL,
CLIFTON VILLAGE,
BRISTOL,
BS8 4JG
t: 0117 946 7700
FAX: 0117 946 7606

THE BIGGEST AND BEST RANGE OF STOCK IN THE UK

MUSIC CONNECTIONS

ALL PRICES INCLUDE VAT.

YAMAHA

Open system for Compatability. The 02R features an "open system" for compatabilty with all major industry-standard digital audio formats: TASCAM(TDIF-1), ADAT, AES/EBU, and Yamaha. Optional I/O interfaces allow the 02R to be easily intergrated with any digital recorders, wether tape based, or Non-linear "Hard-disc or Magneto optical".

DIRECT FACTORY PRICES

Music connections have done it again. Last year we teamed up with TASCAM to bring you a great deal on all their multitrack recorders. This year we're bringing you their great 2600 series recordinh console. The features are too numerous to list here so call any one of our stores listed below for a list of the specs. However the greatest deal is the price which is as follows:

16 Input: List £2499
Our price £1195.
24 Input: List £3299
Our price £1595.
32 Input: List £3500
Our price £1995.

PROMIX
16 Input channels with gain trim & pad, Stereo input channel, Stereo mix/cue/2-track recorder monitor functions, Analog 2-track IN/OUT for stereo recorder, 4 fader groups, Cue function, 4 aux sends, motorized faders, 33 position pan control, LCD display and available in rackmount form.

NEW FROM TASCAM

This desk is so new, we haven't even managed to get a picture of it. But by the time this goes to print we will have it in stock!

The M1600 series recording console is designed to complement the new generation of mo ular digital multitracks and hard disk recorders.

FEATURES:
16/24 channel in-line design
8 XLR MIC inputs inc. high performance preamplifier circuitry
Phantom power
TRS balanced line input on each control
Balanced/unbalanced tape returns via D-sub connectors
Signal present/overload LED on each channel
3 band assignable EQ with sweep mid-range
Tape/Channel monitor output assignable to AUX 1/2
1 Stereo and 4 mono AUX sends
4 fully assignable Stereo Aux Returns
In place solo
Mute switch on every channel
Insert point on every channel
Balanced group/direct outputs via D-sub connectors
2 track input
Stereo sub input
Optional Meter unit (included in price)
Optional expander

TASCAM

DIRECT FACTORY PRICES

16 Channel including meterbridge £1399
24 Channel including meterbridge £1699

ROLAND M160 Mk II - £299

16 Channel Rackmount mixer with faders, balanced outputs, 4 aux returns and individual pan. The ideal mixer for keyboard set-ups.

MACKIE

Full range of Mackie in stock: from 1202 to 8 Bus.

ULTRAMIX PRO
Automation system for Mackie desks, complete with remote fader, software and 34 channel VCA unit.

MACKIE 8IBUS
The ultimate expandable mixing system that the pro's use. Perfect for use with ADAT or DA-88.
Now available, automation for 8-BUS Mackies including Mac software. Call for more details!

DIRECT FACTORY PRICES

The DCP-8 £749
£93.62 per channel!
8 Compressors
8 Gates
8 Automated fader channels
8 limiters
8 mutes
All Under Digital Contr
Only £79.68 a chan

IF YOU HAVE A RECORDING STUDIO...
YOU NEED AN ACP-8.
IF YOU HAVE A PROJECT STUDIO...
YOU NEED AN ACP-8
IF YOU HAVE A P.A. SYSTEM...
YOU NEED AN ACP-8

The ACP-8 £599
£74.87 per channel!
8 Compressors/limiters/gates
Side chain on every channel
Trigger inputs on all channels
Balanced/Unbalanced I/O
Hard/Soft Knee Compression
Variable Attack & Release
Variable Gate Close
Only £63.72 a channel

ELECTRONIC MUSICIAN 1996 EDITORS CHOICE

PreSonus Audio Electronics

DIRECT FACTORY PRICES

WE WILL NOT BE BEATEN ON PRICE!

THE UK'S ULTIMATE RECORDING & MIDI SPECIALISTS

MUSIC CONNECTIONS

Music Connections direct factory policy.

As music connections has grown foreign manufacturers have realised that we sell so much hi-tech equipment that we might as well sell their equipment direct for them.
so when you see the sign, direct factory prices you are buying the equipment at prices normally offered in their home market, more importantly there is no distributor profit margin on this product. as a customer you really are getting exceptional value! so look for our direct factory prices logo.

TASCAM

YAMAHA

WE CURRENTLY HOLD IN STOCK ALL YAMAHA PORTASTUDIOS AT GREAT PRICES. AS WE HAVE SAID BEFORE THIS IS THE YEAR FOR TECHNOLOGY TO GO MAD AND IN A COUPLE OF MONTHS WE SHOULD HAVE THE NEW MINI-DISC RECORDER. SO WATCH THIS SPACE!

DYNATEK

STRUCTURED FOR STORAGE

Wether for digital audio, video or sampling, Dynatek hard drives satisfy the demands for both studio and live environments. Your data integrity and peace of mind are assured when you choose Dynatek SCSI Mass Storage.
THE FUTURE STARTS TODAY!

2 GIG DESKTOP DRIVE (with pro cables, software & discs.)	£399
1 GIG DESKTOP DRIVE (with pro cables, software & discs.)	£351
CD-ROM (with pro cables, software & discs.)	£139
230 OPTICAL DESKTOP (with pro cables, software & discs.)	£549
230 OPTICAL RACKMOUNT (with pro cables, software & discs.)	£599
270 SYQUEST DESKTOP (with pro cables, software & discs.)	£349
SYQUEST EASY DRIVES	£210

DIRECT FACTORY PRICES

GEMINI

THIS NEW DRIVE IS CAUSING A SENSATION IN AMERICA.
IT INCORPORATES A 650MB REMOVABLE OPTICAL AND A QUAD SPEED CD-ROM IN ONE UNIT. THE CD IS COMPATIBLE WITH ALL CURRENT SAMPLERS. AND WHEN YOU BEAR IN MIND HOW MANY DISCS YOU CAN SAVE ON ONE 650MB CARTRIDGE OVER THE COMING YEARS, JUST THINK HOW MUCH MONEY YOU'LL SAVE!

RECORDABLE CD-ROMS
SUPPORTS DIGIDESIGN MASTERLIST PRO.
DIGIDESIGN CD-ROMS WORK WITH ALL MUSIC APPLICATIONS UNLIKE CHEAPER IMITATIONS!
RECORDABLE CD-ROM AT UNBELIEVABLE PRICES!

CDR 200
Dual speed record, Quad speed read inc. software, cables & discs — £1049

CDR 400
Quad speed read/write state of the art technology comes with pro cables, software and discs — £1395

Chelsea
MUSIC CONNECTIONS
202NEW KINGS ROAD,
CHELSEA,
LONDON, SW6 4NF.
☎: 0171 731 5993
☎: 0171 736 4771
FAX: 0171 731 2600

Chelmsford
MUSIC CONNECTIONS
ROBJOHNS ROAD,
CHELMSFORD,
ESSEX,
CM1 3AG.
☎: 01245 354 777
FAX: 01245 355 007

Birmingham
MUSIC CONNECTIONS
CROSBY COURT,
GEORGE STREET,
BIRMINGHAM,
B3 1QG
☎: 0121 212 4777
FAX: 0121 212 4877

Southampton
MUSIC CONNECTIONS
KINGSGATE,
ST. MARY'S ST,
SOUTHAMPTON,
SO1 1NF
☎: 01703 233 444
FAX: 01703 233 266

Bristol
MUSIC CONNECTIONS
21 THE MALL,
CLIFTON VILLAGE,
BRISTOL,
BS8 4JG
☎: 0117 946 7700
FAX: 0117 946 7600

THE BIGGEST AND BEST RANGE OF STOCK IN THE UK

MUSIC CONNECTIONS

ALL PRICES INCLUDE VAT.

ASR-10

- 88-key weighted or 61-key synth action keyboards, or rack version
- Up to 32 voice polyphony
- Up to 16 Mb memory
- Stereo sampling at 44.1 and 29.76kHz
- Analog or digital input
- Sampling through effects
- Advanced resampling
- Imports Roland and Akai CD-ROM's
- 24-bit effects processor with 62 algorithms
- Virtual 16-track sequencer
- Digital audio recording
- "Play While Load"
- Bank loading of complete performance setups
- Easy sound layering and splitting
- HD disk drive/SCSI
- Up to 8 polyphonic outputs
- Patch Select buttons
- Optional digital I/O

RAP-10 £125

MCB-10 INTERFACE £59

E-MU

FULL EMU RANGE IN STOCK AND ON SHOW AT ALL TIMES.

ENSONIQ

DP4

4 independent 24-bit stereo processors
4 inputs & 4 outputs
Able to process 1,2,3 or 4 signals
54 algorithms
400 presets
Seamless switching of effects
Dynamic MIDI control
Front-panel headphone jack
Front-panel XLR
Dedicated input & output volume knobs
3-step input LED's
+4/-10 dB switching
Output mixing

DP2

The power and flexibility of Ensoniq's DP series effects in an affordable 2-processor unit.

lexicon

£CALL

ALEX & REFLEX

BEHRINGER

£CALL

COMPOSER

DRAWMER

ALESIS

£CALL

MIDIVERB 4

BOSS

£CALL

SX-700

£CALL

VITALIZER

Roland

£CALL

SDE-330

SRV-330

Only at MUSIC CONNECTIONS!

Roland

£499

£599

SPECIAL DEAL!
JS-30 & DYNATEK CD-ROM

Designed for realtime DJ applications and remixes, the JS-30 is ideal for phrase sampling, has the same highly acclaimed technology featured on the Roland S-770 and S-750 samplers and at £495 it's a real give-away. Up to 22.5 seconds of sampling is available with the standard 1 meg memory (upgradable to 4meg) and has SCSI as standard.

A R T

APPLIED RESEARCH AND TECHNOLOGY

If you have been in the music industry for a while, we are sure you have heard of the name ART. Recently art have totally overhauled their product range. Some of the existing products have been totally updated and some are totally new. Like their brilliant mic preamps for all price points & the great new effects network. Also the new progate is getting rave reviews in America.
So if you're in the market for some new pro-audio equipment, give the new range of ART effects a try, you won't be dissapointed!

AKAI

£CALL

The new AKAI samplers incorporating all the capabilities that have made the s3000 series the world standard for professional sampling, the new range add features like a powerful multi mode for ease of layering and multi-timbral sequencing, multi-effects card that provides four independent channels of effects, RAM expansion with readily available SIMM memory, flash RAM, MESA graphical Macintosh-based front-end etc.

WE WILL NOT BE BEATEN ON PRICE!

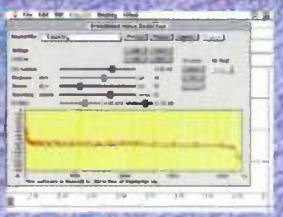
THE UK'S ULTIMATE RECORDING & MIDI SPECIALISTS

MUSIC CONNECTIONS

PRO TOOLS

Music Connections direct factory policy.

As music connections has grown foreign manufacturers have realised that we sell so much hi-tech equipment that we might as well sell their equipment direct for them.
so when you see the sign, direct factory prices you are buying the equipment at prices normally offered in their home market, more importantly there is no distributor profit margin on this product. as a customer you really are getting exceptional value! so look for our direct factory prices logo.



DINR - Software Noise reduction plug-in for Sound designer II

digidesign
steinberg
windows
1996 tour

FEATURING AT THE FOLLOWING VENUES:

MUSIC CONNECTIONS BRISTOL
3 MAY 19.00

MUSIC CONNECTIONS CHELMSFORD
16 JUNE 19.00

MUSIC CONNECTIONS SOUTHAMPTON
7 MAY 19.00

digidesign®

The Digital Audio Revolution continues...on the Windows Platform

You Could Always Hear What AKAI Did For Your Music...
Now You Can See It.

DR16
Familiar MTR style operation with dedicated controls.
16 tracks on one HD
25 minutes recording time per track
16 channels of automated digital mixing & optional EQ
Powerful on-board non destructive editing with undo
Accurate audio scrubbing via jog/shuttle controls

We have superb package deals available on these products, PLEASE CALL FOR DETAILS.

DR8
8-track version of DR16.

AKAI

LAST OF THE STUNNING CBX-D5'S AVAILABLE!
CALL FOR ALL CURRENT PACKAGE PRICES BUT HURRY LIMITED STOCKS!

Roland®

VS-880
Digital mixer incorporating 14 input channels, digital EQ, 2 stereo busses and 8 recording busses.
64 tracks of 16 bit CD quality 44.1kHz direct to disk recording technology with full digital mixing capability, automation, optional built-in digital FX processing, storage to either internal IDE or external SCSI drive and back up to DAT in only 1.5 times actual recording time.

THE PRODUCT OF '96

VS8F-1 £349
Optional effects expansion board.

Chelsea
MUSIC CONNECTIONS
202NEW KINGS ROAD,
CHELSEA,
LONDON, SW6 4NF.
☎: 0171 731 5993
☎: 0171 736 4771
FAX: 0171 731 2600

Chelmsford
MUSIC CONNECTIONS
ROBJOHNS ROAD,
CHELMSFORD,
ESSEX,
CM1 3AG.
☎: 01245 354 777
FAX: 01245 355 007

Birmingham
MUSIC CONNECTIONS
CROSBY COURT,
GEORGE STREET,
BIRMINGHAM,
B3 1QG
☎: 0121 212 4777
FAX: 0121 212 4877

Southampton
MUSIC CONNECTIONS
KINGSGATE,
ST. MARY'S ST,
SOUTHAMPTON,
SO1 1NF
☎: 01703 233 444
FAX: 01703 233 266

Bristol
MUSIC CONNECTIONS
21 THE MALL,
CLIFTON VILLAGE,
BRISTOL,
BS8 4JG
☎: 0117 946 7700
FAX: 0117 946 7600

THE BIGGEST AND BEST RANGE OF STOCK IN THE UK

MUSIC CONNECTIONS

ALL PRICES INCLUDE VAT.

TEAC

dynaudioacoustics®

TEAC S300
LAST FEW AVAILABLE
Co-axial 2-way bass reflex speaker system including sub-woofer.

£149

20/20 bas

BIAMPLIFIED MONITOR SYSTEM

- Internally BiAmplified with **200W Total power**
- **An active Asymmetrical Fourth Order Crossover** that separates the line level frequencies prior to amplification.
- **A 130 Watt Amp** that receives only the low frequencies and is designed to perfectly match the **8" Mineral Filled Polypropylene Low Frequency Driver**
- **A 70 Watt Amp** that receives only the high frequencies and is designed to perfectly match the **1" Natural Silk Dome Tweeter.**
- **A Large Diameter Low Air Restriction Front Mounted Bass Port** for full, accurate bass response
- An intelligent combination **XLR or 1/4" Input Connector**
- **Continuosly Variable Presicion Low and High Frequency Trim Controls**
- **Input Sensitivity Control and Clip LED Indicator**
- **Circuit Breaker** (no looking for fuses in the middle of the night)
- **Passive version also available**

EXPERT

EXPERT

MASS TECHNOLOGY

MASS TECHNOLOGY
Designed to match and easily interface with all popular mixing consoles and includes both XLR and 1/4" Jack/Phono connections. Our amplifiers have special 'Pin-Fin' heatsinks to efficiently dissipate heat, this means that our amps are 'Fan-free' meaning no noise or interference.
CALL FOR PRICES ON ALL MODELS.

ABFLECTOR £79.95
BASSTRAP £106
SKYLINE £66

Acoustic Tools

ACOUSTIC TOOLS
We are constantly amazed how many people spend fortunes on their recording equipment (especially their speakers) but then pay no attention to the acoustics of their studio-bedroom-lounge or wherever they happen to be recording.
Well we are here to help. RPG and Music Connections have teamed up to offer you the chance to actually hear your music as it really sounds. We can tailor a package to suit exactly the size and shape of your recording facility. Just think how impressed visitors will be, when they come to your studio and see you know all about acoustics.
Give us a call or visit our showrooms and see how we can effect your monitoring.

DIRECT FACTORY PRICES for PROJECT STUDIOS

DIRECT FACTORY PRICES

Westlake Audio

EXCLUSIVE

£995

Lc 6.75
Features a unique intergration of crossover, cabinet and drivers that produce a rugged, attractive and cost effective unit while maintaining the sound characteristics so identified as the Westlake Sound.

£1695

BSM-4
The BSM-4 is a portable 3 driver unit, ported and featuring an internal high level crossover network. For accuracy and loudness the BSM's are hard to resist.

Westlake Audio strives to design and build loudspeakers that are as accurate to the source recording as currently possible given the existing level of technology and to research methods of improving this technology for future generations of loudspeakers.
Our responsibility to the customer is to provide products that not only meet our design goals for performance but also acheive a level of reliability that will ensure the enjoyment of our loudspeakers for years to come.
An acceptable level of performance and standard for reliabilty will only come from our own diligence in manufacturing which is ensured by the testing, retesting and further retesting of our products before they can be called Westlake Audio Loudspeakers.
Westlakes customers include: Michael Jackson, Whitney Houston, Quincy Jones, Frank Sinatra and Natalie Cole.

WE WILL NOT BE BEATEN ON PRICE!

THE UK'S ULTIMATE RECORDING & MIDI SPECIALISTS

PART-EX

CHELSEA

PROMIX 01	£995
SRV330	£450
SDX330	£450
SDE330	£450
DIGITECH VOCALIST	£CALL
REVOX B77 MK2	£499
MARANTZ CDR	£1495
DM80 PACKAGE INCLUDES ALL BELOW	£2995
TWIN 1 GIG & DAT BACK-UP, DM80 REMOTE, FADER PACK, MAC SOFTWARE, CENTRIS 610 16" MONITOR.	

CHELMSFORD

ROLAND JV30 (BOXED)	£499
GEM WX2 (BOXED)	£899
ROLAND JV880	£499
KORG EX-800	£179
YAMAHA MT8X	£699
JL COOPER PPS-1 SYNCRONISER	£99
YAMAHA NS10-M	£150
DIGITECH VOCALIST II (C/W FOOTSWITCH)	£399
ROLAND JUNO 60	£299
ROLAND JW50	£499
ALESIS D4	£199
AKAI DR4D C/W INTERNAL 540MB DRIVE	£1199
MACKIE SR24-4	£1199
AKAI DR8	£2100
TASCAM DA30	£750
KORG POLY 800	£199
ROLAND JV1080	£799
KORG DSS1 KYBD	£299
ROLAND PG150	£99
DBX 160XT	£199
YAMAHA RX7	£199
ART ALPHA 2	£279
ALESIS 3630	£179
YAMAHA SPX 1000	£699
DRAWMER DS201	£299
APHEX TYPE C	£149
KORG 01WFD	£999

BIRMINGHAM

ENSONIQ KT88 INC. CASE	£1295
BEHRINGER PEQ305	£350
ALLEN & HEATH GS3 16CH.	£995
ALLEN & HEATH GS3 16CH. (MINT)	£1195
FATAR STUDIO 90 PLUS	£349
ROLAND R70	£249
KORG X3	£699
JUNO 6	£195
KORG 01WFD	£799
SY35 (EX DEMO)	£399
OPCODE STUDIO 5	£349
SAMSON MPL2242	£499
APHEX TYPE B	£99
ROLAND P55	£299
JV50 (EX DEMO)	£645

SOUTHAMPTON

BOSS DS330	£749
ROLAND JV90 INC. CASE	£599
ALESIS SR16	£150
MACKIE MS1202	£249
MACKIE CR1604	£650
ROLAND JV880	£350
YAMAHA QY20	£199
ALLEN & HEATH GS3/16	£1050
KORG TRINITY PLUS(BUILT IN PROPHECY)	£2199
FOSTEX R8	£700
FOSTEX 812	£500
ALESIS MEQ230	£149
ROLAND D5	£299

BRISTOL

FOSTEX XR7 4-TRACK	£350
ALESIS MICRIVERB III PX	£130
AKAI S950 (FULLY EXPANDED)	£850
ART ALPHA 2SE FX	£250
KORG C3500 PIANO	£799
TASCAM 644	£599
ALESIS SR16	£160
ZOOM 9030	£250
ALESIS MIDIVERB IV	£275
APHEX TYPE C2	£200
SECK 18-8-2	£650
SOUNDCRAFT SPIRIT 24-8	£1400
MACKIE LM32	£699

Music Connections direct factory policy.

As music connections has grown foreign manufacturers have realised that we sell so much hi-tech equipment that we might as well sell their equipment direct for them.
so when you see the sign, direct factory prices you are buying the equipment at prices normally offered in their home market, more importantly there is no distributor profit margin on this product. as a customer you really are getting exceptional value! so look for our direct factory prices logo.

MUSIC CONNECTIONS

CAD

DIRECT FACTORY PRICES

CAD 92
THE EXTREMELY LOW MASS OF THE MICROPHONE DIAPHRAGM OFFERS EXCELLENT TRANSDUCTION OVERALL ESPECIALLY FOR HIGH FREQUENCY TRANSIENTS. THE CAD 92'S SMOOTH BANDWIDTH OF 40HZ-20KHZ. COUPLED WITH THE HIGH OUTPUT OF -45DB, MAKE IT A FIRST CLASS STUDIO AND TOURING MICROPHONE. THE CAD 92 PROVIDES EXCEPTIONAL CLARITY FOR VOCALS, CRISP HIGHS FOR CYMBALS AND THE OVERALL SMOOTH RESPONSE NECESSARY FOR ACOUSTIC GUITAR, ALL IN A LIGHTWEIGHT PACKAGE THAT IS RELIABLE AND AFFORDABLE.

CAD 27
AN EXCELLENT, RUGGED AND VERSATILE UNIDIRECTIONAL MICROPHONE THE CAD 27 OFFERS CLEAN, TRANSPARENT SOUND REPRODUCTION FOR USE IN VOCAL AND INSTRUMENT APPLICATIONS.
INCLUDES SERIALIZED, GRADED CAPSULE WITH INDIVIDUAL TEF PRINT-OUT AND PROTECTIVE POUCH.

E-100
SHARING THE INNOVATIVE SERVO CIRCUITRY WITH THE E-200, THE E-100 IS TRULY ONE OF THE BEST VALUES IN THE MICROPHONE WORLD IN ADDITION TO THE PHENOMENAL WIDE BANDWIDTH RESPONSE THE E-100'S PHYSICAL DIMENSIONS CONTRIBUTE TO IT'S VERSATILITY AS A VOCAL MIC, AN INSTRUMENT MIC, A DRUM KIT MIC, OR AN OVERHEAD MIC

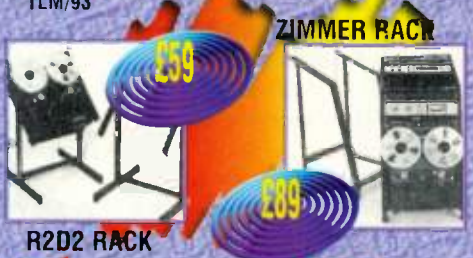
E-200
DESIGNED FOR CRITICAL APPLICATIONS SUCH AS RECORDING, SOUND REINFORCEMENT AND BROADCAST. IT'S UNIQUE COMBINATION OF TRANSPARENT REPRODUCTION OF ANY SOUND SOURCE AND HIGH SPL CAPABILITY MAKE IT ONE OF THE MOST VERSATILE HIGH QUALITY MICROPHONES EVER MADE. EQUALLY AT HOME IN A VOCAL BOOTH IN FRONT OF A WHOLE SYMPHONY ORCHESTRA, CLOSE MICING A KICK DRUM OR RECORDING A CLASSICAL GUITAR.

E-300
WIDE BANDWIDTH - 10HZ TO 20KHZ
EXCEPTIONAL DYNAMIC RANGE - 137DB
EXTREMELY LOW SELF NOISE - 11DB
SERVO HEAD AMPLIFIERS
HIGH SPL CAPABILITY - 140DB
TRANSFORMERLESS BALANCED OUTPUT
INTERNAL POWER RESERVOIR SYSTEM
REMOTE OPERATION

WHAT HAPPENS BIG IN AMERICA, AS HISTORY WOULD HAVE IT GOES BIG HERE. CAD EQUITEK ARE THE FASTEST GROWING RANGE OF MICS IN THE US. ONCE AGAIN WE BRING YOU THESE GREAT MICS AT FACTORY DIRECT PRICES. TRY THEM AND BE STUNNED THAT YOU CAN GET A MIC OF THIS QUALITY AT THESE PRICES.

AUDIO TECHNICA
ATM 4033
AKG
C1000
AKG
C3000
SHURE
SM58&57
HEUMANN
TLM/93

CALL FOR UNBEATABLE PRICES ON THESE INDUSTRY STANDARD MICROPHONES.



ZIMMER RACK
R2D2 RACK

DAT TAPE AT TRADE PRICES.

15 MIN - £3.89
30 MIN - £3.99
48 MIN - £4.39
62 MIN - £4.49
92 MIN - £4.99
122 MIN - £5.99
DAT HEAD CLEANER - £8.95

THESE PRICES ARE FOR MIXED LENGTHS OF 10 OR MORE TAPES.

YOU WON'T BUY BETTER!

Chelsea
MUSIC CONNECTIONS
202NEW KINGS ROAD,
CHELSEA,
LONDON, SW6 4NF.
☎: 0171 731 5993
☎: 0171 736 4771
FAX: 0171 731 2600

Chelmsford
MUSIC CONNECTIONS
ROBJOHNS ROAD,
CHELMSFORD,
ESSEX,
CM1 3AG.
☎: 01245 354 777
FAX: 01245 355 007

Birmingham
MUSIC CONNECTIONS
CROSBY COURT,
GEORGE STREET,
BIRMINGHAM,
B3 1DG
☎: 0121 212 4777
FAX: 0121 212 4877

Southampton
MUSIC CONNECTIONS
KINGSGATE,
ST. MARY'S ST,
SOUTHAMPTON,
SO1 1NF
☎: 01703 233 444
FAX: 01703 233 266

Bristol
MUSIC CONNECTIONS
21 THE MALL,
CLIFTON VILLAGE,
BRISTOL,
BS8 4JG
☎: 0117 946 7700
FAX: 0117 946 7600

THE BIGGEST AND BEST RANGE OF STOCK IN THE UK

THE MAIN Event?

PAUL WHITE tests a pair of US-built studio monitors designed to combine tonal accuracy with affordability.

EVENT 20/20 STUDIO MONITORS

Event may be a new name on the studio equipment map, but the people behind the company are anything but new players: their chief loudspeaker designers (including Frank Kelly, interviewed back in *SOS* April '95) have a 25-year track record with some of the biggest names in US audio, including JBL, Gauss, UREI, Harman and Alesis.

DESIGN & CONSTRUCTION

Designing a new loudspeaker can be no easy task, because most of the parameters and potential problems are well-documented, as are most of the solutions. Indeed, some would argue that the only improvements still to be made are very small, and while this is probably true, the Event approach seems not to be to improve on perfection at all costs, but rather to build a cost-effective monitor capable of rivalling the performance of established models costing two or three times the price. This is a most laudable aim, but how is it possible to build a very high-quality studio monitor loudspeaker system for under £400?

If you've ever seen how a hi-fi loudspeaker system is priced, you might be horrified to learn where the money goes. Once you've deducted the dealer and retailer margins, it's quite possible that even a quite decent £500, 2-way speaker will incorporate bass drivers costing under £15 each and tweeters that cost maybe £8 each or less. The rest of the money goes on the crossover, the cabinet, assembly, and of course the manufacturer's development costs and profit margin. No wonder, then, that some hi-fi systems contain sadly under-engineered drivers; by the time the pretentious trim and endangered-rainforest veneer on the cabinet has been paid for, there's really very little left to invest in decent woofers and tweeters.

Event would appear to have approached the problem from the other end, and though their drivers must still be built to a price, they're properly designed to do the job asked of them. The custom-built bass driver in this 2-way system is eight inches in diameter, and uses a mineral-loaded polypropylene cone mounted in a pressed steel chassis via a damped rubber surround. Driving the cone is a 1.5-inch, high-temperature voice coil in a magnetic assembly large enough to inspire confidence. A silver diecast aluminum trim ring provides a smooth aerodynamic transition from the driver to the cabinet, while forming a part of the 4-way mounting system.

It is generally accepted that soft-dome tweeters produce the most natural sound at sensible listening levels, and the 20/20s use a 1-inch, silk-domed unit with ferrofluid cooling. A second-order crossover (12dB/octave) operates at 2.2kHz, providing an overall frequency response of 50Hz to 20kHz +/- 2dB. This is quite a low crossover frequency considering the crossover slope is only second order, and it says a lot for the quality of the tweeter that no serious anomalies are audible in the 500Hz to 2kHz part of the spectrum, where the tweeter must still deliver a significant amount of audio energy, albeit at a progressively lower level with falling frequency.

A long, large-diameter port is used instead of a shorter, narrower one and this has a right-angled bend in it to make it fit the cabinet. This angled port design feature was also used on the Alesis Monitor Ones, and is intended to keep the port working properly at high sound pressure levels; ▶

pros & cons

EVENT 20/20 £399/£999

pros
- Well-balanced, smooth sound with good bass extension.
- Attractive price.
- Efficient; you don't need a hugely powerful amplifier.

cons
- I'm thinking!

summary
An extremely well thought-out design, which puts solid audio performance before fashion.

SOUND ON SOUND

Studio 49 Specifications
- Full-size 49 unweighted keys
- Velocity Sensitive

Studio 610 Specifications
- 61 full size velocity-sensistive keys.
- Pitch Bend Wheel and Programmable Wheel
- Program change, MIDI channel change, Transpose

Studio 610+ Specifications
As Studio 610 except with aftertouch and semi-weighted keys

Studio 900 Specifications
- 88 weighted keys with hammer action
- Pitch Bend Wheel and Programmable Wheel
- Program change, MIDI channel change, Transpose
- Also available with integral flight-case

Studio 1176 Specifications
- 76 weighted keys, Hammer action
- Velocity Sensitive with Aftertouch
- Pitch/Mod. Wheels
- 4 Programmable Zones
- 32 Presets
- 2 control sliders
- Program and bank change

Studio 1100 Specifications
- As 1176 but with 88 keys
- Also available with integral flight-case

Studio 2001 Specifications
- Full-size 88 weighted keys with hammer action
- Four MIDI inputs may be used for additional keyboards, MIDI accessories, sequencers, etc.
- Four fully independent MIDI outputs,
- 64 MIDI output channels.
- Two programmable control wheels.
- Four programmable control slider.
- Preset increment and decrement input.
- Eight keyboard zones may be defined over local or external keyboard regions.
- Also available with integral flight-case

Full range of Volume, Swell, Sustain & MIDI pedals

"Playing stadium-capacity shows and recording live albums, I needed a keyboard that combined great feel with MIDI versatility and reliability".

James Hallawell, pictured at the Royal Albert Hall during the recent Alison Moyet tour.

PIECE OF THE ACTION

With recent credits including sessions with Supergrass, Stereo MCs, Joan Armatrading, Dave Stewart and full tours with Alison Moyet, Graham Parker and The Pretenders, top keyboard player James Hallawell has had a busy year.

To cope with his varied and demanding schedule, James has been relying on a FATAR 2001 keyboard as the heart of his set-up.

James chose the 2001 for its powerful MIDI control and the incredibly realistic piano action found throughout the FATAR range.

Visit your local FATAR centre now and get yourself a piece of the action.

STAB, MASSAGE & BOUNCE...

The secret of the FATAR ACTION lies in the patented hammer. Whilst most 'piano action' instruments rely on damped or weighted keys, FATAR's hammer is thrown up and forward on its pivot as the key is depressed, mimicking exactly the action of a traditional acoustic piano.

The combination of more mass moving through an arc means greater acceleration of the key and a remarkably increased dynamic range. You'll find you can put great power into chord stabs and loud passages whilst the natural inertia of the hammer provides exactly the right kind of counter-balance that lets you massage real piano keys for expressive pianissimo.

Equally important is the tiny bounce a hammer gives the key as it comes to rest. It's this bounce that that lets you play those two-handed paradiddles - and while we are talking percussion it's worth remembering that keyboards are used for triggering all sorts of things these days.

FATAR STUDIO SERIES
MASTER KEYBOARDS

ARBITER GROUP PLC. Wilberforce Road, London, NW9 6AX Tel: 0181 202 1199 Fax: 0181 202 7076 Internet: http://www.demon.co.uk.arbiter

ARBITER
GROUP PLC

▶ smaller ports apparently suffer from turbulence which makes the effective port size, and hence the cabinet tuning, change with level.

So far, the quality of design and choice of components seems fine, so where has the money been saved? The most obvious area of economy is the cabinet. This is fabricated from vinyl-laminated, five-eighths-of-an-inch medium-density fibreboard, and the constructional method seems to be similar to that used for low cost hi-fi systems, so what you get is a functional box with sharp corners and a no-nonsense, wipe-clean finish. Machined rebates accept the drivers, which are mounted without the benefit of gaskets, and are secured using screws rather than bolts. Despite the lack of gaskets, there appears to be no air leakage around the bass driver, and the overall presentation is very smart. The front port vent is plastic, but inside the box the port changes to a cardboard tube — again, perfectly acceptable in engineering terms, and another way to trim the cost without compromising performance. Absorbent lining is placed on the cabinet sides, and the crossover is mounted on a small PCB affixed to the rear panel. Grain-orientated steel laminate rather than air-cored inductors are used, presumably to save cost, and though some purists will argue the merits of air-cored inductors, the only meaningful test is ultimately to listen.

An off-the-peg, rear-panel terminal block accepts unterminated wires, banana plugs, spade terminals or pin connectors, and no provision is made for bi-wiring, doubtless on the very valid basis that few studio users would use it anyway!

THE ACTIVE APPROACH — THE BI-AMPED EVENT 20/20

This active version of the 20/20 (not shown in the picture in this review) includes a pair of amplifiers — 130W driving the LF speaker and 70W feeding the tweeter. These are fed from a 4th-order active crossover operating at 2.6kHz. The input socket can accept either balanced XLRs, balanced jacks or unbalanced jacks. An input level control provides 20dB of gain adjustment, and separate trim controls are fitted, so the low frequency and high frequency levels can be adjusted independently to help compensate for room acoustics and speaker position. An active, subsonic filter attenuates signals below 30Hz (these wouldn't be heard anyway, but they might tax the speakers and amplifiers), and RF filtering is also included to reduce the risk of radio frequency interference. A green power indicator LED is positioned at the bottom of the woofer trim ring to show the speakers are on, which also doubles as a clip indicator. Protection for the speakers and amplifiers is provided by amplifier output current limiting, over-temperature sensing and switch-on muting to guard against power-up transients. There's also a resettable mains circuit breaker.

Though the speakers have the same family sound as the passive versions, the use of a steep active crossover and bi-amping results in a noticeably tighter, better-controlled sound with greater clarity at the bass end in particular. At the top end, the sound seems smoother, yet very detailed. Even at very loud monitoring levels, the sound remains tight and very well controlled. If you haven't already got a suitable power amplifier, I'd strongly recommend you consider the active versions, as they have a very clear sonic advantage over their passive companions.

LISTENING IN

The Event 20/20s are quite compact, measuring just 14.75 x 10.25 x 11.75 inches, and they're obviously designed to fill the need for a nearfield monitor, though they deliver quite enough bass end to be used as main monitors in a small studio or edit suite. Tonally, the speakers are detailed, but without being overbearingly harsh — a common fault among budget monitors. There are no untoward bass-end hot spots, no nagging peaks in the 3 to 6kHz range, and the general impression is that you're hearing a pretty honest representation of what's being fed in. The adjectives smooth, sweet, confident and effortless spring unbidden to mind, but as I don't have a sentence to put them in at the moment, I'll leave them here for the time being. There's plenty of top-end clarity without any tendency to fatigue, and the stereo imaging is excellent, even when you're well in front of the sweet spot. To maintain a sense of perspective, the sound of the 20/20s stands up well in comparison with the likes of the smaller Genelec and Dynaudio monitors, though every different brand has its own unique character. The 20/20s' sound isn't as tightly controlled as from my little ATC 20s, which are far less efficient and very highly damped, but there's nothing to worry about, especially at the price the 20/20s are going for.

These monitors are rated at 200W peak, 150W programme, and have a nominal 4Ω impedance, though they're efficient enough at 88dB@1 Watt @ 1m that you could monitor quite loudly with an amplifier as low as 50 Watts per channel, or even less. Because loudspeakers often dip below their nominal impedance at certain frequencies, it is essential to use a good-quality amplifier, one that is rated to handle 4Ω loads or lower. I used an AVI 100W per channel integrated amplifier for testing, and had plenty of level in reserve.

SUMMARY

The Event 20/20s turned out to be damn fine monitors, well up to the task of serious mixing, editing or post-pro work; I'm looking at my Pro Tools system at the moment to see if a pair would fit, though a lack of magnetic shielding on this particular model means you can't put them too close to your computer monitor. I understand that a magnetically-shielded version of this monitor is in the planning stage.

The 20/20s' bass end is sufficiently extended to make them useful as the sole pair of monitors in a small studio, yet it isn't so extended as to cause problems in a project or home studio that may not have the benefit of thorough acoustic treatment. Well-recorded music is reproduced with a degree of clarity and detail that you'd normally associate with rather more costly monitors, while flaws in poor recordings are clearly exposed. This is exactly what you need from a monitor system — overall honesty without frills or flattery. After all, when something isn't right, you want to be the first to know about it.

As a first product from a new company, the 20/20s seem to have hit the target price for a project studio monitor without significantly compromising on audio integrity. Corners have been cut, but these are all in exactly the right areas — the cabinets are functional rather than statements of high fashion, both cabinets are identical rather than being built as right- and left-handed versions, and the design has been worked out for efficient assembly. I don't have a problem with any of that, as the drivers are up to the task, and the basic design is sound. If you're in the market for new monitors in this price range, you'd be doing yourself a great disservice by not checking out the Event 20/20s. I'm now very curious to see what they come up with next — who knows what awaits us beyond the Event horizon? SOS

info

£ Passive monitors £399 per pair; Bi-amped active versions £999 per pair. Prices include VAT.

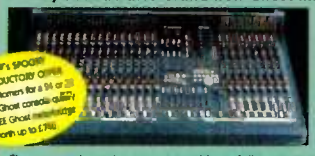
A Key Audio Systems Ltd, Unit D Chelford Court, Robjohns Road, Chelmsford CM1 3AG.

T 01245 344001.

F 01245 344002.

R&W IS HAUNTED

by Soundcraft's brand new Ghost mixing console



R&W's SPOOKY INTRODUCTORY OFFER first 5 customers for a 24 or 32 channel Ghost console qualify for a FREE Ghost monitorbridge worth up to £700

It's set to spook every other 8-buss desk on the market. Pound for pound, it's got more highly desirable bells and whistles than the rest. Major features like an on-board computer with a fully automated MIDI mute recall system, control of external tape machines with audio/video scrub facility, a Timecode reader/generator and 4 MIDI data faders for control of external effects parameters.

Audio-wise it's a killer - Ghost features Soundcraft's new ultra-low noise mic amp with a whopping +60dBu input sensitivity, and of course legendary Soundcraft 4-band EQ with 2 fully parametric mids is included as standard. There are also 6 mono and 2 stereo aux sends, 4 stereo returns and Mix B path on every channel (giving 56 possible inputs on the 24 channel version).

One thing about Ghost that won't spook you is it's low cost. Ask for our free information sheet.

THE CLASSIC LANGEVIN CR3A

You'd normally expect to pay well over £1,000 for a large condenser cardioid studio microphone, particularly when it has a 1inch x 6micron gold-plated diaphragm, -10dB pad switch and bass roll-off as well and extremely low noise discrete amplifier circuitry.

And then you'd expect to part with even more of your money for pop filter and shock-mount suspension.

Not with the Langevin CR3A - all the above are *standard* features, yet you can buy it from R&W for just £439 inc VAT.

- The accessories are FREE.
- Classic studio performance.
- Your money back if not impressed.

Now **£399** inc. VAT

TWO TEMPTING TANNOYS

Less Than **£446** at R&W

Less Than **£646** at R&W

R&W introduce some great new nearfield speakers from the Tannoy stable. System 600 (6") and System 800 (8") are for the discerning eye as well as the critical ear. Perfectly proportioned for positioning atop your console meterbridge. Audition a pair at R&W or borrow a pair from us to hear in your own studio. We bet you'll be as highly impressed as we are.

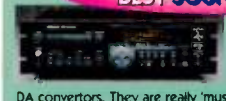
THE "FAB FOUR" AT R&W

FREE Extended 2-Year Guarantee
FREE RC808 Remote control
FREE Ten Hi-Bit Tapes

A Tascam DA88 can record up to 113 minutes of music in CD-quality on a single ultra-small Hi-8 tape. We recommend it because no other digital 8-track tape format can compete on features, build quality and reliability. It is still the preferred choice of multitrack tape format by the professional.

We will not be beaten on Tascam DA88 Price & Service. Call us now.

BEST SOUNDING DAT



Listen to Tascam's DA30 MK2 DAT Recorder next to any other brand of DAT machine and hear the difference.

The secret is in its unique AD and DA convertors. They are really 'musical' sounding. Thus they ensure your valuable masters actually sound better. Add to this Tascam's famous workhorse build quality and long feature list. Then consider R&W's best price promise.

Nobody can beat R&W on Tascam DA30. Just ask!

Budget DAT

Tascam's most recent studio DAT recorder. At a price more associated with delicate Hi-Fi DATs. The difference is that this machine is heavier duty by far. And it comes with some unique features. You can record a 60-character message at the start ID of each track and this is displayed as the track plays. You can turn off SCMS copy limiting without the need for a modification. It even comes fitted with 19" rackmounts as standard.

We've sold loads of DA70's - Why? - Because we sell them for less!

Portable & Affordable

The Tascam DA-P1 is the world's lowest-cost professional portable DAT recorder. With the sort of facilities you expect in a studio DAT. Along with XLR microphone inputs and 48V phantom power for condenser mics, plus a built in record limiter to ensure your recordings don't distort at those unexpectedly high points that always happen when you're recording your most important work on location.

Save money on a DA-P1! R&W have a special price for you this month.

BACK IT UP

We've recommended the superb Fostex DMT8 Hard Disk Portastudio for some time. And now we are adding the benefit of a low-cost DAT backup recorder to save your valuable work at the end of a session. Here's a new R&W package combining the Fostex DMT8 with the legendary Sony DTC60-ES DAT mastering recorder. A Digital Workstation with optical Backup and Mastering all-in-one. No need for any extra gizmos - just use the optical cable supplied. And we guarantee it for 2 years!

Just £1995 inc. VAT at R&W only while stocks last.

TWO NEW MARANTZ CD-RECORDERS

"Everything you've ever wanted in an audio CD-Recorder." That's the verdict on the new CDR-620 and CDR-615 from Marantz. The ultimate (and increasingly preferred) mastering format is now Compact Disc. So if you're mastering from a Digital Audio Workstation you'll need the SCSI-equipped CDR-620 (with its FREE RC-620 Remote) or else a standalone CDR-615. And, by buying from R&W, you'll get all the CD-R "extras" you need too.

- FREE R&W Pre-Sales Test Bench Checkout
- FREE R&W Installation & Training (M25 area)
- FREE R&W Extended 2-Year Guarantee
- TEN (yes, 10) FREE Blank 74-minute/650Mb CD-R Discs

R&W are the recognised CD-R experts. Call us for best CD-R Advice & Price.

dbx 1066 A WINNER

Here's a real winner of a dynamics processor for you. The dbx 1066 Compressor Limiter Expander/Gate will turn your world on its ear (it says here). Actually they're right. It does. We recommend you have a listen to it. Or at least get some bumph on it from us. It's a joy to use and hear.

Great Dynamic Processing from R&W for just £449 inc. VAT

NEW PANASONIC DAT

When pure audio performance is what you're after we have long considered two DAT recorders to be worthy of serious consideration, the Tascam DA30 MK2 and Panasonic's SV-3700. Now Panasonic have brought out their new SV-3800. And it's a beauty. Thanks to its new D-A and A-D converters. Practical too - it's got a shuttle wheel multiple digital interfaces. Just a few reasons why the SV-3800 is selling so well at R&W right now. And R&W will guarantee it for not one, but TWO years to give you that extra little bit of confidence & assurance.

Get a new Panasonic DAT for £1099 at R&W now!

IT'S 330 ALREADY

So let's get into space with Roland. Two great effects units - the SRV-330 Dimensional Space Reverb and the SDE-330 Dimensional Space Delay. Not just your ordinary stereo effects, neither. These guys deliver truly 3-Dimensional sound environment and spatial effects you will love.

R&W sells Roland Space Effects for less.

AFFORDABLE CONVERSION

The Analogue-to-Digital and Digital-to-Analogue converters in most digital recorders and mixers are quite adequate for the job. But, for reasons of economy, they are not always as good as they could be. Hence there are a few excellent third party converters around. Whilst most of these are well out of range of the average pocket, here are two that are not. The Langevin ADC-20 20-bit A-to-D and DAC-20 20-bit D-to-A. We've a pair of evaluation units available if you really want to be amazed. Ask Colin Bird or Phil Darke to arrange a loan for you.

Try before you buy!

IN YOUR DREAMS

Well, it used to be, but at R&W it's now a reality. We can give you a fully digital Studio Workstation for less than £1499! It's the Roland VS-880 and it offers an amazing 64 tracks of 16-bit/44.1kHz CD-quality direct to disk recording. Plus full digital mixing and automation. Storage is to internal IDE or external SCSI drive, with fast DAT backup. For modest extra cost we can also give you an optional internal digital effects board to make you VS-880 really indispensable.

R&W won't be beaten on Roland VS-880

THE WIZARD OF R&W

From the people who gave you the cutting edge technology of the M5000 Digital Audio Mainframe here's the new tc electronic Wizard M2000. The first really affordable multi-effects processor from the acknowledged world leader in the art of digital processing. The M2000 incorporates many of the M5000's virtues, including its much sought-after C.O.R.E. reverbs - unique to tc electronic - as well as tc's new *Dynamic Morphing*™ function whereby one effect may be seemlessly changed (morphed) into another. Like tc's 2290 and M5000, the M2000 is set to become an Industry Standard. And this time they've priced it so we can all have one!

Wizard M2000 now at £1639 inc VAT at R&W

THEY JUST KEEP ON COMING

Yup, it's time for yet another addition to the unbeatable Folio range from Soundcraft. This time it's the Folio-SX. And it's a corker. 20 inputs (12 mono & 4 stereo) into 4, with direct outputs from channels 1-8 for multitrack recording. Great EQ section ("*Real British EQ*" as Soundcraft put it). This desk must be heard to be believed. The perfect budget console for both live and studio use. Worth serious consideration.

Folio-SX is not more than £599 at R&W

BEST FOSTEX VALUE AT R&W

Take the concept of ADAT one step further. Throw out the tape. Put in a hard disk. Make it modular so multiple machines can be slaved together to build into 16 & 24-track systems. What've you got? Yes, it's the new Fostex D80 with its up-to-40 minutes of simultaneous 8-track recording in CD-quality on removable, IDE caddy-held hard disks. What's more, it's got a removable front panel Remote Control providing access to all functions including cut, copy, paste & move editing. The D80 even interfaces with the excellent Fostex DTM8 (see panel left).

For £1499 inc. VAT, the D80 comes with one 850Mb (18 minute) hard disk to get you going. But if you give us just £70 more than this (£1569) we'll give you another 1.71Gb (40 minute) hard disk worth £295! Limited stocks, so HURRY!

Yamaha 02R Digital Console

NO DEPOSIT FINANCE AVAILABLE Subject to Status

Rarely out of Stock

AMAZING FEATURE LIST

Yamaha's new 02R is an eight buss fully programmable digital console with 40 input channels (24 analogue, 16 digital), 100mm motorised moving faders and no less than 50 internal effects processors. All controlled by its own internal Mac-like computer.

LOW COST

Its price tag of just £6999 inc VAT makes it possible for us to provide you with a fully equipped, digital studio for under £10K. Including digital multitrack & monitoring. Just ask us for a quotation.

R&W have the best stocks of 02R in Europe. Call us now.

Talk to Phil, Rich or Colin on the R&W Sales Desk. They'll arrange for you to evaluate the ground-breaking Yamaha 02R for yourself.

FREE AKAI HARD DISKS AT R&W

The great thing about Hard Disk Recording is that you don't have to trundle through a tape to hit the spot. Just access any track or point in a track instantly.

We recommend Akai's DR4, DR8 & DR16 multitrack machines because they are so reliable and have a similar control surface to a tape recorder. This means no tedious learning curve - you can get on with your work as soon as you've unpacked it and plugged it in.

Also, just like ADATs and Tascam DA88s you can start off with one Akai DR8 8-track and daisy-chain to another one, or even a DR16, to upgrade your system to a 16 or 24 track setup as you can afford it.

When you buy a DR8 or DR16 at R&W to get you started we'll give you a FREE 1GB Hard Drive worth £295.

FREE R&W MEMORY UPGRADES WITH AKAI SAMPLERS

Now, as well as the best price on your new Akai sampler, R&W will give you a FREE Memory Upgrade of up to 16Mb on S3000XL and S3200XL models.

- S2000 £ Best Price Guaranteed.
- S3000XL £1799 inc. VAT including FREE 8Mb R&W Upgrade
- S3200XL £3499 inc. VAT including FREE 16Mb R&W Upgrade

The best Akai Deals in the UK!

FREE SAMPLING SOFTWARE AT R&W

Drive your new Akai sampler from your Mac with Akai's 'MESA' modular editing software, FREE at R&W.

IN YOUR FACE!

We all know Mackie make some great mixers. Now they've made their compact range even better. By revamping their circuitry and making it VLZ - Very Low Impedance. This simply means LESS NOISE and LESS CROSSTALK (No need to shout!). Want to know more? Ask us to send you a copy of "In Your Face", Mackie's brilliant newspaper-style approach to product literature. Once you've read it you'll be convinced that (a) you'll want to own a Mackie compact mixer, and (b) you'll want to buy it from Raper & Wayman (where does it say that?). We're waiting for your call.

Mackies cost less at R&W.

RAPER & WAYMAN
Professional Audio

R&W IN-STORE OR MAIL-ORDER

- Microphones
- Mixers
- Digital & Analogue Multitrack
- DAT Recorders
- Hard Disk Recording
- CD Players & Recorders
- Effects Processors
- Samplers
- Broadcast Equipment
- Monitor & PA Speakers
- Power Amplifiers
- All the leading brands in stock
- 2-Year Minimum Guarantees
- Pre-Delivery Testbench Checks
- Spacious Showrooms
- Relaxed Atmosphere
- Knowledgeable Sales Staff
- Superb Technical Support
- In-House Service/Repair Centre
- No 'Hard Selling'
- Next Day Insured Delivery
- Export Shipping arranged

R&W give you all this AND the best Advice & Price in the business.

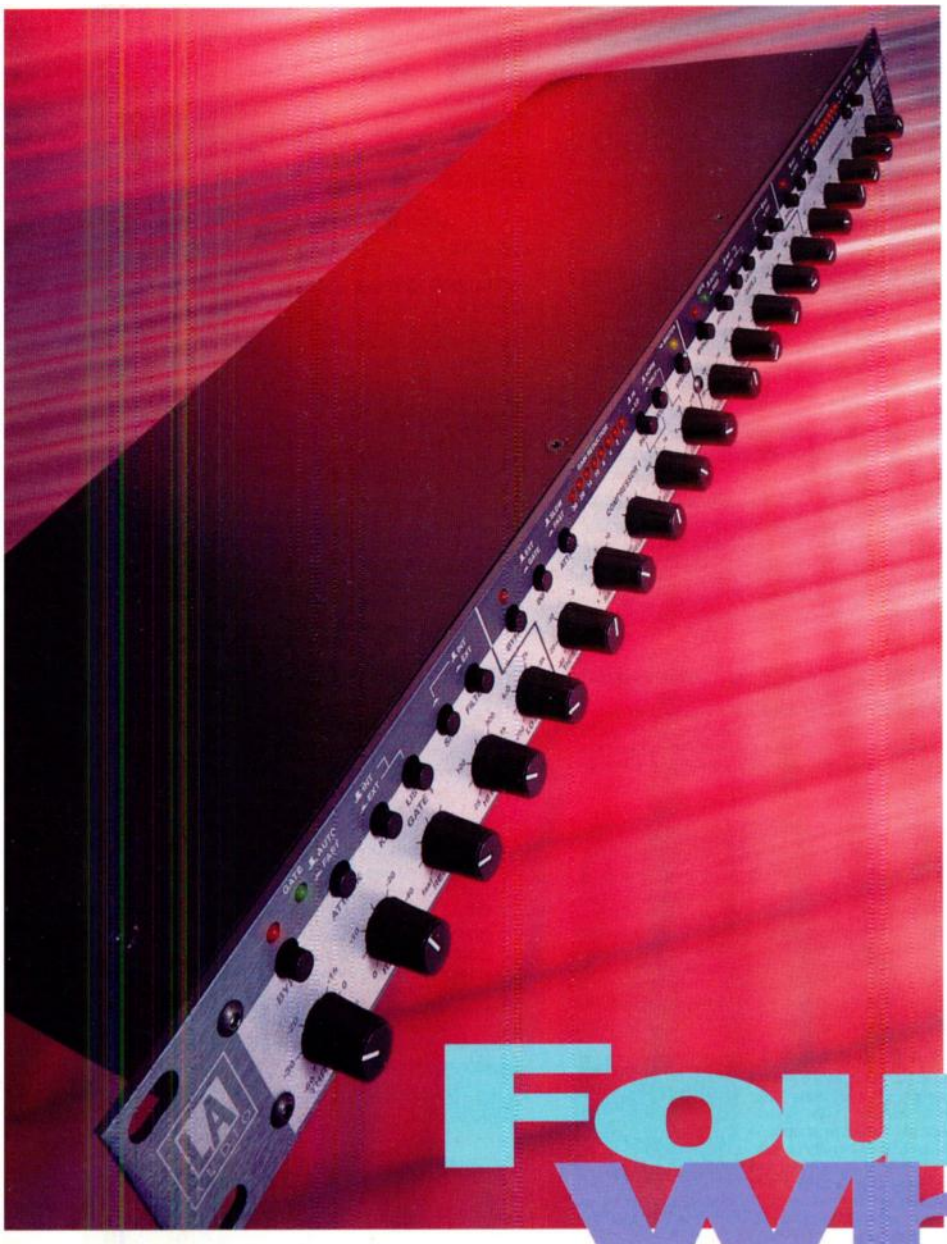
Tel: 0181-800 8288

Fax: 0181-809 1515 EMAIL: 100551.2752@compuserve.com

Unit 3, Crusader Estate, 167 Hermitage Road, Manor House, London N4 1LZ.

MasterCard · Access · VISA · IRANSAX Cheques? YES!

WRH



Four Wheel Drive

Always ready for some off-road action, PAUL WHITE scrambles for his XLR adaptors and test drives LA Audio's latest incarnation of the 4x4.

LA AUDIO 4x4² 4-CHANNEL DUAL FILTER NOISE GATE COMPRESSOR

With so many compressors and gates on the market, companies need an angle to make their products stand out from the crowd. Some go straight for the jugular and set rock bottom prices, while others go to the other extreme, offering fancy colours, high prices, and the promise of vintage performance.

LA Audio seem to prefer the 'added value' route; their original 4x4 processor comprised two compressors and two gates, plus filters which could be assigned to either the gate (for frequency-conscious gating) or to the compressor (for de-essing/de-popping). I remember being impressed by the sound quality of these compressors, as well as the overall flexibility of the system, but LA Audio clearly thought they could go further. In the 4x4², they've delivered added value with a vengeance.

RETHINK REMODEL

Rather than being an upgrade, this is a complete redesign based on the circuitry used in the LA 4C and 4G dedicated compressor and gate units. The cosmetics are new, the internal design is new, and the features on offer have been extended to include separate filters for the gate and compressor, plus electronically balanced inputs and outputs on XLR connectors. Further jack connections are provided, so that the gate filter can be used as a separate equaliser if required. There gate also offers a Key Input, for external triggering. And for good measure, there's a basic but useful single-ended noise reduction mode thrown in.

The compressor has the benefit of an external side-chain In/Out connector, allowing additional EQ or other processing to be inserted in the compressor side-chain. Taken as individual compressors and gates, these features would be welcome but unremarkable — after all, we've seen most of them before in LA Audio's own 4C and 4G models. It's only when you consider that you get *two* compressors and *two* gates, complete with all the above facilities, in a sensibly-priced 1U package, that the 4x4² begins to look rather special.

Both the gate and compressor retain LA Audio's proprietary FET technology, which is designed to emulate the warm overload characteristics of tube designs. The compressor also has a soft-knee characteristic coupled with a ratio control — a combination I've always found to work well.

The gates and compressors may be used independently or in combination with the gate before the compressor in the signal path. Linking is achieved via the Ext/Gate button in the compressor section, and when linked, the gate output and compressor input become unavailable — a good system if you want to leave the unit wired to a patchbay.

GREAT GATE?

Looking at the gate section first, this has almost as many features as you'd find on a stand-alone dual gate, the main difference being that the envelope attack is switchable between Fast and Auto rather than being fully variable. Fast mode has a very fast attack time, suitable for use with percussive sounds, while Auto continuously adapts the gate attack time to the transient characteristics of the input signal. Release, Range and Threshold are all fully variable, with Range setting the amount of attenuation when the gate is closed, and may be varied continually between 0dB to 60dB.

Triggering is switchable from Internal (where the gate triggers from its own input signal) to External, and a green status LED indicates when the gate is open. Bypass switches with red status LEDs are provided separately for the compressors and gates, while a Key Listen switch allows the gate keying signal (post-filtering, where applicable) to be monitored.

Filtering follows the familiar, variable frequency high-pass and low-pass formula originally introduced by Drawmer, but an Int/Ext button enables the 4x4²'s filter to be disengaged from the gate, so that it can be accessed via the rear panel sockets. The filter section comprises two independent, variable-frequency shelving filters, each with a 12dB per octave response. The Lo filter has a high-pass response, while the Hi filter has a low-pass response. Steep shelving filters of this kind can usefully extend the flexibility of more conventional equalisers, as well as being ideally suited to their more usual role of helping reduce false gate triggering. The idea of making them accessible for external use is thus very welcome.

A further filter option is the SNR mode, which uses the filter to implement a simple, single-ended noise reduction process. This works rather differently to most stand-alone SNR units, in that the filters are used to determine how much of the signal will be allowed to pass when the signal falls below the gate threshold setting. For example, you might set the Lo filter to 150Hz and the Hi filter to 3kHz, so that when the signal level falls below the threshold, the audio bandwidth closes down to reduce hum below 150Hz and hiss above 3kHz. Though this arrangement isn't quite as sophisticated as a sliding filter SNR, it is surprisingly effective, and reasonably transparent — provided you're careful with the settings.

EXPRESSIVE COMPRESSION

Like the gate, the 4x4²'s compressor compromises by having a switchable attack time, though this time the choice is between Fast and Slow rather than Fast and Auto. Personally, I feel Auto would have been a better choice, as the Auto setting on my own Drawmer 441 adapts beautifully to anything you throw at it. The main compressor controls comprise the usual Threshold, Ratio, Release and Gain (output make-up gain) with switching that allows the compressor to be used independently or after the gate. An 8-section LED gain reduction meter monitors how much level is being trimmed off by the compressor at all times, while a Stereo button in the centre of the front panel (accompanied by an amber LED) allows the two channels to operate as a ganged stereo pair.

The 4x4² sees the compressor with its own filter; in this case a switchable high- or low-pass filter continuously variable from 100Hz to 10kHz. This is normally employed in the side-chain, where it can be used to make the compressor react in a selective way to pull down the gain of high frequency sibilant sounds (in high-pass mode), or reduce low frequency artefacts such as popping (in low-pass mode).

Another use for the filter becomes evident when you select Half mode, which configures the compressor as a half-band compressor. This is a very creative mode — it lets you split the frequency spectrum using the filter, then (depending on whether you've selected high- or low-pass filtering), you can compress just the upper or lower end of the spectrum, leaving other frequencies unchanged. The Gain control adjusts the level of the compressed portion of the spectrum against the uncompressed portion, so you can do lots of neat things like compressing the top end, then bringing it up in level to create an enhancer-type effect. Similarly, you can compress just the bass end of a sound — or even a full mix — then crank it up to deliver a very punchy sound, without affecting the brighter elements in the mix. The split point is set by the Frequency control, allowing you to be very precise about where the effect comes into play.

> "The designers really have gone flat out to provide you with just about every possible combination of options based on gates, compressors and filters..."

OFF-ROAD ACTION

Checked individually, the 4x4²'s gates and compressors behave very much like those fitted to the 4G and 4C — hardly surprising, given that these are the very circuit designs upon which the new 4x4² is based. The compressor has a deliberately warm character. When you really pile on the compression, the gain pumping becomes clearly audible but in a constructive, 'vintage' sounding manner rather than being unpleasant. Of course, you can provoke the pumping to excess ▶

pros & cons

LA AUDIO 4X4² £465

pros
- Powerful range of creative features.
- Warm, vintage sound.
- XLR balanced ins and outs.

cons
- Compressor has only Fast and Slow attack settings — no Auto option.

summary
A supremely versatile compressor/gate combination that could satisfy all the gating and compression needs of the small studio.

SOUND ON SOUND

LA Audio 4x4²

▶ if you choose a fast compressor attack, a fast release and lots of gain reduction — but used sensibly, the compressor is smooth and flattering.

In split compression mode, I had great fun trying to create very beefy mixes by compressing just the bottom end. At the opposite extreme, you can create a very exciter-like effect simply by compressing everything above 4kHz or so — then bringing up its level while using the Bypass button to check that you haven't overcooked things. Similarly, the filter is useful for gentle de-essing, but lacks the focus of a dedicated de-esser unit. Such devices usually include a band-pass filter option, allowing you to tune into the sibilance more precisely.

The gate works well, and the Auto setting means that you don't miss a separate Attack control — except when you wish to use a gate to impose a deliberately slow attack on a sound. The side-chain filters are suitably sharp, and the overall balance of features is impressive. I also rather like the 'quick and dirty' SNR option, which can really help quieten noisy synths and guitars. It works just like a gate, except when the gate closes: instead of nothing, you're left with a filtered version of the original, and how filtered this is depends entirely on your filter settings.

PERFORMANCE

At almost £465, the LA Audio 4x4² doesn't quite fall into the lower end of the budget equipment category, but when you take into account that you're getting two comprehensive gates and two very flexible compressors for your money, there's no disputing its value. The designers really have gone flat out to provide you with just about every possible combination of options gates, compressors and filters, and for this reason the 4x4² is a very powerful creative tool as well as a useful all-rounder.

Criticisms are few, and perhaps the only shortcoming worthy of mention is the lack of an Auto compressor attack setting. The two switchable options perform well enough for most applications, but Auto would have been even better. My favourite creative mode is the split-band compressor, but it's also good to be able to use the gate filter externally, without having to lose the use of the entire gate. Full marks (almost) for lateral thinking — a well thought-out British design with impeccable styling. SOS

ROUND THE BACK

The 4x4²'s main audio connections are supplied on electronically balanced XLRs, and the circuitry is compatible with either -10dBV or +4dBu operating levels. Each channel has separate input and output sockets for the gate and compressor.

The gate is fitted with an external Key Input, as well as a TSR jack which provides access to the filter input and output. The compressor has side-chain access on a stereo jack (wired Ring-Send, Tip-Return). Power is thankfully provided via a standard IEC mains socket — no wall-warts here!

info

£ £464.13 inc VAT.
A SCV London, 6-24 Southgate Road, London N1 3JJ.
T 0171 923 1892.
F 0171 241 3644.

SOUND CONTROL MAIL ORDER

Address...
• The Elgin Works
• Dunfermline
• Fife. KY12 7SD

Freephone...
0800-52-52-60

Facsimile...
01383-725733

Email...
jmt@soundcontrol.co.uk

ROLAND VS880 DIGITAL RECORDER...
• 8 X 8 VIRTUAL TRACKS
• VARIABLE SAMPLE RATES
• INTERNAL IDE DRIVE OPTION
• EXTERNAL SCSI AS STANDARD
• 14 CHANNEL DIGITAL MIXER
• AUTOMATED MIX/PAN BY MIDI
• OPTIONAL MEGA EFFECS BOARD
• INTUITIVE TAPE-TYPE TRANSPORT
• ANALOGUE IN, DIGITAL IN/OUT
• FREE U.K. DELIVERY
HARD DISK EXTRA £1499.00 ASK FOR DETAILS
OVER 35 MINS TOTAL RECORDING (USING ALL 8 TRACKS) FROM A TYPICAL 540MEG HARD DRIVE
CALL US NOW FOR FURTHER DETAILS ON THE VS880 AND ITS VARIOUS OPTIONS FREE ON 0800-52-52-60...

ZIP DRIVE...
C/W FREE 100 MEG DISK...
THE MOST EFFECTIVE MEANS OF SCSI BACKUP EVER... THE PERFECT PARTNER FOR A VS880 OR ANY SCSI SAMPLER - CHECK THIS OUT...
£199.00
YOU CAN EVEN RECORD DIRECTLY ONTO ONE OF THESE FROM THE ROLAND VS880 - ALL 8 TRACKS...

FOSTEX DMT-8...
COMPLETE WITH INTERNAL 540 MEG IDE HARD DRIVE FOR 8 TRACK DIGITAL RECORDING
£NEW PRICE
DIGITAL 8 TRACK WITH NO TAPES!! TOO MANY THINGS TO SAY ABOUT THIS MEGA 8 TRACK! CALL OUR MAIL ORDER LINE NOW FOR FURTHER INFORMATION OR TO RESERVE YOURS TODAY!

DA20...
PERFECT FOR DIGITAL BACKUP/MASTERING...

AUDIOMEDIA-2...
WITH SOUNDESIGNER-2
£749.00
CHECK OUT THIS PRICE ON THE FANTASTIC AUDIOMEDIA-2 PACKAGE FOR ANY NUBUS EQUIPPED MACINTOSH. PLEASE ASK FOR OTHER DIGIDESIGN SOLUTIONS THAT ARE AVAILABLE FOR MAC/PC

TURTLE BEACH
YAMAHA DB50XG IN STOCK
THIS SUPERB RANGE OF SOUND CARDS OFFER THE VERY BEST VALUE IN DIRECT TO DISK RECORDING FOR THE P.C AND COMBINED WITH THE YAMAHA DB50XG THEY ARE AN UNBEATABLE COMBINATION...

SOUND CONTROL MAIL ORDER

FREEPHONE - 0800-52-52-60

PORTA-03 MKII

- FREE MICROPHONE
- FREE CABLE
- FREE U.K DELIVERY

£199.00

PORTA-07...

- FREE MICROPHONE
- FREE CABLE
- FREE U.K DELIVERY

£339.00

V3Z5...

AT LAST - IT'S BACK...

£69.00
£60.00-*

*- ONLY £60 WHEN ORDERED ALONG WITH ANY FOUR TRACK FROM SOUND CONTROL...

TEAC W416...

DOUBLE DECK LUXURY!

£99.00
£90.00-*

*- ONLY £90 WHEN ORDERED ALONG WITH ANY FOUR TRACK FROM SOUND CONTROL...

MT50/MT4X...

- FREE MICROPHONE WITH SELECTED YAMAHA FOUR TRACKS...
- MT50 - £299 • MT4X - £429

£299.00
£429.00

DCC170/DCC730...

- FREE TAPES • FREE DELIVERY

AT LAST - DIGITAL MASTERING WITHIN EVERYONE'S PRICE RANGE!

ASK ABOUT OUR EXCITING DEALS ON PHILLIPS DCC MINI HIFI SYSTEMS FROM ONLY £399.00

£249.00

MICROPHONES...

SHURE SM57 ---- £99.00
SHURE SM58 ---- £99.00
SHURE BETA-58 £149.00
• AKG • AUDIO-TECHNICA ETC...
PRICES FROM ONLY £29.95!!

MONITOR-1...

WE HAVE LARGE STOCKS OF MONITORS INCLUDING THE FABULOUS ALESIS MONITOR ONES CALL FREE TO ORDER RIGHT NOW!

IN STOCK NOW FOR FREE U.K DELIVERY

S-CRAFT ABS-2...

FOR FREE DELIVERY AND THE BEST POSSIBLE PRICE, CALL US NOW WITH YOUR CREDIT CARD HANDY!!!

IN STOCK NOW FOR FREE U.K DELIVERY

NEW PRICE ALLEN & HEATH GS1...

FREE METERBRIDGE

IF YOU ARE IN THE MARKET FOR A NEW MIXER, THEN LOOK NO FURTHER... THE ALLEN AND HEATH GS1 OFFERS UNPARALLED QUALITY AND WITH OUR NEW MEGA PRICE AND FREE UK DELIVERY, IT HAS REDEFINED THE TERM 'VALUE FOR MONEY'... JUST GET ONE...

£699.00
SAVE £100'S

ROLAND JV1080 ...

FREE 2 YEAR WARRANTY ONLY FROM SOUND CONTROL MAIL ORDER!

HURRY, HURRY, HURRY... THESE DON'T HANG AROUND!

IN STOCK NOW FOR FREE U.K DELIVERY

ROLAND PC200 MK-2...

WITH ALL THE MODULES AND SOUNDCARDS THAT WE STOCK, YOU WILL NO DOUBT NEED A QUALITY MASTER CONTROLLER KEYBOARD - SO HERE IT IS... THE PC200 MK-2 IS THE BEST ON THE MARKET.

IN STOCK NOW FOR FREE U.K DELIVERY

AKAI STUFF...

ALL THE SAMPLERS...
ALL THE ACCESSORIES...
AND THE AMAZING NEW MIDI TONE MODULES - INCLUDING THE VINTAGE SYNTH MODULE...

ZOOM 1202...

- 100'S OF EFFEX & FREE U.K DELIVERY

NEW LOW PRICE

REV100/RV70...

TONS OF PATCHES, PROGRAMABILITY, MIDI & LOTS OFF RRP - DON'T MISS OUT... THE BOSS RV70 IS THE BIZ. AND SAVES YOU £200!!

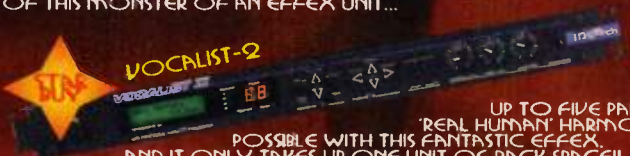
£199.00

DIGITECH...

JUST CHECK OUT THE REVIEWS ON THE STUDIO QUAD IT IS THE MOST FLEXIBLE QUALITY DIGITAL EFFEX UNIT TO DATE! - CALL US RIGHT NOW TO ORDER FREE! IT WILL BE A LONG TIME BEFORE YOU GROW OUT OF THIS MONSTER OF AN EFFEX UNIT...

£MEGA

VOCALIST-2



UP TO FIVE PART 'REAL HUMAN' HARMONIES ARE POSSIBLE WITH THIS FANTASTIC EFFEX, AND IT ONLY TAKES UP ONE UNIT OF RACK SPACE!! WHETHER YOU PLAY LIVE, OR RECORD FROM HOME, AND NEED GOOD HARMONIES WITHOUT THE FUSS- THEN THIS IS THE EFFEX FOR YOU.

£399.00

TSR-12 EFFEX

STONKING GOOD 'VALUE FOR MONEY' WITH THE QUALITY OF EFFEX ONLY FOUND ON MORE EXPENSIVE UNITS, THE TSR12 ALWAYS DELIVERS THE RESULTS. PROGRAMABILITY AND MIDI CONTROL ARE STANDARD, AS ARE A TWO IN, TWO OUT CONFIGURATION. THE TSR12 EVEN HAS ON-BOARD MIDI FILTERING AND MIDI MERGING - THIS IS A 'MUST BUY' EFFEX UNIT...

£299.00

WRH

fixing the mix

PART 1: SALVAGE TECHNIQUES

Conventional wisdom states that you can't 'fix it in the mix', but that doesn't mean you can't try! PAUL WHITE discusses a few practical salvage techniques in the first part of this short series.

In an ideal world, a producer decides what is to be recorded while the engineer is left to set levels, sort out routings, programme effects and so forth. In the typical project studio, however, the same person usually ends up having to do both jobs. If everything has been recorded perfectly, and if the musical arrangement is appropriate to the song, then it should be possible to set up an initial mix fairly quickly, using little or no EQ. But what do you do if the session didn't go so well and some of the recorded sounds are less than ideal? Worse still, you may be called upon to take over work on a poorly recorded job that was started at someone else's studio. That's when your skills at salvage work are really put to the test.

Over the past couple of months I've discussed ways of making good recordings and achieving good-sounding mixes [see 'Match Before You Mix' *SOS* May/June 1996], hopefully by avoiding most of the problems that I'm going to touch upon during the course of this article. I've also gone on record as saying that there's only a limited amount you can do to fix a bad recording, but provided not everything is disastrously recorded, it's usually possible to make some improvement on any mix. My approach here will be to look at specific problems and then propose possible solutions or partial solutions using both basic studio equipment and, where appropriate, more advanced hardware.

The first option is invariably the most satisfactory, but for whatever reason, musicians often seem very reluctant to take it — if a track sounds wrong, either musically or technically, then simply re-record it. While this option may not be open to professional producers working with busy international artistes, it's usually possible to get Fred from down the road to come back and redo his out-of-tune bass part.

What follows is a catalogue of increasingly desperate strategies that may be applied if re-recording is not feasible. Recording problems break down into many types, some clearly defined, others less so. The most obvious technical problems relate to noise, distortion, EQ and spill, while the more artistic considerations include the wrong choice of sounds, poor timing, out-of-tune notes or just plain incorrect notes. As you might expect, the more serious the problem, the more difficult it is to do address it, but by using samplers and hard disk recorders, even out-of-time and out-of-tune playing can be improved if you have the patience.

GATING & MUTING

Probably the most common technical problem is 'noise', which could include tape hiss, instrument amplifier hiss, amplifier hum, and general digital grot from budget synths and effects units. You can attack noise on several different levels, and if the contamination is serious, you may need to use two or more of the following processes in combination. ▶

Drawmer DS201 Dual Gate.

TRUE MULTITRACK DIGITAL RECORDING

FOSTEX

It records 8 tracks simultaneously, at CD-quality, it does this without compression, ...and there's not a tape in sight!

Finally, someone has developed an expandable IDE-based digital removable hard disk system which offers up to 40 minutes* of true *multitrack* recording, non-destructive 'cut, copy, move & paste' editing, instant locate & search, five 'virtual reels', digital and analogue inputs/outputs along with a full function auto locating remote control. And all in a package which is as easy to use as your tape machine and costs no more than £1,499 inc VAT. Naturally, that someone is Fostex.

SLAVE D-80s for 16 & 24 TRACK RECORDING
The D-80 can be slave or master to other D-80's / DMT-8's and the outside world via its standard in-built MTC, and is sample accurate with Word Clock (optical S/P-DIF).

* Using optional 1.7IGB Hard Disk. 850Mb supplied as standard. All trademarks acknowledged. E&OE.

D-80 Digital Multitrack

SCV LONDON

Exclusively distributed by SCV London

For further information contact SCV London. 6-24 Southgate Road London N1 3JJ. Tel: 0171 923 1892. Fax: 0171 241 3644

WRH

fixing the *mix*

A *noise gate* is a very effective means of removing unwanted noise during the pauses between sounds, and you'd be surprised how much you can clean up a mix by gating any channels that contain parts that do not play all the way through the mix. For example, if the lead guitar solo only pops up in the middle of the song, you don't want any background noise on that track contributing to the mix the rest of the time, so bang a gate on it. It's usually worthwhile gating vocals also, because there are always pauses between words or phrases where nothing useful is happening. However, don't feel you have to gate out traces of breath noise, otherwise the vocal track may well end up sounding unnaturally sterile.

> "I don't know of any technique that is entirely successful for rescuing a distorted lead vocal..."

With any slowly decaying sounds, make sure you set an appropriately long gate release time. Even if some gated sounds appear to be slightly unnatural, there's a good chance they'll sound fine when you add reverb, especially when the rest of the mix is playing.

Closely related to gating is MIDI *muting*, often found on upmarket mixers. Although it isn't usually practical to use this to clean up tiny pauses between individual words or phrases, it is very useful nonetheless for temporarily shutting down tracks when they're not required in the mix. Obvious uses are to mute the guitar solo track until it's needed and to mute the vocal tracks during instrumental passages.

NOISE REDUCTION

A more subtle alternative to gating and muting is the *single-ended noise reduction* (SNR) unit. Gates and mutes can only remove noise when they are closed, and no signal is allowed to pass — they can't do anything about noise (such as hiss) that's audible over the top of the wanted signal. Single-ended noise reduction units, however, employ variable-frequency low-pass filters that open and close according to the level and frequency content of the music being treated. Though by no means perfect, a decent SNR can significantly reduce audible noise, both during pauses and when material is playing, without inflicting too much damage on the wanted signal.

As with any processor, if you ask too much of it, side-effects will show up. In the case of SNRs, typical side-effects can include audible dulling of the signal (if you try setting the threshold too high) or the over-processing of reverb tails. For this reason, whenever possible it is best to route signals through an SNR prior to adding reverb, and if you have several channels that you think would benefit from the treatment, route them all to a stereo subgroup and patch the SNR unit into the group insert points.

EQUALISATION

An often forgotten ally in the war against noise is the *equaliser*, but the EQ in a typical mixing desk may not be flexible enough to do the job properly. A good graphic equaliser is more versatile, but for the ultimate in control, you need a good parametric EQ.

Changing the EQ of a signal is obviously going to have some effect on the overall sound of that signal, but quite often you'll find your mix includes sounds that occupy only a limited part of the audio spectrum. For example, an overdriven electric guitar contains no really deep bass and the top end rolls off very quickly above 4kHz or so, because of the limited response of a guitar amp's loudspeaker. This being the case, you can apply a sharp top cut above 4kHz and a low cut below 100Hz without changing the guitar sound too significantly. You'll need to experiment to discover the exact frequencies, but you'll find this technique very useful, not only with guitars (and bass guitars) but also with warm synth pads from cheap or vintage instruments. Careful use of EQ may also help to reduce the effect of finger noise on stringed instruments.

If you don't have a parametric equaliser, you

KEEP THE NOISE DOWN

- All noise reduction techniques work better when applied to individual tracks rather than to entire mixes, though digital noise reduction systems and SNR units can be used on complete mixes providing the amount of processing is carefully controlled.
- To clean up a reverb, try putting a gate or SNR on the reverb input. Most allegedly noisy reverb units are actually victims of noise fed from the effects buss. Any attempt to treat the reverb output is likely to result in the reverb decay being modified in an unnatural manner.
- Even if you think your recording is astoundingly quiet, you will probably still hear an improvement if you gate or otherwise mute mixer channels when the track isn't playing anything.
- Always switch your noise treatment in and out to hear what difference it is making to the wanted part of the sound. Listen in particular for noise 'breathing' (the effect of the noise floor level changing as the noise gate or mute opens). In the case of EQ and SNRs, listen for high frequency timbral changes, especially at the ends of decaying sounds.

Sound Division
PRO-AUDIO & LIGHTING SYSTEMS

IN ASSOCIATION WITH

UNIVERSE

DANCE MUSIC TECHNOLOGY DJ FOR TOTAL CREATIVITY

PRESENTS THE FIRST SHOW OF ITS KIND...

DANCE TECH '96

an exclusive hands-on exhibition dedicated to DJs, Remixers & Producers

Enter the creative world of dance music production

See, hear and demo the latest state-of-the-art dance music production tools from the worlds leading equipment manufacturers:–

ROLAND	KORG	TECHNICS	VESTAX	JBL
AKAI	NOVATION	INTIMIDATION	PIONEER	DBX
YAMAHA	KURZWEIL	GEMINI	DENON	AHB
EMU	ALESIS	KAM	STANTON	FOSTEX
C-LAB	STEINBERG	SOUNDCRAFT	ECLER	SCV

SPECIAL GUEST APPEARANCES BY

MARSHALL JEFFERSON & BILLY NASTY

AT

COMPLEX

1-5 PARKFIELD ST, (off Liverpool Rd) ISLINGTON, LONDON N1
nearest tube station: ANGEL (Northern Line)

SPECIAL GUEST APPEARANCES BY

COLIN DALE & DJ RAP & GAYLE SAN

SPONSORED BY

TRIBAL GATHERING '96 | Roland | DJ Magazine

SUNDAY 7th JULY 1996 1.00pm to 6.00pm

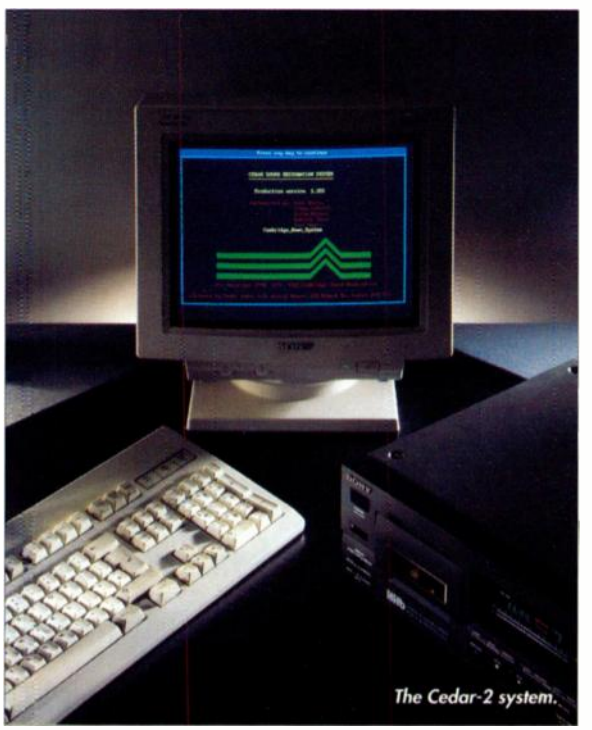
ADMISSION PRICE £3.50 ON DOOR (£3.00 IN ADVANCE) | LICENSED BAR

AVOID THE QUEUE AND THE WAITING – BUY YOUR TICKETS IN ADVANCE. TEL: 0171 609 3939

FREE ENTRY INTO DRAW FOR SIX COMPLEX 'VIP' TICKETS FOR A 'VOYAGER' OR 'KINGSIZE' CLUB NIGHT OF YOUR CHOICE

fixing the *mix*

can use the side-chain filters in a Drawmer DS201 gate as equalisers, simply by leaving the gate in Key Listen mode. This particular gate has very steep shelving filters which can be used to 'bracket' the wanted sound. The Low filter will keep out bass rumble and hum while the High filter will reduce hiss and digital grot (my technical term for non-random noise and/or whining produced by budget digital synths and sound cards!).


The Cedar-2 system.

It is vitally important to keep in mind that noise is cumulative, and though individual tracks may appear reasonably clean when listened to in isolation, when you bring up all the mixer faders, the overall background noise can still be quite significant, especially if you have 16 or more tracks (including virtual MIDI tracks) on the go. Anything you can do to reduce the noise contribution will greatly improve the clarity of your finished mix.

OFF-LINE DE-NOISING

Some of the more serious hard disk recording systems offer digital de-noising, which tends to provide a far more effective solution than the simple analogue processing discussed so far. Roland build a stand-alone digital SNR unit which is well worth investigating.

De-noising systems such as Digidesign's *DINR* software (or the more upmarket CEDAR and Sonic Solutions' NoNoise packages) may be used to reduce the level of background noise by several dBs without introducing audible side-effects. The simpler systems typically allow you to reduce the level of noise by as much as 5 or 6dB without any side-effects showing, while the more sophisticated systems can probably double that figure.

Many of these systems work by first splitting the signal into a very large number of frequency bands. A software algorithm is then used to decide how much noise is present in each band and a separate threshold is set for each band (normally an automatic procedure handled by the software) below which any residual signal is assumed to be noise. It's almost like having separate intelligent noise gates working on several hundred very narrow frequency bands. If you push such systems too far, however, whatever noise is remaining may be heard occasionally peeping through the various filters. This produces a sound almost like distant wind chimes. Again, the more sophisticated systems are less likely to suffer from this problem, but if you hear it, at least you'll now know what it is.

These digital solutions can be applied to individual tracks (or sections of tracks), by copying them from tape onto hard disk along with their timecode reference. Using timecode is a good idea, otherwise you may find it difficult to copy the processed audio back onto the multitrack in the right place after you've cleaned it. If you must work without timecode, then deal with short sections and 'fly' each one in by hand as though you were playing back from a sampler. Ideally you should put the processed audio onto a spare tape track, but if you don't have any, you may have to risk recording it back over the original.

NON-RANDOM NOISE

Mains hum or buzz from fluorescent striplights can be a serious problem, because as well as the fundamental frequency of 50Hz (or 60Hz depending on which country you live in), there's often a whole string of related harmonics present that run right across the audio spectrum. High-pass filtering may well take be used to remove the hum component altogether, but you'll still be left with an irritating buzz.

> "You'd be surprised how much you can clean up a mix by gating parts that do not play all the way through the mix."

Roland's single-ended noise reduction devices are particularly good at dealing with this problem,

Sound Division

EUROPE'S NO.1 DANCE TECHNOLOGY SPECIALIST

SYNTHS · SAMPLERS · WORKSTATIONS · SEQUENCERS · HARD DISK RECORDING · DESK TOP MUSIC PRODUCTION

OPEN SIX DAYS A WEEK
MON–FRI 9.30AM–6.00PM
SATURDAY 10.00AM–6.00PM
SUNDAY – CLOSED

WORLDWIDE ENQUIRIES WELCOME
FAX US ON +44 171 609 1310

MAIL ORDER SPECIALISTS
24 HOUR EXPRESS DELIVERY SERVICE

SYSTEMS UPDATE

INTELLIGENT DRUM & BASS · PROGRESSIVE HOUSE · SOULFUL GARAGE · NEW ENERGY TECHNO
ULTIMATE STORE FOR DANCE REMIX & SOUND PRODUCTION

With such choice of equipment for you to realise your ideas before somebody else. Remix existing tracks & sounds with creative sampling. We can assemble Project and Home Studios which identify your needs and suit your hard earned budget. Call Paul or come and evaluate this cool gear in our dedicated Studio Suite.

0% FINANCE – BUY NOW PAY LATER – CALL FOR DETAILS

AKAI REMIX 16 DONT

Roland HOT NEW PRODUCT GROOVE BOX MC-303 DELAY!

E-MU Orbit ORBIT + LAUNCH PAD THE DANCE PLANET THE

Roland HOT NEW PRODUCT DJ-70 MKII ORDER

YAMAHA HOT NEW PRODUCT CS1x TODAY!

novation DRUM STATION + BASS STATION BEST

Roland XP-80 MS1

OUT NOW! Falcon MKX + Cubase Audio V2.05 £POA

waldorf PULSE IN STOCK NOW! IN

Roland VS-880 VS8F1 1Gb Jaz Drives in stock!

AKAI S2000 & S3000XL DANCE!

AKAI SG01v PLEASE

YAMAHA SU-10 PHONE

KORG Prophecy FOR

WE CUT IT EVERY TIME

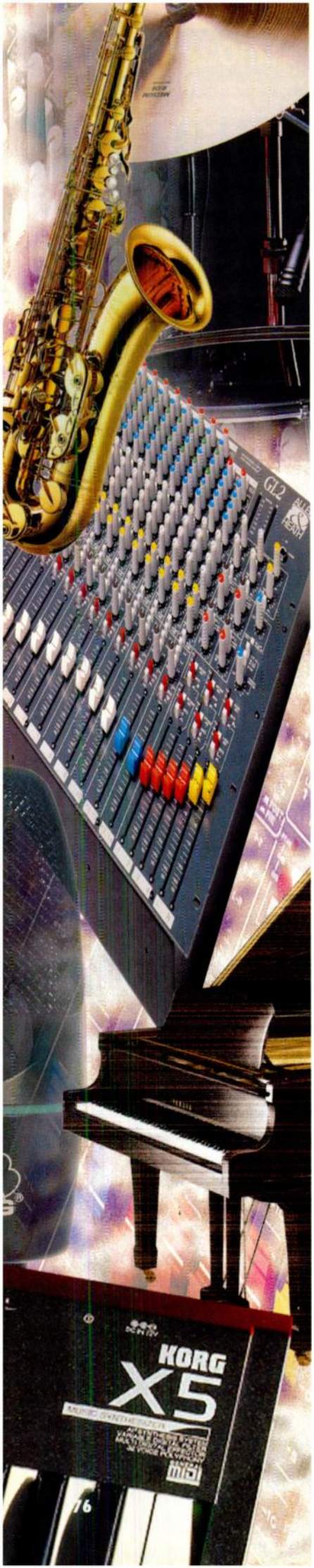
EFFICIENT MAIL ORDER!
INTEREST FREE FINANCE!
UNBIASED PRODUCT ADVICE!
QUALITY CUSTOMER SERVICE!
RELIABLE AFTER SALES SUPPORT!
HASSLE FREE DEMOS!
NO APPOINTMENT NECESSARY

E-MU ESI32 ADVICE

Roland JV1080 AND

TASCAM DA20 PRICE!

0171 700 4242 0171 700 4442
FAX US ON 0171 609 1310
ADELAIDE HOUSE, 383-385 LIVERPOOL RD, ISLINGTON, LONDON N1 1NP
E-Mail: 100610.2341@compuserve.com



fixing the *mix*

because they employ a whole series of digital filters which create narrow notches in the frequency spectrum corresponding to both the odd and even harmonics of the fundamental hum frequency. A similar technique is employed by Digidesign's *DINR* software, when used in hum removal mode, and a clever search algorithm enables the filters to lock onto the hum automatically. However, attempting to attenuate the hum by too much can cause audible side-effects — the notch filters start to work on the wanted audio, creating a slight 'phasey' effect.

A lower tech approach is to use a multi-band parametric equaliser with the lowest band tuned to the fundamental hum frequency (eg. 50Hz) and the following filters tuned to double (100Hz), three times (150Hz), and four times (200Hz) that unwanted frequency. The filters should be set for the highest Q (ie. a very narrow band) and the cut function applied until the hum problem is reduced.

This method will only be partially successful, because the multi-band parametric won't have enough filter bands to tackle all the hum harmonics, but you should still be able to make a noticeable improvement. In most situations, the fundamental plus the first few harmonics will be the loudest elements, with the higher harmonics being much quieter. Each filter will have to be tuned in by ear and it may be useful to bypass all the filters apart from the one you're tuning, so that you can hear exactly what effect each filter is giving you. Once you've optimised the individual filter settings, you can switch all the other filters back on.

As mentioned earlier, the Low filter on a Drawmer DS201 gate can also be useful in removing the low frequency components of hum. What's more, the hum may only be clearly audible during pauses in the signal, so gating could be applied here in the same way as to tackle broad-band hiss.

DISTORTION

Distortion is a particularly difficult problem to deal with and I don't know of any technique that is entirely successful for rescuing a distorted lead vocal or overdriven acoustic instrument sound. In theory, there are elaborate digital processes that could be used to reconstruct distorted waveforms, but in the smaller studio the most useful tool is probably the equaliser.

Before you reach for the equaliser, there may be an even better way out. If the distortion occurs only in one or two places, then my first thought would be to look for identical passages (or even individual notes) elsewhere in the music. If these exist, you can sample them and then drop them in over the top of the original sections. As always, work on a spare track using a copy of the original part if at all possible, because it's very easy to make something worse if the drop-in doesn't go your way. If you have access to a hard disk system, this is where you'll come to appreciate the joys of cut-and-paste editing.

To tackle distortion successfully, you need to understand a little about what it is. Distortion is caused when a circuit is driven into clipping or when an analogue tape is driven into saturation; the usual outcome is that a whole series of harmonics are generated, some of which can sound very unpleasant. Because the harmonics are higher in frequency than the basic pitch of the sound being distorted, it is sometimes possible to reduce their effect by applying high-cut filtering, but in most instances this will also affect the wanted sound. Even so, a slightly dull acoustic guitar might sound better than a distorted one.

Just occasionally, you'll find you can hide undesirable distortion by applying even more distortion to the whole track, but this is more likely to work on an artistic level when applied to guitars and synths than it is to, say, vocals or piano. Having said that, distorted drums and even vocals can be useful in certain styles of dance music, though you're unlikely to get away with it if you're mixing a ballad.

FILTERING OUT DISTORTION

I've used the High filters of a Drawmer DS201 gate on more than one occasion to try to 'skim off' some of the top end from a distorted signal. Of course any variable-frequency, low-pass shelving filter with a 12dB per octave slope (or greater) will also do the job, it's just that most studios have a DS201 in their rack somewhere.

To create a sharper filter, you can patch the right channel of the DS201 (or other filter) into the second channel and set both Frequency controls to the same value. In theory, this will double the filter roll-off rate (giving 24dB/octave) providing greater attenuation of frequencies immediately above the cutoff point. Any parametric equaliser which includes a shelving low-pass filter will also work nicely.

Tape tracks containing instruments such as electric guitars or bass guitars may also be played back through guitar combos and remiked — the speakers will act as filters while the amp EQ also gives you the chance to polish up the basic tone if need be. The same technique can be used with distorted synth sounds, but please realise that this is a last resort and distorted parts should always be re-recorded if at all possible.

REMEMBER. . .

Whatever you do, try to get away from the old idea that you can hide a serious error by recording something over the top to distract the listener's attention. If it is a drumstick click , you might just be able to overdub a vibraslap or a tambourine, but it has to be artistically appropriate — and even then, it will only work if the sins being masked are very minor. Back in the hippy '70s, we used to joke that if we had a lousy mix, we could always flange the whole song!

Next month, I'll be looking at the evils of vocal popping, out-of-time playing, tuning problems and musically inappropriate sounds. SOS

YOU DON'T NEED BBE

Until you hear it!

Then your point of reference is forever changed.

"There is an added fullness and clarity. Stereo program becomes more three dimensional, more spacious. Dense textures become more pleasurable, with a more palpable space around each discrete instrument. This is powerful stuff. Maybe its voodoo?"
Recording Magazine

"As close as we've seen to a magic black box, the BBE 462 is probably the most cost-effective improvement you can add to your rig."
Guitar Player Magazine

"Listening on a variety of loudspeakers – JBL, KRK, Meyer, Tannoy, Yamaha and a few lesser-known names – I discovered that the BBE Process provided a nice punch to older recordings without being brittle or shrill. The LF contour emphasized the bottom end, without undue boominess."
MIX Magazine

"All of the mixes we played gained extra sparkle and clarity when processed with the BBE 462."
Keyboard Magazine

GO HEAR WHAT YOUR EARS HAVE BEEN MISSING.

A 30 second demo is all you need. Call your dealer now!

BBE®

M.A.D. (Music & Audio Distribution) Ltd, 10 Station Parade, Willesden Green, London NW2 4NH. Tel: 0181 452 1009. Fax: 0181 452 9019

m corporation

Audio Division

COMPUTERS

Authorised Apple Reseller

7100

Apple 5200.....15" monitor built in & keyboard.....from £999

Apple 7200.....17" monitor & keyboard, ...£1049

EX DEMO MAC & PCS ALWAYS AVAILABLE

E Magic

Cubase

CUBASE
Lite, Score, & Audio for Mac, PC & Atari
Audiomedia
Cubase AudioV3...offering full Pro Tools III Support
ALSO TDM Plug Ins
EMAGIC
Logic V2.5 & Audio
Audiomedia & Logic bundle, £1299
PowerMacs & Performas
486 & Pentium PCs
OPCODE STUDIOVISION

DRIVES

NEW SYQUEST EZI 135MB INC CARTRIDGE. £225

1 GB QUANTUM FIREBALL AV SCSI EXTERNAL.....£359
1 GB QUANTUM FIREBALL AV SCSI INTERNAL.....£259
1GBMICRODISK.....£649
2GB MICRODISK STACKABLE EXTERNAL.....£899
9GB MICRODISK.....£2759
SEAGATE 525MB INTERNAL.....£139
SEAGATE 525MB EXTERNAL.....£199
SYQUEST 270MB £535
SYQUEST 88MB.....LOW!
FUJITSU 230MO EXTERNAL.....£619
FUJITSU 230MO INTERNAL.....£495
170 MB INTERNAL.....£149
532MB EXTERNAL.....£349

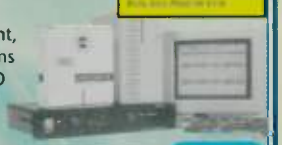
DRIVES FROM 500MB TO 9GB!
REMOVABLE DRIVES FROM 100MB TO 2.8MB!

HARD DISK RECORDING

DIGIDESIGN

Pro Tools III

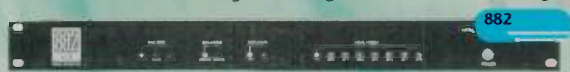
Pro Tools 3.21 PCI...Increased DSP processing power over NuBus equivalent, runs on new Apple PCI range, DSP farms now integrate with 888 I/O & 882 I/O interfaces, TC electronics & TC Tools Focusrite TDM Plug Ins available



888 I/O

888 I/O Audio Interface.....8 channels of high quality A/D and D/A conversion. 8 channels of digital I/O, high resolution LED metering

882



• We don't just sell Digidesign we use it •
• Our support is unrivalled •
• Personal demonstrations in a studio environment •

Pro Tools Project PCI..Now shipping. Adat Interface 888 I/O & 882 I/O compatible, volume and pan automation, 8-16 tracks playback, full file compatibility with Pro Tools 3.21

PRO TOOLS & PCI EVENING SEMINAR 13TH JUNE
PHONE NOW TO BOOK YOUR APPOINTMENT &
COME ALONG TO OUR DIGIDESIGN BAR-B-Q!

SOUNDSCAPE

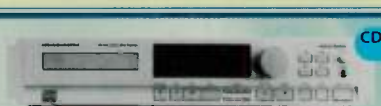
Soundscape

8 Tracks upwards
Real time digital eq
Digital mixing
Locks to any sequencer using the same PC.

Expandable up to 128 tracks, Timestretch Option, Removable Drive Option, Balanced Ins & Outs Available
RS422 & REVERB PLUG IN COMING SOON

AUDIO CD & CD ROM RECORDERS

CDR 620



Marantz CDR 620.....multi-functional CDR620 sets new standards, top quality A/D and D/A converters, sample rate converter, digital audio delay and fully automatic indexing from CD, DAT, DCC and MD sources.....Call for more info

• PINNACLE RCD1000 • MARANTZ CDR 615 •
• YAMAHA CDE100 • JVC PERSONAL ROM MAKER •
• PHILIPS CDD522 • MICRONET MCD + •
• RICOH R59 200 CD • SONY CDW900E •

• We can supply CD ROM drives for all samplers and computer packages • Overnight Delivery Available •

DEDICATED HDR

ROLAND

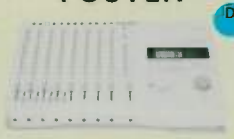
VS880

NEW VIRTUAL STUDIO

VS880.....8 track HD recording, 64 virtual tracks, 6 simultaneous recording, 32, 44.1 & 48kHz record rates, 14 mix channels, (including 8 tape tracks) 8 bus routing, 2 aux sends, 8 inputs, 2 analogue stereo outs, 2 Dig I/O.....**Phone for more information**

FOSTEX

DMT8



Fostex DMT-8.
New Tapeless multitrack with built in IDE drive and mixing facilities IN STOCK

EMU

Darwin

Emu Darwin....8 track hard disk recorder, LCD track edit display, advanced MMC & MTC, internal digital mixer.....CALL

AKAI

DR16

DR8

DR4 VR

WE ARE A LEADING AKAI SUPPLIER.
PROFESSIONAL ADVICE AT THE LOWEST PRICES
•CALL US NOW.•
PERSONAL DEMONSTRATIONS AVAILABLE

VESTAX

THE Lowest Price on Vestax HDR6

FOSTEX

2000RE

Fostex 2000RE Digital Recording, Editing & Mixing System, 16track, touch screen
CALL

0115 9474070

The M Corporation Midlands Regional Offices
389-394 Alfred Street North Nottingham NG3 1AA

RECORDING SERVICES

One Off CDs

One off CD-R only.....LOWEST EVER PRICES!!
PQ Encoding to CD.....£40

Studio Hire

16/24 Track digital studio hire: Kurzweil & Akai samplers. Cubase Audio. Session 8, a wide range of synths and outboard from... **£15 per hour**

ALLEN & HEATH SIGMA 24, PRO TOOLS III, KURZWEIL K2000, AKAI S1000, AKAI S3000 NEVE 9098 EQ, PANASONIC SV3700, TECHNICS PRO DJ DECK, ROLAND U110, ROLAND D550, ROLAND MKS80, ROLAND R-5, ROLAND SH101

RECORDABLE CD

MULTITRACK

ALESIS

Adat XT

NEW XT AS REVIEWED IN SOS
4 times faster, intelligent transport, onboard digital editor with track copy, auto punch, track delay, tape offset, onboard autolocator & loads more!.....CALL US NOW

TMC are selliong our own studio adats, last chance to get one!!.....£1899

SONY

PCM800

PCM800 high quality, digital multitrack, AES?EBU digital I/O, up to 110 minutes continuous recording.....CALL NOW

TASCAM

DA88

DA88..post production quality, digital linear 8 track, over 100 mins recording time.....CALL

FOSTEX

Fostex D80 8 track
Up to 40 mins of simultaneous 8 track recording and playback utilising IDE removable, caddy held hard disks, 16 bit linear resolution digital to analogue conversion at a sample rate of 44.1kHz, removable front panel remote...ARRANGE YOUR DEMO NOW!

NEW & EX DEMO

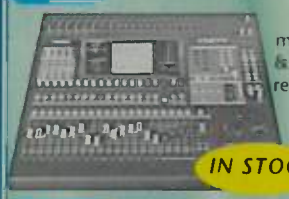
ONCE ONLY OFFER!
SOUNDTRACS SOLO MIDI 16/8/16/2 & ALESIS ADAT V4 & FREE LOOMS £3200.00

Fatar Ex Demo S2001	£899
Mackie 1604	£675
Yamaha SY35	£349
Kawai G Mega Synth	£435
Teac 34	£500
Alesis Adat	**£1899**
Roland MT120	£499
Behringer Ultrafex (1)	£175
Kawai RV4	£449
Tascam DA20	£679
Behringer Intelligate	£259

MIXING CONSOLES

YAMAHA

O2R



On board automation of all digital mixing parameters. 40 input channels & 2 full featured stereo internal effects returns. 4 band fully parametric digital equalisation (automatable) on all channels.
Call to arrange your personal audition

IN STOCK

Pro Mix

Fully automated 18:2 digital console; 24 bit digital mixing; 50 snapshot memories Fully editable 36 bit 3 band parametric EQ.

MACKIE

32.8

8 Buss

Professional 8 Bus Console 16/24/32 Available
24 Channel expansion available
n stock NOW
Come in for your personal audition

1202VLZ

BEHRINGER

Eurorack

MX8000

LOWEST UK PRICES

Eurorack...8 mono input channels with insert points and direct outputs, 4 stereo inputs channels, 3 band eq on all channels, 6 aux sends and much more!

Eurodesk MX8000 24/8/2,
• Superb eq •
• 6 stereo aux returns•
• 48 channels mixdown•
• 6 auxs•

SOUNDCRAFT

Ghost

New GHOST...IN STOCK

Studio

Studio 16.....total input gain control, two foldback sends, four band swept eq, tape send on every channel .....DEMO AVAILABLE

SOUNDTRACS

Topaz

Topaz
24 & 32 channel, new automation system available

STUDIOMASTER

P7

P7..Digital quality in-line console
Expandable to 40 channels.
New meter bridge option available

ALLEN & HEATH

GS3

Allen & Heath GS3 16 channel console expandable to 24 with mute automation

PHONE THE M CORPORATION FOR PROFESSIONAL ADVICE AND FULL BACK UP SUPPORT

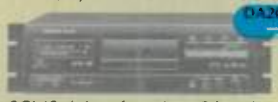
DATS

TASCAM

DA30MK II

DA30 Mk II.....44.1, jog & shuttle, balanced I/O,AES & SPDIF.....CALL NOW

DA20



DA20..SCMS defeat function, 2 heads, 44.1, professional quality.....LOW PRICE

PIONEER

Pioneer D9601 96/88.2/48/44.1 KHz recording. XLR analogue I/O AES/EBU & S/PDIF I/O. Machine control.....IN STOCK

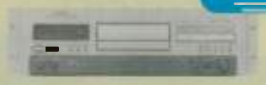
PANASONIC

SV3800

NEW SV3800....exceptional sonic quality, multiple digital interfaces, shuttle search & single programme play.....IN STOCK

FOSTEX

D5



Fostex D10 & D5

SONY

D7

New Portable D8 with 44.1kHz analog input!!
Sony Portable TCD D7.. only a couple left!

DTC A8

Sony DTC A8.super bit mapping, 44.1khz, digital I/O, 4 motors & 2 heads.....IN STOCK

SYNCS

IN STOCK • OVERNIGHT DELIVERY • LOWEST PRICES • PROFESSIONAL ADVICE & SUPPORT •

	LTC	MMC	MTC	SMPTE	ADAT	DA88	VITC
BRC				•	•	•	
CUEPOINT			•	•	•		
DATAMASTER		•		•	•		
DATASYNC							
PPS 2			•	•			
PPS 100			•	•			
AC1		•	•		•		
AI2					•		
SYNC			•	•			
VIDEOSYNCMAN							
SMART SYNC	•		•				•
SYNCMAN			•	•			
VIDEOTIME PRO	•		•	•			•

The M Corporation Head Office & Mail Order
The Market Place Ringwood Hants BH24 1AP WRH
01425 470007

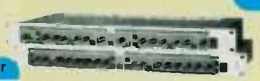
corporation

Audio Division

OUTBOARD

BEHRINGER

Intelligate

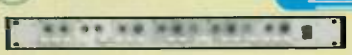


Composer

• AUTOCOM MDX1000 •
• COMPOSER MDX1100 •
• MULTICOM MDX2400 •
WE ARE THE LOWEST IN THE UK

AMEK

9098 EQ



9098 NEVE EQ.....£1099
"The sound of Class A without the cost"
THE M CORPORATION HAVE ONE EX DEMO NEVE 9098EQ AT AN UNBELIEVABLE PRICE!

ALESIS

Midiverb IV

Alesis M'diverb IV.....LOW PRICES
Alesis Q2.....£CALL
Alesis Microverb III.....IN STOCK

DIGITECH

Digitech VHM5 Vocalist.....£499
Digitech RP1.....£389
Digitech Studio Quad.....IN STOCK

ROLAND

E660

E660 Stereo digital EQ • Pre + post delay • Hum canceller • Balanced + unbalanced analogue • SP DIF + optical I/O • 28 bit internal processing • 99 memories • Full MIDIimplementation.....£549

Lexicon Alex £319
Lexicon PCM80.....LOW
Lexicon Reflex.....£379
Lexicon LXP15 MK II .....IN STOCK

NEW YAMAHA PRO R3

• ART•
• ZOOM•
•TL AUDIO•
WE SUPPLY ALL THESE LEADING BRANDS AT THE LOWEST POSSIBLE PRICES

DBX 363X.....£LOW
DBX 150X, 2 Channel.....£IN STOCK
LA Audio CX2.....£CALL
Ensoniq DP2.....£LOW
Ensoniq DP4.....£IN STOCK

DRAWMER

1960

FULL DRAWMER RANGE IN STOCK
PROFESSIONAL SERVICE
THE LOWEST PRICES

MONITORS

SILVER

SL & BH

Silver SL & BH closefield monitor system
Fully shielded, time aligned monitors will deliver a balanced mix at just 50cm. These precision tools will complement any existing set-up and provide incomparable stereo placing of your mix.
Exclusively from The M Corporation.

Silver 5L(pair).....£735
Silver BH(pair).....£675
CALL FOR DETAILS OF THE NEW 10L MIDFIELDS

SOUNDCRAFT

Absolute 2's

Absolute 2s.....£249

ALESIS

Monitor 2's

Monitor 1

LOWEST UK PRICES ON ALESIS

JBL

Tannoy

ALL MONITORS AVAILABLE FOR DEMONSTRATION IN OUR STUDIO, OR WHY NOT TAKE ADVANTAGE OF OUR FREE LOAN SERVICE?

AMPLIFIERS

SAMSON

Servo 500

Servo 500....Rack Mount Power Amp (3 space), designed for studio & live use, 250 watts per channel @ 1kHz, 4 OHMS, Mono Bridgeable to 500 watts.....IN STOCK

ALESIS

RA100

Alesis' industry standard studio reference amplifier Clean, accurate amplification for reference monitors and live use. 100 watts per channel,
4 ohms.....£275

Alesis Matica Range In Stock • High Speed Wide Bandwith Dual Channel Power Amplifiers •

CHAMELEON

Chameleon

CALL FOR DETAILS OF THE NEW CHAMELEON RANGE OF AMPS

C AUDIO

C Audio

C Audio RA Series...three high performance stereo amps, long term performance and operational reliability.....CALL

OMNIPHONICS FOOTPRINT, 1U RACK AMP
ALSO IN STOCK, CALL NOW!

MASTER KYBDS

KURZWEIL

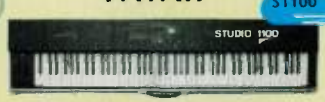
PC88

Kurzweil PC88, 88 note master keyboard,120 internal sounds inc the renowned Kurzweil piano voices, weighted keyboard.....CALL NOW

Also available PC88MX, offering 64 voice polyphony & 400 new sounds AVAILABLE FOR DEMONSTRATION

FATAR

S1100



Studio 1100..88 weighted keys, 2 MIDI outputs

• Studio 49 • Studio 610 • Studio 610+ •
• Studio 900 • Studio 900FC •
• Studio 1100• Studio 2001
• Full Range In Stock •

ROLAND

A33

A33..user friendly MIDI kybd controller, 76 weighted keys, velocity sensitive, 2 MIDI outputs, 32 patches for instant selection.....CAL

MICROPHONES

AKG

C414

C1000S

C3000

LOWEST UK PRICE

FULL AKG RANGE IN STOCK

RODE

NT2

Rode NT2 Professional condenser mic,.gold plated diaphragm, 10dB pad & bass roll off, Neumann U87 quality
AVAILABLE FOR LOAN

NEW RODE CLASSIC IN STOCK

TGX50

ALSO AVAILABLE
Beyer
Audio Technica
Shure
Sony
Neumann

0115 9474070

The M Corporation Midlands Regional Offices
389-394 Alfred Street North Nottingham NG3 1AA

CDR SERVICE · OVERNIGHT DELIVERY · INSTALLATION SERVICE · EDUCATIONAL DISCOUNTS

IN STORE DEMOS · LEASE HIRE · CREDIT ACCOUNTS · PERSONAL FINANCE

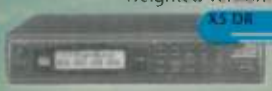
SYNTHESIZERS

KORG

NEW!

Trinity

Trinity....4 versions available ranging from 61 key to the all in one Trinity Pro X 88 key weighted version. Call to arrange your personal demo

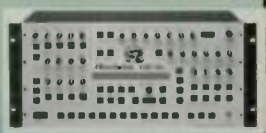


X5 DR

KORG X3, X5 & I3 ALSO IN STOCK
CALL FOR THE LOWEST PRICES

OBERHEIM

Oberheim OBMX.....Analogue synthesizer, front panel means instant gratification!! Call for details.



ROLAND

XP80

NEW

XP10

Roland new M Series Modules *Call for details and the lowest prices*

Roland's popular JV1080 64voice polyphony, 32 bit processor .....*CALL*

JV1080

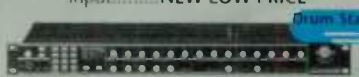
ALL EXPANSION BOARDS AVAILABLE FROM STOCK

NOVATION

Bass Rack

Nowation Bass Station Rack Classic analogue sounds with full midi specification. 99 memories, analogue filter input.....NEW LOW PRICE

LOW PRICE



Drum Station

EMU

Vintage Keys

Classic Keys

Emu Classic & Vintage Keys, Morpheus & Proteus ALL AVAILABLE

ALESIS

QS6

Quad Plus

EMU

ESI-32 32 voice polyphony, digital filters, time compression, EIV compatible. Audition sample from hard disk, with 8MB expansion.....£1225

ESI32

LOWEST UK PRICES PROFESSIONAL ADVICE

E4K

EIV

EMU E-IV, 128 note poly, 128 digital filters, up to 128 Mb RAM, 18bit DACs 128 x oversampling ADC, 32 part multi timbral, 8 balanced polyphonic outs. Call for details.

SAMPLERS

KURZWEIL

THE U.K.'S NO.1 K2000 DEALER

V3.0

K2000

K2000R

V3.0 adds a 32 track sequencer, realtime mix automation, disk macro facilities, sample audition over SCSI.

K2000 V3.0.....£1899
K2000 V3.0, 8Mb & EZ135.....£LOWEST IN THE UK
V3.0, 8Mb & sample option.....£2499

Also available P-RAM, Orchestral & Contemporary ROM 'Blocks'

K2500

K2500 KEYBOARD...76 & 88 NOTE WEIGHTED SAMPLE OPTION NOW IN STOCK

K2500 ...48 note polyphony • 192 oscillators • dual SCSI ports • • 32 track sequencer • digital I/O • up to128Mb RAM • Optional digital multitrack I/F • Sampling Option • Quad Stereo FX Buss Module • • Compatible with K2000 Library •

AKAI

S2000

Akai's New Simm Based Samplers

All drive options
All upgrade options
The best service
The best support
The Lowest prices

S3000XL

S1200XL

Call us to find out why we are one of the most successful Akai dealers in Europe.

ROLAND

S760

S760.....24 note polyphonic, in built SCSI, 2Mb expandable to 32Mb,

If you're serious about samplers, call us NOW!

VISA

The M Corporation Head Office & Mail Order
The Market Place Ringwood Hants BH24 1AP

WRH

01425 470007

ACTION

NOVATION DRUMSTATION DRUM SYNTH MODULE

I'm surprised someone hasn't brought one out before; a rack device dedicated to reproducing the two most sought-after drum machines to hit planet Earth in the last million years or so: Roland's TR808 and TR909. Novation have already made lots of friends with their BassStation synth, and have now turned their beady eyes on the drum box market. Using a combination of samples and Analogue Sound Modelling (or ASM if your brain has storage space for the acronym), you can build a kit featuring sounds from both the TR808 and TR909 with all the means of modifying the sounds that has made these drum machines so popular. The one thing lacking is Roland's neat method of programming rhythm patterns, but if you opt for a convenient MIDI rack device instead of the real thing, the chances are you're after the sounds, and not just the 'pose value' of owning the original. So, how closely does it resemble the real thing sonically? The answer is pretty damn close. I managed to borrow a TR808 to try alongside it, and working on an 'eyes closed' method, found the most obvious difference was the way the TR808 was programmed. With *Cubase*'s drum editor, I could get near to the programming style, but I wouldn't attempt to convince the 'original is best' advocates who hold to their beliefs at all costs — even when faced with machines held together by sellotape and bits of string.

APPEARANCES ARE INFORMATIVE

Housed in a 1U rack module, the DrumStation is decked out in a tasteful combination of pale yellow and grey on a black background, and packed with

rotary pots, switches and rubber 'calculator-style' pushbuttons. Although small, these controls are well conceived and accessible. A small red 2-character display conveys the various messages, program numbers and the like to the outside world. The manual, though excellent, was hardly needed at all — if I had to stoop to a cliché at this early stage in a review, it would be that this is an intuitive machine. On the far left is the master volume, which is notable, because it can be overriden by a MIDI control change 7 message at any time. Presumably Novation have a reason for this, but I found it pretty disconcerting. When I turn something down, I like to be sure it will stay down...

Two buttons to the right of the master volume select which drum kit is to be edited. Since some of the features of the TR808 and 909 differ, those functions pertaining to the TR808 only are marked in grey text. Perhaps the percussion voices unique to the 808 should have been labelled in grey also? Underneath are the headphone socket and memory write-protect switch.

The DrumStation comes with 25 preset kit memories and a further 15 user memories. This is probably quite sufficient, but if necessary, you can transmit SysEx dumps of single kits or all user kits to an external device. The Select button below the display steps through the various MIDI functions such as transmit and receive channels, utility mode (see separate box for details) and program save or select. Navigation is via the tiny matrix of buttons.

The back panel is generously endowed with stereo outputs and six individual outs. Output routing can be saved as part of a kit, and I found it convenient to think in terms of each output being used for a different effects unit, rather than a different drum (see the Utility mode box for more on this). MIDI In, Thru and Out sockets are of course present, and the DrumStation controls send out all the movements as MIDI controller information, so all tweaks can be recorded into a sequencer, although some parameters (eg. Distortion, Pan and Front Cut) require you to generate the controller information yourself from your sequencer or master keyboard. If you are lucky enough to have a BassStation, Novation thoughtfully provide a conversion table of matched controllers for this purpose. And if that weren't enough, a Roland Sync 24 output (a pre-MIDI communication protocol) allows triggering of old gear such as my battered TR606, providing you route a MIDI Clock to the DrumStation.

DREAM DRUMS? — THE SOUNDS

Sounds may be auditioned via MIDI or the handy auto trigger facility, which repeats a note at a tempo you set — that's the sort of attention to detail that I find most endearing! Many of the drum voices feature ASM — yes, it's that 'M' word again — and this means that you get to stray from the comfortable path of sample reproduction and delve deeper into the heart of the sound. Few details are available on the modelling process, but in many cases the ASM tone is combined with a sample to produce the finished result (see the chart elsewhere in this article for more details). Six of the instruments are totally sample-based (with no ASM): the cowbell, maracas, claves, ride cymbal, rim shot and hand clap. These still work effectively, allowing the real sound generation muscle to be reserved for the more complex voices. The manual explains that ASM sounds, unsurprisingly, require more processing power than sample playback, and consequently polyphony is reduced depending on the number and type of drums sounding. This sounds confusing (and it is) but, in practice, it didn't cause me any problems, since I only have the usual complement of hands and feet anyway! I'm told polyphony is "up to 8 notes", not 12 as stated in the manual, and I guess some form of reserve function would have been nice, even as a global setting.

True to the original Roland sounds, the snare drum has four dedicated parameters: Tune, Level, Tone and Snappy — a setting which increases the amount of white noise in the drum body. Using these, you can squeeze plenty of life out of that old 808 snare, even before resorting to external processing. The bass drum has Tune, Level and Decay. For the 909 kit, there is also Attack, and for the 808, there is Tone. The remaining instruments each have Tune and Level knobs, with the toms, hi-hats and cymbals also featuring a Decay setting. Those instruments which share common controls are selected via a small 3-position switch, making it a little more difficult to set the relative tuning of the toms and congas.

It is difficult to single out any individual voice for praise. All are excellent renditions of their TR808 and 909 ancestors. If, by some chance, you have never heard these machines, remember that (with ▶

STATION

British company Novation made their name with the BassStation synth, which offered dance music producers instantly tweakable, analogue-style synth sounds in a MIDI-controllable package. The new DrumStation applies the same formula to the de rigueur dance sounds of Roland TR808 and TR909 drum machines. PAUL NAGLE moves from Station to Station...

pros & cons

NOVATION DRUMSTATION £450

pros

- Faithful representations of two classic drum machines.
- Great MIDI control.
- Sonic tweakability which exceeds even the originals in some cases.

cons

- Expensive.
- Loses the drum machine heart that helped shape the sound in the first place.

summary

The DrumStation achieves a very realistic simulation of the TR808 and 909, and will therefore do well amongst those determined to have greater control over the sounds than mere samples can provide, but who can't afford the absurd price tag on the original instruments. The MIDI control also allows you to stretch the sonic limitations of these two instruments, but maybe the choice of some different sound sources would result in the DrumStation being added to a few more shopping lists.

SOUND ON SOUND

▶ the exception of the 909 cymbal, which was a sample anyway), none of the voices actually sounded realistic. Yes, the toms can sometimes be mistaken for someone hitting a cardboard box with a dead fish, and yes, the famous 808 'snare' does sound rather like a yeti stomping through a pile of cornflakes, but what the hell — these sounds were what gave drum machines such a unique musical identity.

Novation have managed to reproduce a bass drum which has great presence, especially with a little front cut and external EQ. The toms sound superb with a touch of distortion, and the crisp, metallic hi-hats and 'plinky' claves are classics that I will personally never tire of. Both the 808 and 909 snares seem destined to last forever, although thankfully the popularity of the handclap seems to have waned with the passing of disco. Of all the instruments, the only one I could never find a use for was the bloody awful cowbell! If I could vote for an enhancement, it would be to add the sounds of other classic machines such as the Drumulator or TR707 (especially the latter) — but perhaps now that the work has been done to create the modelling technology, it will be possible in the future.

CONCLUSIONS

A drum machine without the rhythm-making section isn't a new idea, but the DrumStation is targetted at a very specific market. So, what's the verdict? Well, anyone with a regular need for these sounds will be more than happy with the DrumStation's version of them. Of course, because many instruments already include some 808 and 909 samples, the average punter might consider the DrumStation an expensive luxury — but I've heard many quality 808 and 909 samples, and none allow such a degree of control over subtle nuances of the sounds. On the other hand, although packing these sounds into a convenient rack is very neat and tidy, you do lose the pattern memories and step-time input that was for some as important as the sounds themselves. At the end of the day, you have to keep in mind that if you wanted both of the original drum machines and a sync/MIDI box for the 808 too, you would probably have to pay twice the asking price of the DrumStation.

I suppose Novation must have felt faintly sick when they heard about the forthcoming Roland MC303, but there are significant differences between the two, not least that Roland's box omits all the dedicated knobs that make the DrumStation such a joy to use. And with advance orders for the DrumStation apparently numbering well into the thousands, it would seem that *plenty* of people are fed up with lining the pockets of those who were cunning (or fortunate) enough to pick up real 808s and 909s for a song when everyone was selling theirs! SOS

ANALOGUE SOUND MODELLING/SAMPLE CHART

	TR808	TR909	ASM	Sample
Bass Drum	0	0	0	
Snare Drum	0	0	0	
Rim Shot	0	0		0
Hand Clap	0	0		0
Closed Hi-Hat	0	0	0	0
Open Hi-Hat	0	0	0	0
Ride Cymbal		0		0
Crash Cymbal	0	0	0	0
Low Tom	0	0	0	
Mid Tom	0	0	0	
High Tom	0	0	0	
Cowbell	0			0
Low Conga	0		0	
Mid Conga	0		0	
High Conga	0		0	
Maracas	0			0
Claves	0			0

Of these, the TR808 hi-hats and crash cymbals are recreated using ASM, and the 909 versions are samples with ASM envelopes and tones.

MIDI UTILITY MODE

Some intriguing features set the DrumStation apart from its analogue predecessors, and allow you to carry out some things previously only achievable with patience and extreme cleverness. In Utility mode, you select the drum you wish to edit via the plus or minus keys. A nice time-saving feature is that a quick turn of any knob causes its drum to become the currently selected one — but I'd have liked to have gone one stage further, and been able to select drums for editing by incoming MIDI note (though this could prove problematic for drums that share the same editing controls, like the toms). As it is, you can be auditioning a tom sound from your master keyboard and end up furiously tweaking the DrumStation's front panel controls, wondering why the sound you're playing isn't affected.

Front Cut, which removes up to 99 milliseconds from the start of the drum sound, results in a more muted or rounded character. This is particularly good for removing the 'head' element of a bass drum, enabling you to catch that 'hit in the chest' thud that is so vital in cardiac emergencies and dance music.

Controller/velocity decides whether a particular parameter responds to velocity or other controller data. You can program different elements of each drum so that, for example, the snare's tone and tuning respond to velocity but the 'snappiness' is controlled via MIDI, allowing a great variety of responses. I found I could get great results when triggered from my little Yamaha DD12 drum pads, combined with a continuous pedal mapped to pitch.

The DrumStation can accept or ignore note off information for each drum. This means you can choose whether drums cut off when hit again before their decay time has ended. If you get problems with polyphony, this might be useful and is set on an individual drum basis, like all the other parameters mentioned here.

General MIDI is, happily, almost entirely absent, but it does rear its bland head in the form of a simple remap facility. If you want to quickly integrate an 808 or 909 kit into a GM song, this is the way. Output Set lets you assign any of the drums to anywhere in the stereo panorama or to any of the six individual outputs. This is a generous number, and is invaluable if you wish to process the sounds of kick and snare separately. A useful feature within the Assign Bank function allows you to map a single drum sound over an octave range on the keyboard, although I didn't find a means of overlapping drums on the same note.

Novation have continued with their high standards as far as MIDI spec goes. Practically every DrumStation parameter has its own associated MIDI controller — 100 in total — with which you can coax out every drop of expression from these simple noises. Purists can ignore this if they wish, but I loved the power to take such basic voices and move them as far as possible from the starting point. Distortion adds 'soft-knee' distortion to the currently selected drum voice, and is particularly good for adding some extra nastiness to snares and kicks. Last amongst the utility functions is a demo which shows off the sonic power of the DrumStation admirably with stereo hi-hat panning, wacky tuning changes and dynamic kick and snare combinations. I freely admit that none of my own efforts matched this.

info

£ £449.99 inc VAT.

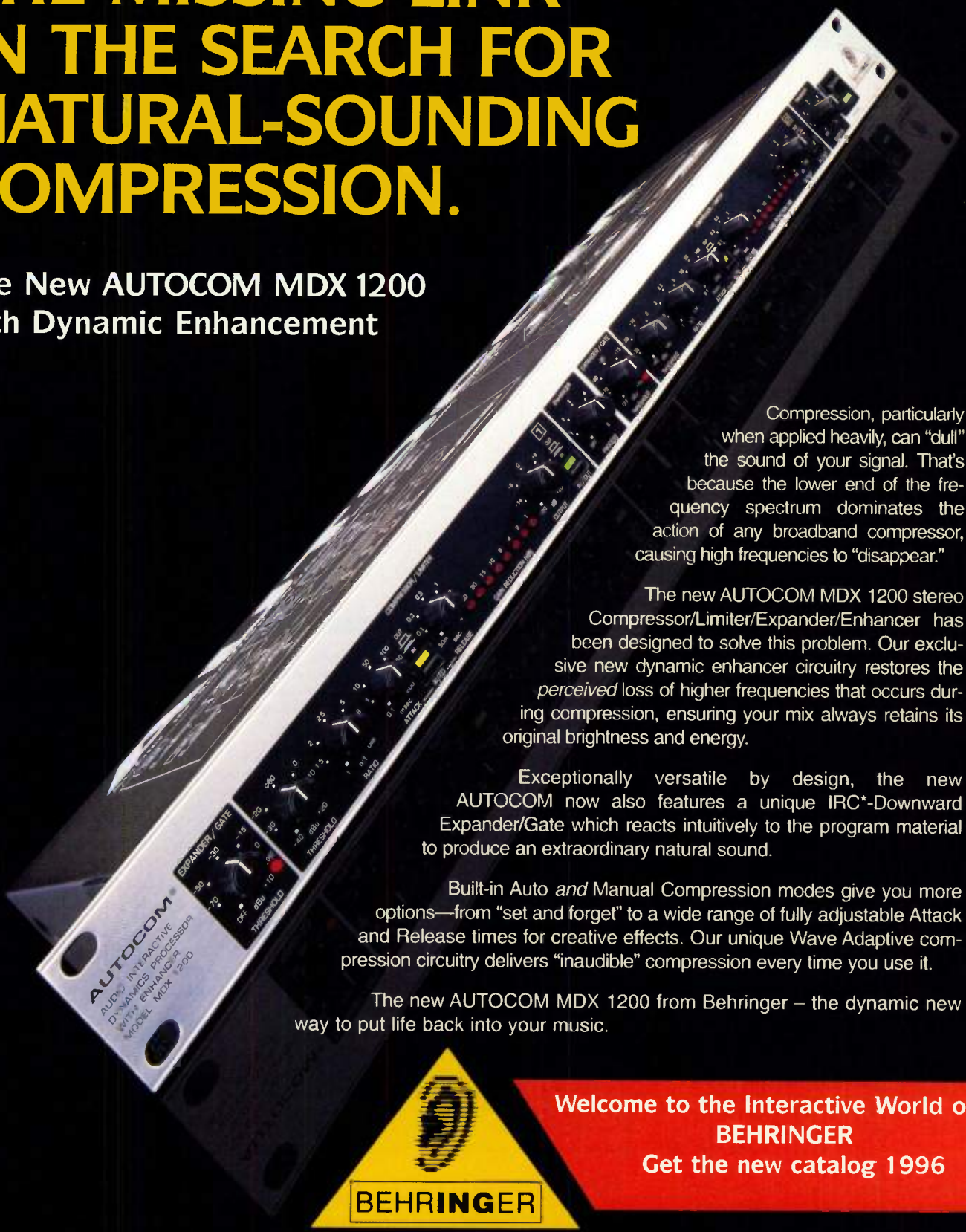
A Novation Electronic Music Systems Ltd, Westacott Business Centre, Maidenhead Office Park, Westacott Way, Maidenhead, Berkshire SL6 3RT.

T 01628 828888.

F 01628 825599.

WE'VE DISCOVERED THE MISSING LINK IN THE SEARCH FOR NATURAL-SOUNDING COMPRESSION.

The New AUTOCOM MDX 1200 with Dynamic Enhancement



Compression, particularly when applied heavily, can "dull" the sound of your signal. That's because the lower end of the frequency spectrum dominates the action of any broadband compressor, causing high frequencies to "disappear."

The new AUTOCOM MDX 1200 stereo Compressor/Limiter/Expander/Enhancer has been designed to solve this problem. Our exclusive new dynamic enhancer circuitry restores the *perceived* loss of higher frequencies that occurs during compression, ensuring your mix always retains its original brightness and energy.

Exceptionally versatile by design, the new AUTOCOM now also features a unique IRC*-Downward Expander/Gate which reacts intuitively to the program material to produce an extraordinary natural sound.

Built-in Auto *and* Manual Compression modes give you more options—from "set and forget" to a wide range of fully adjustable Attack and Release times for creative effects. Our unique Wave Adaptive compression circuitry delivers "inaudible" compression every time you use it.

The new AUTOCOM MDX 1200 from Behringer – the dynamic new way to put life back into your music.

BEHRINGER

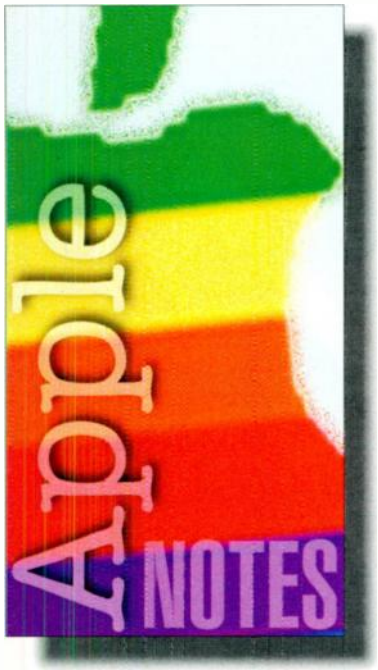
Your Ear Is Our Judge

Welcome to the Interactive World of BEHRINGER
Get the new catalog 1996

UK Retail Price £199.00

*(Interactive Ratio Control)

For more information about the new AUTOCOM MDX 1200 and the Interactive World of Behringer, please ask your local dealer or contact:
BEHRINGER U.K., St.Vincent House, 59 Woodbridge Road, Guildford, Surrey GU1 4RF. Tel: +44 (0)1483 458877. Fax: +44 (0)1483 458877.
BEHRINGER Specialized Studioequipment GmbH, Otto-Brenner-Str.4, D-47877 Willich. Tel: +49 (0)2154-92060. Fax: +49 (0)2154-428523.



MARTIN RUSS surveys his dying Mac IIsi and ponders the purchase of a new model. Will he go for leading-edge Power or a last-generation bargain?

It's been quite an eventful month here at Apple Notes. There's an annoying (no, alarming!) hardware fault in my once trusty Mac IIsi: my boot drive has developed an alarming tendency to mess about with preference files, I seem to have RAM that isn't, and one of my SCSI plugs keeps popping off its socket. All this makes my Mac rather unstable — prone to suddenly stopping in the middle of everyday operations such as drawing a menu, or closing a dialogue box. It's all been rather distressing.

In fact the situation has become so bad that I'm considering retiring my loyal friend and moving closer to the leading edge of Mac computing. The IIsi is worth surprisingly little these days, and getting it repaired seems like a bit of a waste of money. Times have changed considerably since the IIsi and I first met, and so, following the often-quoted 'change your computer every three years' rule, I've been looking around at the possibilities.

There are two schools of thought: one says that you should go for leading-edge technology because you will need it in three years time (!), and the other says that tried and tested technology is less of a risk, and probably cheaper. Balancing on the advancing wave of technology is OK if you have the money, but not everyone does. With this in mind, the pragmatic solution seems to be to look closely at what has gone before and what is happening now, and work from that.

Power Computing's Mac clones (like the P120 pictured here) make worthy alternatives to bona fide Apple Macs — but be sure to check the clones' expansion slots if you're contemplating using your machine with a Digidesign system, as the newer models appear to be swapping from NuBus to PCI slots...

The most obvious major change over the last few years is the demise of the Macs based on 680n0-based processors. The Mac II series turned into the Quadras, then the Centrises, LCs and Performas — with the range gradually becoming 68040-only when the Quadra 630 came out. More recently, the rise of the Power Macs has seen the gradual demise of NuBus and the adoption of PCI, even by the Power Computing clones. With the third generation of Power Macs now coming on-stream, the Mac range of computers is now wholly Power Mac, with the exception of some PowerBooks. The increase in computing power has seen a corresponding rise in number of features and complexity of applications, with a resulting increase in their size and the amount of RAM they require. *MIDI Manager* appears to have been declared officially obsolete by Apple, at least according to some reports.

So one approach to upgrading would be to go for a brand-new Power Mac, choosing one with the right mix of features and price, and allowing just a little bit of room to cope with the evolutions of the next three years. On the other hand, the last generation of 68040-based Macs are now very low-cost, and they should have few problems with running those favourite old programs that you've been using for years. The Quadra 650 is a good example of one of the last set of 68040 Macs that has the option of an upgrade to Power Mac in the future by replacing the main board (if you can still find an upgrade when you decide to move on, of course). PowerBooks can be very effective replacements for the Mac Classics, SEs and SE/30s when you need to take a computer on the road. Performance musician Nick Rothwell uses a PowerBook in his live setup (see the 'Music and Movement' feature in the ▶

APPLE NEWS IN BRIEF

• SPEED FREAK

You may have seen adverts for Intel Pentium processors with clock speeds of 166MHz or more, and wondered how the PowerPC is responding. Well, although you can get 150MHz PowerPC chips as I write, the first deliveries of 166 and even 180MHz chips should be arriving as you read this. By the late autumn, 200MHz may even be available. And don't forget that a 166MHz PowerPC 604e chip is more than equivalent to a Pentium with the same clock speed.

• SYSTEM 8.0: COPLAND

The long awaited Copland operating system, which has long promised such goodies as multitasking, a customisable desktop (even more than now!?) and an improved set of file management utilities, may now be even longer in arriving. It now begins to look as if it will happen slowly, as incremental improvements to the existing System 7.5.

• BMW?

Although many people have been saying that Apple will be changing from making a broad range of Macs and concentrating on just high-end BMW-style computers, the latest word is that Apple will continue to produce low-end affordable Macs, which has to be good news for Mac musicians who aren't at the hard disk recording/DSP/film/TV end of the market.

Hi-Tech's No.1 ANDERTONS SuperStore

ANDERTONS Services

PRICE MATCH

EXPERT STAFF

GUITAR REPAIR SHOP

AFTER SALES SERVICE

0% FINANCE

10 DAY EXCHANGE PLAN

PART EXCHANGE WELCOME

USED GEAR WANTED

6

MAIL ORDER

EXPRESS DELIVERY

CALL NOW

UP TO 18 MONTHS 0% FINANCE BY PHONE

You phone our 0% Hotline on 01483 38212 and we'll fill in a quick and easy finance form with you
We send the forms for you to sign, then you send them back with the deposit
We despatch the goods to you and you get months to pay back the balance
NO INTEREST CHARGES • MONTHS TO PAY

CALL NOW

Hard Disk Recording

Fostex DMT-8
New V.2 Software
Interest Free credit
Deposit £299
12 monthly payments of £100
Total Price £1499 *Subject to status*
New features available include:
virtual tracks. Ability to insert larger Hard disk.
Improved copy and pasting.

New Fostex D 80
Rackmount version of DMT-8
without mixer section. features include:
removeable Hard disc capitbites.
Front panel removeable as remote.Change together
multiple units to give you 24 tracks.

NEW Roland VS880
Interest Free Credit
Dep = £399
10 Monthly payments of £110
Total Price £1499

New Novation Drum station

TR808 + 909 drum sounds
stereo left/right + 6 outputs
50 drum kits programs
distortion effect - variable for
each drum sound.
RRP = 449.00
IFC deal = deposit 49
10 monthly payments = £40 per month
subject to status.

NEW Emu Orbit
just in from Emu their new dance module.
*600 sounds *16 point multitimbral
* 6 outputs *editable drum loops

Roland MC303

Call for details

Package Deals

Soundcraft 16/8/16 and Fostex D80 inc looms + extension cable
£2699

Behringer MX8000 and Fostex D80 inc looms and extension cable
£3099

Akai S3000XL
IFC Price = £1799
deposit = £197
18 months @ £89

Waldorf Pulse
IFC Price = £599
deposit = £99
10 months @ £50

Roland XP80
IFC Price = £1799
deposit = £197
18 months @ £89

Akai S2000
expanded to 10 meg
including zip drive
+100 meg of sounds
IFC Price = £1399
deposit = £157
18 months @ £69

S2000
only £999
deposit = £99
18 months @ £50

Alesis Quadrasynth Piano Plus
IFC Price = £1049.00
deposit = £199.00
10 months @ £85.00

EMU ESi 32
with Scsi
IFC Price = £1299
deposit = £147
18 months @ £64

Korg O5RW
IFC Price = £449
deposit = £49
10 months @ £40

Digitech Studio Quad
IFC Price = £499
deposit = £55, 12 months @ £37

	Deposit	Payments	Total
Alesis Quadrasynth +	£199	10x£85	£1049
Fatah Studio 900	£79	12x£45	£699
Korg X5 DR	£99	10x£50	£ 599
Korg X5	£99	12x£54	£747
Korg X5D	£99	10x£50	£899
Korg I3 Prophecy	£99	10x£90	£999
Novation Bass Station Rack	£49	10x£35	£399

	Deposit	Payments	Total
Roland JV10 80	£199	12x£75	£1099
Roland XP50	£199	18x£72	£1499
Roland MGS64	£99	10x£50	£599
Tascam 488 MK11	£199	10x£90	£1099
Yamaha MT8X	£199	10x£80	£999
Yamaha W5	£157	18x£69	£1399
Yamaha W7	£120	18x£60	£1200

	Deposit	Payments	Total
Yamaha SY85	£99	18x£50	£999
Yamaha PFP-150	£189	18x£95	£1899
Yamaha MU50	£49	10x£35	£399
Yamaha MU80	£79	10x£55	£629
Yamaha QS300	£199	18x£50	£1099
Yamaha CSX-1	£99	10x£50	£599
Yamaha QY700	£199	10x£80	£999

Cubase Audio XT and Digidesign Audiomedia IIIPCI

Cubase Audio XT offers a powerfull combination of sequencing and audio support for audiomedia III card
Total Price £1395
Interest Free Credit = Deposit £195
12 Months @ £100

Other Package Deals

Cubase V3.0 + Tahiti Card	£565
Calkwalk Audio + Tahiti Card	£519
Cubase V3.0 PC	£329
Cubase Score V3.0	£499
Calkwalk Pro	£179
Calkwalk Pro Audio	£269
Passport Pro 6	£129

Interfaces

Midiman Winman 1 in/1 out	£49
V22 2 in / 2 out	£99
Midi edge 2 in / 4 out	£129
Midiman 4x4 4 in / 4 out	£199

Digidesign Sample Cell II PC
Special Offer Only £399

SERVING THE MUSICIAN SINCE 1964

YAMAHA DB50XG IN STOCK CALL NOW

New Hard Disk Recording Product.

PCI Card For Mac or PC

New from digidesign is a PCI card with CD quality 16-bit, 44.1K or 48K recording. The card can record 4 tracks of audio and playback 8 tracks. With the PCI card comes Session software for PC Only.

The software offers:

non-destructive editing.
8 Bands of real time EQ.
Fully automated mixing (Volume + Pan).
Track Bouncing.
Customizeable crosspads.
Synchronisation to sequencers.
Plus much More!

NOW IN STOCK. £879

Second Hand

Boss DS 330	£199
Digidesign Audiomedia III	£349
Tascam 38	£699
Roland JD800	£1199
Roland D20	£399
Roland AX-1	£249
Roland D50	£399
Roland Octopad	£199
Yamaha SY55	£449
Yamaha FP01	£69
Yamaha DX7S	£299
Yamaha R100	£99
Yamaha EMP 100	£149
Yamaha QX5 FD	£199
Yamaha RX5	£169

ANDERTONS
58 & 59 WOODBRIDGE ROAD
GUILDFORD · SURREY GU1 4RF

01483 38212

01483 38211

Access VISA

Apple NOTES

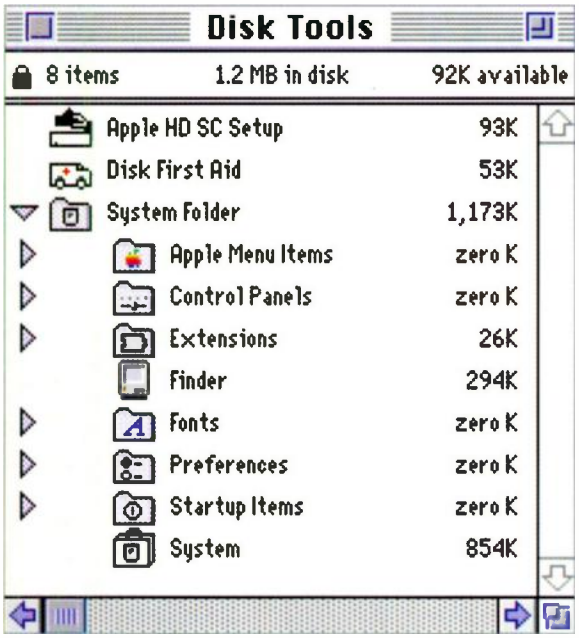
▶ November 1995 issue of *SOS*, and Apple Notes in the December 1995 issue).

So what do I go for? Is it a Power Mac, a 68040 old-timer, or a portable PowerBook? Tune in to this channel, same time next month, to find out...

TIP OF THE MONTH: EMERGENCY RECOVERY

Speaking of hardware faults, what happens if the hard disk that you boot up from suddenly dies? It does happen, and from my conversations with Mac users, many people don't seem prepared for this sort of emergency. What's needed is an emergency disk from which to boot so that remedial action and repairs can be undertaken. If you don't have one already, you need one!

One of the emergency boot disks I use came with the original System 7.1 floppies. The Disk Tools disk has a System Folder containing a very minimalistic set of system files, plus *Disk First Aid* and the *HD Setup* applications. The first port of call for a Mac crash recovery is probably the *Disk First Aid* utility. After that, professional help may be needed if all is not well.



My 'F Plan' Emergency disk — about as slim and trim as it gets these days, at 854Kb!

But what about more recent systems? Making your own emergency disk ought to be straightforward, but for some reason it isn't as easy as it could be. If you use the System 7.5 installer program to custom install a minimal system onto a floppy, you may be told that there isn't enough room on the floppy. The solution is to install the minimal system onto a spare hard disk (I use a SyQuest removable) and then prune things by hand. Remove all the beeps and so on from inside the System, then put just the Finder and the System onto a floppy. You may also need empty folders for the Apple Menu Items, Fonts, Control Panels, and so on. I managed to get the system down to 854Kb, and this allows a 294Kb Finder and the 53Kb *Disk First Aid* to fit onto one HD floppy. (If you've only got 800K drives, you need to upgrade, because almost everything comes on HD disks these days.)

And let's hope you never need to use the emergency recovery disk!

ON THE NET

There are other parts to the Internet beyond the World Wide Web. Two of the most interesting areas are Newsgroups and Mailing Lists.

Newsgroups are a bit like a global free newspaper, except that the reporters are ordinary (sometimes) people — so anyone can post a story. As a result, there are some weird and wonderful 'news' topics (the definition of what is 'news' is often stretched to breaking point!). To read newsgroups, you need a news reader utility program, but often WWW browsers include one. The news topics are sorted into groups by a series of categories. Here are some example newsgroups on the subject of music:

- **alt.fan.jimi-hendrix**
- **alt.music.orb**
- **rec.audio.pro**
- **rec.music.makers.synth**
- **uk.music.misc**

Mailing lists are a more targeted version of newsgroups, but based on email. Rather than being available for anyone to read and contribute to, mailing lists are 'subscribed' to. Once subscribed, you then receive email which is also posted to everyone on the mailing list, and anything that you post to the list is automatically sent to everyone else. Musical topics include lists covering electronic music, synthesizers, automated composition, and even programming languages like *Max*.

HOW IT WORKS — COMMUNICATIONS

This month I'm taking a closer look at the kind of programs you'll need for electronic communications using your Mac.

• TERMINAL EMULATORS

Just about the simplest way to communicate over a telephone (apart from talking, of course!) is directly from one computer to another. In its basic form, this involves making a connection from your computer to another computer, and then making your computer compatible with the other end — emulating the sort of terminal device the other computer expects. This explains the name 'terminal emulator 'for the application program that accomplishes this task so that your computer can communicate with the remote computer. In most cases, the remote computer sends text to you, and you send text back. A terminal emulator is often included in the set of utility software that comes with modems, and these programs often have catchy names ending in 'Term'.

• BULLETIN BOARDS

One use for this inter-computer communication is to allow people to leave messages on the remote computer, which other people can then look at. Rather like a bulletin board — so that's what it's called. Bulletin board computers live at the other end of telephone lines, and can be used to provide all sorts of messaging and storage functions. Many bulletin boards have become entwined in the Internet.

• EMAIL

Long before the Internet became hugely hype-worthy, people with computers and modems were sending each other messages using electronic mail — email. No stamps, no envelopes, and no need for blotting paper. Instead, all you need is someone to act as a sorting office — which is where bulletin boards come in. Why put messages on a bulletin board and expect people to come to that board when you could move the message to a bulletin board that they already use? From this simple idea, email has evolved to allow the transfer of electronic messages from any computer to almost any other computer. It's a little like the biggest MIDI network you can imagine, only bigger. One of the most popular Mac email programs is called *Eudora*, for reasons which escape me at this moment.

• FTP

Bulletin boards can be used to store more than just messages. One way of transferring data between computers is called File Transfer Protocol, or FTP for short. This can be used to transfer applications, picture files or MIDI files — the contents of the file don't matter. FTP programs are often called by obvious names like *FTP*, although one of the popular Mac versions is called *Fetch*.

• WWW

The World Wide Web is another name for a set of specialised computers which are spread all over the world, and connected by the Internet network. To communicate with these computers, you need a WWW browser. This allows you to wander around all the WWW computers, which are called servers because they act as intermediaries between your WWW browser and their information. The information on the WWW is in the form of pages, rather like a very large magazine. A recent count estimated that there were over 30 million pages on the WWW.

MS1202-VLZ 12-CH • MS1402-VLZ 14-CH • COLLECT 'EM • TRADE 'EM WITH YOUR FRIENDS

VLZ MICROSERIES: SMALL MIXERS WITH WHAT IT TAKES TO HANDLE SERIOUS PROJECTS.

MICRO SERIES 1202 VLZ 4 MONO CHS. 4 STEREO CHS.

MICRO SERIES 1402 VLZ 6 MONO CHS. 4 STEREO CHS.

BOTH MIXERS ARE QUITE AFFORDABLE AND ARE NOW IN STOCK AT YOUR LOCAL MACKIE DEALER. CHECK THEM OUT TODAY!

BOTH MODELS HAVE:

Studio-grade mic preamps with discrete circuitry for high headroom low noise (–129.5 dBm E.I.N.) and wide frequency response (over 300kHz!).

Low Cut filters (18dB/oct. @75Hz) on mono mic/line channels allow use of low-frequency EQ on vocals without boosting room rumble, mic thumps, P-pops and wind noise.

Trim Controls on mono channels have 60dB total gain range for boosting weak sound sources and a 10dB "virtual pad" for taming hot digital multitrack outputs.

2 Aux Sends per channel (one globally switchable pre/post, one post-fader), each with 15dB of gain above Unity to boost weak effects.

3-band equalization with 12kHz High shelving EQ, broadband musical 2.5kHz peaking Midrange & 80Hz Low shelving EQ.

Constant loudness pan controls.

Stereo in-place Solo.

Mute button routes signal to "bonus" **Alt 3-4 stereo bus** outputs & Control Room matrix. Handy for both recording and live applications.

MS1402-VLZ ONLY: 60mm logarithmic-taper faders based on our exclusive 8•Bus design. Long-wearing wiper material and tight polymer lip seals to protect against dust & other crud.

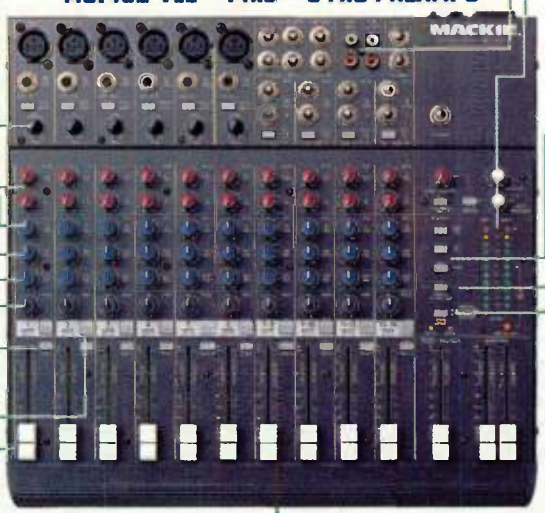
Built-in power supplies — no outlet-eating wall warts or hum-inducing line lumps.

Phantom power so you can use high quality condenser microphones.

XLR outputs with mic-line level switch (along with 1/4" TRS outputs on top panel).

MS1202-VLZ • 12x2 • 4 MIC PREAMPS

MS1402-VLZ • 14x2 • 6 MIC PREAMPS



All inputs & outputs are balanced[1] to cut hum & allow extra-long cable runs, but can also be used with unbalanced electronics.

[1] except RCA tape jacks, headphone jack & inserts.

VLZ (Very Low Impedance) circuitry first developed for our 8•Bus console series dramatically reduces thermal noise & crosstalk in critical areas.

Control Room outputs feed monitor speakers without tying up the headphone jack.

BOTH MODELS HAVE:

Radio Frequency Interference protection via metal jacks & washers plus internal shunting capacitors.

High-output headphone amp can drive virtually any set of phones to levels even a drummer can appreciate.

Aux 1 Master level control & pre/post switch.

Effects Return to Monitor switch folds Aux Return 1 effects into a stage monitor mix via Aux Return 2 level control.

RCA-type tape inputs & outputs.

Peak-reading LED meters with Level Set LED combined with In-Place Solo allows fast, accurate setting of channel operating levels for maximum headroom and lowest noise floor.

Control Room/Phones Matrix adds monitoring, mixdown & metering flexibility. Select any combination of Main Mix, Tape In and Alt 3-4 signals for routing to phones, Control Room outputs and meters. Can be used as extra monitor or headphone mix, tape monitor, or separate submix. Way cool.

Tape Assign To Main Mix assigns unbalanced RCA tape inputs to main mix. Besides its obvious use as a tape monitor, it can also add an extra stereo tape or CD feed into a mix or play music during a break.

MS1402-VLZ only: Global Solo Mode selects PFL or AFL solo modes.

Solid steel chassis & thick fiberglass internal circuit boards resist abuse.

Channel inserts on mono channels.

Not every production project requires dozens of input channels and boatloads of buses.

But doing ANY audio job well requires a mixer with superb specs...and the right combination of useful features.

Our MicroSeries 1202-VLZ and 1402-VLZ might have small footprints, but when it comes to performance, they walk very tall.

Since both are basically chips off our blockbuster 8•Bus Series consoles, they have big-board specs: greater than 90dBu signal to noise ratio, less than 0.005% distortion, more dynamic range than compact discs and frequency response that's only down 1dB at 60,000 Hz.

Why own an imitation when you can own the brand of compact mixer that serious pros prefer. Call for info today.

©1996 MACKIE DESIGNS INC.
ALL RIGHTS RESERVED

MACKIE™

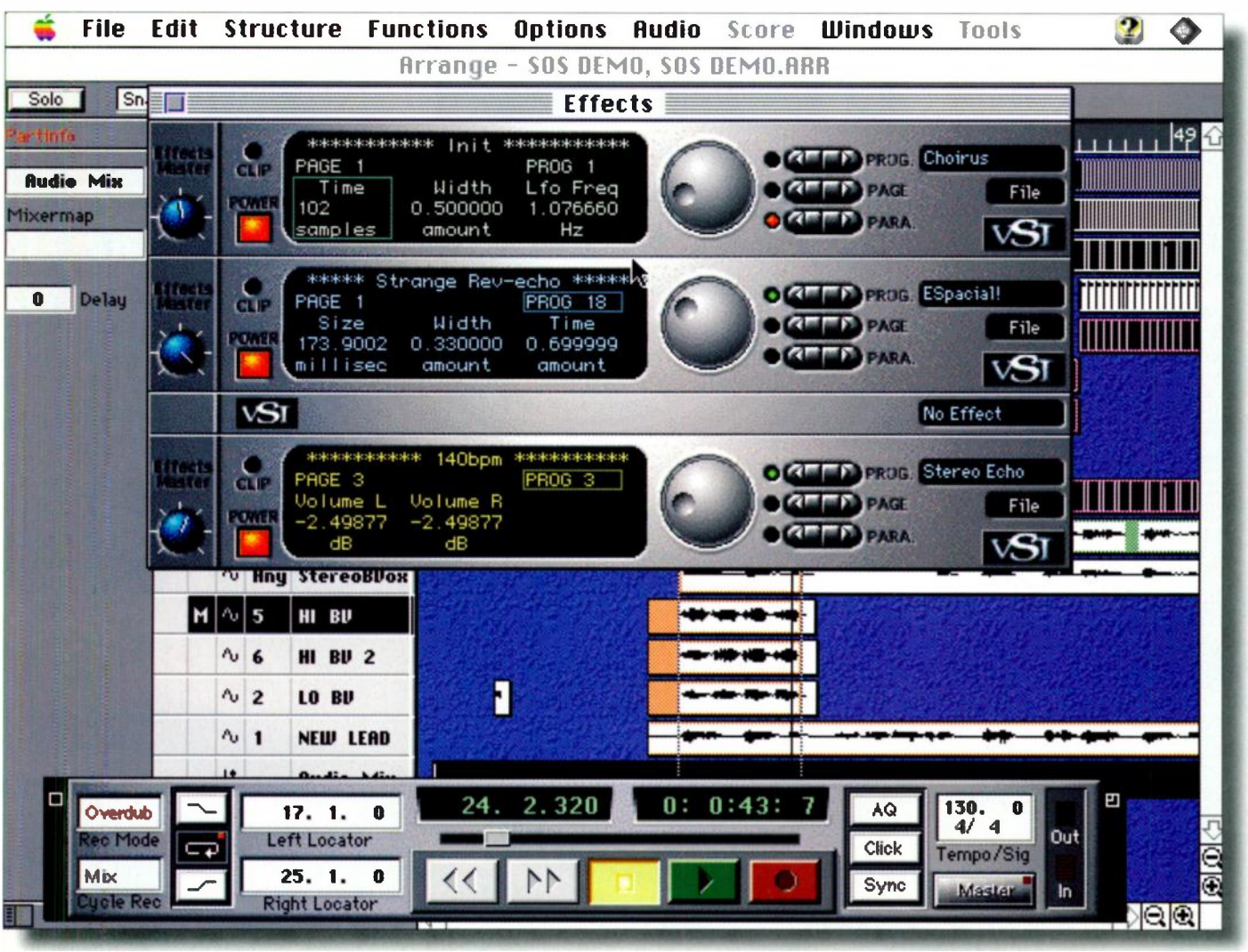
Mackie Designs Inc. • USA • Represented in the UK by Key Audio Systems Ltd.
Robjohns Road • Chelmsford • CM1 3AG • Essex • 01245 344001 • 01245 344002

Welcome to Virtua

STEINBERG *CUBASE VST* AUDIO SEQUENCER FOR APPLE POWER MAC

Software sequencers are in a state of transition. When audio was introduced to MIDI sequencers, it was seen as a premium addition for top-of-the range packages. Recently, however, audio has started to establish itself as standard even on lower-cost software. Opcode's *Vision*, formerly a MIDI-only sequencer, now features audio, though in a more basic form than the company's own flagship, *Studio Vision Pro*. And with the launch of Steinberg's *VST* (Virtual Studio Technology) for Power Macs, audio now figures even in the standard Power Mac version of *Cubase* and *Cubase Score*, as well as in *Cubase Audio*. Anyone buying *Cubase* for the Power Mac now buys *VST*, an audio *and* MIDI sequencer which exploits this machine's 16-bit audio capabilities, though for those who don't want audio or don't have a Power Mac, there's a non-*VST* disk set too.

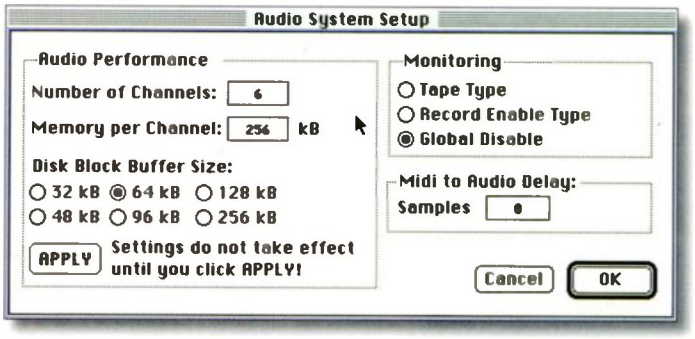
So does *VST* simply bring audio recording to the parts of the *Cubase* range which didn't previously have it? As welcome as that would be, given that the price has remained the same, *VST* actually adds more. In short, it takes the sophisticated MIDI sequencing of *Cubase*, plus most of the audio recording and editing facilities of *Cubase Audio XT* (excepting Digidesign TDM support), and adds comprehensive parametric EQ and four virtual effects processors — reverb, chorus, autopanner, and stereo delay. You can now sequence MIDI parts to your heart's content, manipulate them with powerful editing facilities, then add a number of channels of audio material, which can be EQ'd, effected, and mixed — all within your Power Mac, with no need for an audio recording card, or external effects or EQ. The final track is then output from the Mac's stereo output for mastering. The only external gear you'll need



is MIDI instruments, a mixer (more later on this), an amp and speakers, and/or headphones.

Surely there's a catch? Well, Power Macs' audio connections are on stereo mini-jack sockets, not the most robust or high-quality of audio connectors. Its stereo input means that you'll only ever be able to record two audio channels at once, and the stereo output means that your finished work will have to be mixed inside the computer. You also have to rely on the Power Mac AD/DA converters, which won't be audiophile quality. In a pro studio, these would be real limitations, and you'd want to spend the money on additional hardware to ensure the highest audio quality.

However, not all of us have pro studios. Thousands of musicians have modest 'project' setups, where they produce demos and even budget releases. These are the kind of people who'll be interested in Virtual Studio Technology.



The System Setup dialogue: this helps you set a realistic number of audio channels for your system.

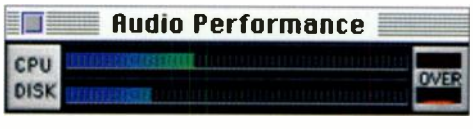
lity

This year's show-stealer at Frankfurt's Musik Messe, Steinberg's* Cubase VST *isn't just another 'MIDI plus Audio' sequencer — it adds the effects and processing options hitherto only available in expensive TDM systems, for the same price as the previous, non-audio version of* Cubase. *Is this the perfect desktop recording environment? DEREK JOHNSON & DEBBIE POYSER find out.

HARDWARE & INSTALLATION

The first requirement is a Power Mac, running System 7.5 or higher (but not 7.5.3 at the present time). Steinberg recommend the 90MHz 7200, and the minimum machine they say you should use is the 6100. The speed of your computer is one of the factors that governs how many audio channels you'll be able to play back, and how many simultaneous EQs and effects you can use. Other factors are hard disk speed and installed RAM. The minimum *free* RAM for *VST* to run is 7Mb (it won't even stoop to installing with less than 16Mb total RAM!), but the more RAM, the more audio channels you can have. You need a 256Kb 2nd level cache memory, which should cost around £120-150, and some kind of data backup method will be required.

Installation is easy, using Master Disk Authorisation copy protection, and the next step is deciding how many audio channels to assign to your system. This figure is quite fluid, depending



The Audio Performance window monitors the load on your CPU and hard disk.

on your hardware and memory, but *Cubase* helps you set a realistic number. Enter a number of channels in the Audio System Setup (pictured above right) dialogue and set an amount of memory per channel from a preset list — the more the better, as far as audio performance is concerned. You also have to set a disk block buffer size, which governs the buffer size used when reading and writing data from/to the hard disk; the two figures are intimately related. If you set too many channels for the RAM available, *VST* alerts you. Then you have to juggle channels and memory allocations.

According to the manual, a Power Mac 7200/90MHz machine with enough free RAM for the recommended memory assignment (around 12Mb), working with its internal drive, should be able to handle 16 audio channels and 32 activated EQs. With a 9500/133 and a large, fast hard drive, you might get as many as 32 channels and 64 EQs. On our 75MHz 7200, with 16Mb of RAM, we were able to run six channels of audio with two EQs each and all four effects processors. We didn't even assign the recommended amount of RAM, giving *VST* 10Mb instead of 12Mb.

An 'Audio Performance' window (shown left) with CPU and disk load meters can be left onscreen at all times, and if you're overdoing it for your system, red Over indicators light up. However, by then you may already have heard the distortion which means you need to pull something back — turn off an EQ, for example.

GETTING STARTED

First, plug a sound source into the Mac's input. Many musicians already have a multitrack mixer, and will feed sound sources into the Mac via that — which is advisable, because the Mac's input is set up for mic-level signals and is quite fussy about incoming levels. You'll probably have to make a ▶

pros & cons

STEINBERG
***CUBASE VST* £329**

pros

- Audio now standard across *Cubase* range.
- Quite comprehensive waveform editing.
- Effects and EQ highly usable, with all changes occurring in real time.
- Uses Power Mac hardware, so no need for any extra audio cards.
- Surprisingly good sound quality.

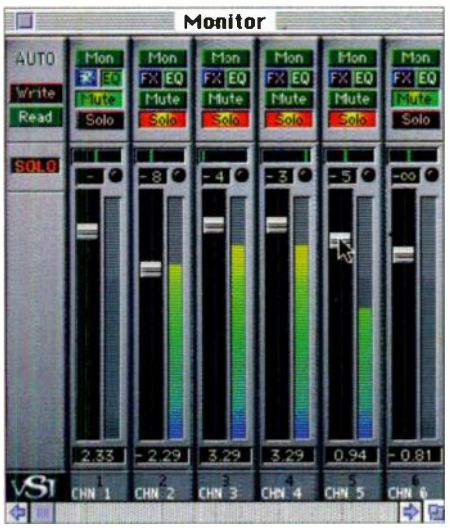
cons

- Unhelpful manuals.
- Audio side sometimes feels a little 'bolted on'.
- Accurately changing parameters in effects windows is difficult.
- Care required when dealing with input and playback levels (though this is more a fault of the Power Mac than *Cubase VST*).
- If you want more than a few audio channels, be prepared to invest in lots of RAM.

summary

This is a real plug in and play system. Almost as fast and easy to use as a cassette multitracker, but far more sophisticated — and with the benefit of digital sound and no loss of quality due to bouncing. You need an up-to-date Power Mac to run it, but even without the effects and EQ, *VST* would have been good value for its low-cost audio and MIDI integration; with these facilities, it's unmissable.

SOUND ON SOUND



The Monitor Mixer for six audio channels. It has all the usual mute, solo and pan facilities, plus EQ and FX buttons for accessing and switching off EQ and effects for each channel. The little pan sliders above the faders can be automatically centred by Command-clicking on them, and faders can be set to 0dB by the same method.

The Master Fader window can be set to monitor the level of incoming signals, by selecting 'Input Meter'.

▶ special lead to connect your mixer to your Mac; we noticed that our Power Mac's socket recesses are slightly too small for the average mini-jack to fit perfectly. The plug appeared to fit, but produced unusual levels of noise because of incomplete electrical contact. We were dismayed at this noise until we diagnosed the problem. You may have to obtain mini-jacks with extra-skinny barrels, or *carefully* shave a little off the ones you have. Even with a correctly-fitting connector, there is some hiss from the Mac output, but at normal volume, it isn't even as bad as the average synth or effects processor.

Recording is initiated from the Arrange window. The Track Class menu allows you to select an Audio track; opening the Track Inspector box then reveals Monitor and Record Enable buttons. Record Enable readies a track for recording, and you then select an audio channel to record with. The Mac assigns signals from the left input to odd-numbered channels and those from the right input to even-numbered channels. Stereo or other two-channel tracks can be recorded: set their channels to 'Any' in the Inspector.

Record Enabling also enables monitoring for the selected channel. *VST* offers three monitoring types: Tape Type and Record Enable use the Mac's hardware for monitoring, but its design creates a buffering delay between the input signal and the same signal being monitored by *VST*'s mixer. If you're recording 'live' audio, like someone singing, this can be enough to throw their timing, and in this case, it would be better to select the 'Global Disable' option. This turns off Mac monitoring and lets you use your own mixer for monitoring instead.

To help you set the correct input level, *VST* has a nice-looking Monitor Mixer (shown above left) with a Master Fader window (shown left) whose meters can show signal input level. This should not exceed 0dB: avoid going into the red and lighting the clipping LEDs. If levels are too high, your instinctive reaction will be to pull down the on-screen faders. However, this won't help, since you cannot set input levels within *VST*: you have to do it at source.

The Monitor Mixer is also used for final mixdown. It can be automated via a separate 'mix' track, which records all mixer movements, including mutes, solos, and EQ and effects changes. Complicated mixes can be assembled a track at a time, and you can even edit individual mix events using List Edit.

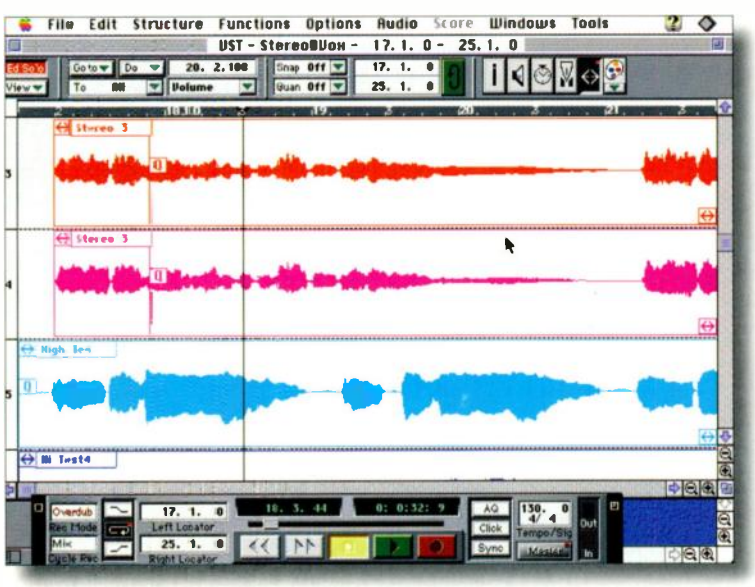
RECORDING AUDIO

When you enable recording for a new Song, *VST* asks where to store the audio Files. You can't create a new folder at this point, so make a habit of creating one for each project before starting to record.

With input level set, recording can commence. A selectable Pre-record parameter starts recording early to catch the attack of sounds starting before a bar-line, and if you fluff part of an otherwise good recording, Punch-in (programmable or manual) is easy to set up and produces flawless results. During recording, *VST* acts very much like tape, and the usual transport controls navigate around an audio track, but it also has some great extra features. Cycle Audio, for example, allows you to set up a loop of part of your song and record multiple consecutive takes of the same part. In the Audio Editor, the takes are ready-stacked, and you can play them back individually to find the best parts of each, for assembling a composite take. This is great when recording vocals or guitar solos. When you've identified the best bits, you can delete the rest, leaving portions of audio scattered across various takes. Selecting 'View by Output' then shows them all together, looking like a single take.

VST lets you record as many audio tracks as you want (disk space permitting), one or two at a time. What you can't do is *play back* as many as you like at the same time. The important restriction is audio *channels*. Tracks are played back by channels, and if you only have eight audio channels in your system, that's all you'll be able to play back at one time. You could play back more, however, by using the channel space cleverly. For example, if one track on channel 2 contains a vocal which occurs during choruses, use the space in between for another track containing a guitar part which occurs during verses. The guitar track would also be set to channel 2, and the result would be two tracks playing back on one channel. If the audio on those tracks overlapped, however, only one track would sound, as they would be fighting for the same channel.

Another way of stretching available channels is Audio Mixdown — like 'bouncing down' with multitrack tape. It re-records the contents of multiple tracks playing on several audio channels onto another track playing on one channel, freeing up the original channels. With *VST*, you don't even have to keep a spare channel to bounce ▶



The Audio Editor, showing three channels of audio (see page 94).

EMIS

The place for keyboards

Ex Demo Clearance
(Cash Prices)

Alesis Quadrasynth Plus Rack	£649
Alesis Monitor Two	£539
E-mu Darwin	£2375
Korg Trinity Plus	£2299
MOTU 7S MIDI controlled Mixer	£299
Quasimidi Cyber 6	£849
Yamaha Pro Mix 01	£1499
Yamaha VL1 Version 2	£1999
Yamaha MT8X	£799

EMU
Orbit • Ultra Proteus
E4 Keyboard • ESI32 SCSI
E64 • E4 • Darwin

QUASIMIDI
Raven • Cyber 6
Quasar • Technox

WALDORF
Pulse *analogue expander*

NOVATION
Bass Station • Bass Station Rack • Drum Station

Mackie
Full range of
Mackie Desks

FATAR
Studio 49 • Studio 610
Studio 900
Studio 1176
Studio1100

Computer Software
Emagic • Steinberg • Twelve Tone
PG Music • Passport • Hohner

KORG
Prophecy • Trinity Plus
i5S • X3 • X5D
X5DR • 05R/W • ih
C505 Digital Piano

YAMAHA
W7 • CS1x • QS300 • SY85 • PF85 • PF-P100 • PF-P150
SU10 • TG100 • MU50 • MU80 • QY22 • RY8 • RY20 • DB50XG
MT50 • MT4X • MT8X • MDF2 • REV100 • NS10 • GC2020
ProMix-01 • P1500, P2500 & P3500 power amps
Mixers, Microphones & Headphones
Full Range of PSR Keyboards

CLAVIA
Nord Lead now version 2
Nord Lead V2 • Nord Rack V2
Nord Expander
8 Voice
expansion

GENERAL MUSIC
We have bought the last shipment ever of the amazing S2 and S3
S2 Turbo £1299 & S3 Turbo £1399
including FREE access to the enormous EMIS Software sample library
WX2 plus • CD20 • CD30 Keyboards • RP1 & RP2 Digital Pianos
Home organs. Mixers. LPS & MP Speakers

KENTON
MIDI to CV converters
Pro Solo Pro-2 Pro-4

SPL
The Vitalizer
effects processor
only £349

Used Instruments

Oberheim Matrix 12	£2999
Wurlitzer EP200a	£199
Casio FZ1	£599
Ensoniq ESQ1	£349
Yamaha DX7	£299
Ensoniq VFX SD	£599
Yamaha DX711D	£349
Yamaha DX711s	£325
Yamaha DX27	£125
Roland Juno 6	£199
Logan String Machine	£125
Casio CZ1000	£149
Korg Poly 800 MkII	£199
Korg T3	£799
Casio HT3000	£125
Kawai K11	£499
Casio VZ1	£325
Yamaha DS55	£249
Korg Micropreset	£75
Siel Expander 80	£149
Korg EX800	£125
Korg DS8	£299
Jen SX2000	£75
Roland SH1000	£149
Roland SH2000	£125
Korg Poly 800	£149
Roland RS202 String Machine	£149
Yamaha TX1P Piano	£149
Yamaha EMT10	£99
Yamaha FB01	£85
Roland Sound Canvas SC55	£275
Dream GMX-1 General MIDI module	£99
Kawai Q80 (32 track sequencer/disk)	£299
Yamaha QX5 (8 Track sequencer)	£149
Casio SZ14 Track sequencer)	£85
The Kat DK10 Controller	£299
Sequential Drumtraks	£199
Emu Drumulator (MIDI)	£149
Roland TR626	£125
Alesis HR16	£125
Fostex X15	£99

The Old School House, Cossham Street, Mangotsfield, Bristol, BS17 3EN
Open 9am to 5:30pm Monday to Saturday. Closed Wednesday, Other times by appointment

0117 956 1855

ALL OUR PRICES INCLUDE VAT

Buy now Pay Later
10% deposit, balance payable in 6 months time at no extra cost

MANUAL MADNESS

Cubase Score VST comes with four manuals, and we think it's time for a rewrite. For a start, there's only one index for all four — if you're working with the audio manual, you have to hunt out the 'Getting Into The Details' manual just to use the index. The audio manual also constantly sends you to the MIDI manuals for full explanations of procedures which are common to the MIDI side. On occasion, it doesn't even say which manual to look in, referring to "the main manual". Certain information isn't in the manuals: some important stuff is covered in the 'electronic' references — read-me files that come with the software. And if you find yourself searching for a list of keyboard shortcuts, save yourself the effort: that's in one of the electronic references too. The audio manual also skips around annoyingly, with information about a single feature scattered over various chapters.

Some features are called by confusing names: why call two different features Mixdown and Audio Mixdown? (The latter mixes audio from several channels to one or two audio channels, creating a new audio File; the former simply moves audio events from several tracks onto one track, so you can group them together.) Audio Mixdown should have been called Digital Bouncing or something similar. It's even listed in the audio manual as 'Bouncing (Audio Mixdown)'! And why call a feature which Unmixes tracks, Remix?

On the positive side, *Cubase* manuals are now properly-bound books rather than ring binders, and are decently printed.

▶ onto, because as soon as the original tracks are muted or deleted, their channels become available for playing back other tracks. Audio Mixdown bounces can even be in stereo, with all level, pan, EQ and effects settings intact.

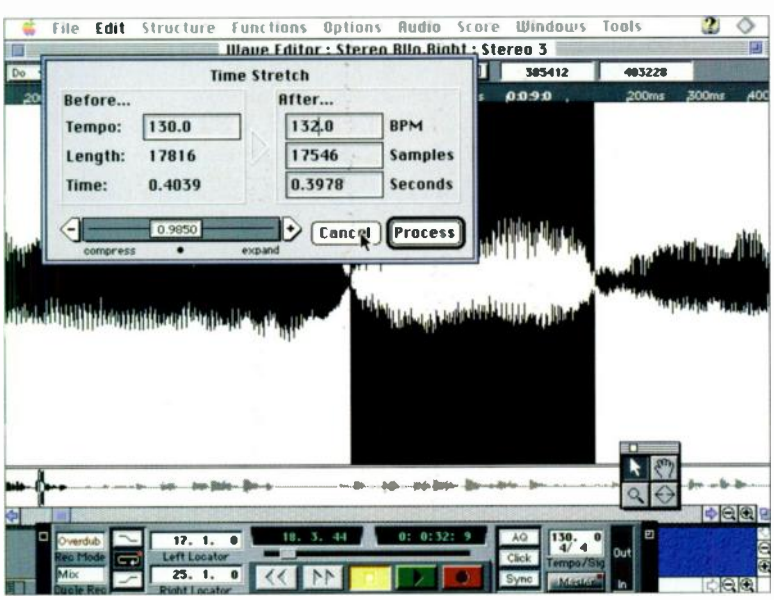
Audio recordings show up on the Arrange page alongside MIDI tracks. You can use many of the same tools you'd use on MIDI data to move, copy, split and paste the audio, but for more detailed editing, you'll probably use the Audio Editor.

THE AUDIO EDITOR

This is the best place for audio track trimming and assembly — cutting a long recording into smaller Segments, masking parts of the audio with 'Inset Handles', editing volume and pan curves, and working with 'Q' (Quantise) and 'M' (Match) points.

Cubase has powerful features for quantising audio events in a similar way to MIDI events. However, since audio, unlike MIDI data, doesn't automatically contain reference points, the audio quantising procedure is inevitably more complex than MIDI quantising, since reference points have to be created. *Cubase* inserts 'Q-points' at sensible locations when you record, and when you perform operations such as splitting audio into smaller parts and manually punching in. There is only one Q-point per audio event, and they are used by the program to snap events to musical positions when you move audio, and also for quantising. Though *Cubase* inserts them, you can edit them. Match points are markers *inside* an audio event, which you or *Cubase* can generate. There can be many of these for one event; they should correspond to significant points, like beats in a drum part, and are used for creating audio groove templates, and Match quantising of audio to tempo, audio parts to MIDI parts, or even audio parts to other audio parts. These audio quantising features would be invaluable in certain situations, and it's nice to know they're there, but they are complex to use.

One operation you're likely to perform is deleting silence from an audio part, to save disk space. There is a special function for this, called Banish Silence, which is not very well explained in the manual. The waveform appears in a dialogue box with a pair of horizontal and a pair of vertical lines superimposed on it. You can move these lines so that they set a time and level threshold, selecting a 'slice' of the waveform that you consider corresponds to silence. *Cubase* then finds sections of waveform fitting the description and nukes 'em. However, the waveform display in the dialogue is small and a bit fiddly to use. We thought it more fun to simply blow the waveform up in the Audio Editor, go through it finding silent bits, which are quite obvious, and then deleting them. This doesn't take long for an average track. Deleting is done using the Backspace/Delete key, which removes the selected area of waveform from the display, or doing the same while holding down Command, which deletes it from disk too. Audition the waveform here by clicking on it with the magnifying glass, and scrub audio by dragging the mouse over the waveform in either direction. Auditioning is great, but scrubbing sounds like Pinky and Perky on speed! To edit several audio parts at the same time, selecting them in the Arrange page and then double-clicking on one of them displays all their waveforms in 'lanes' in the Audio Editor.



The Time Stretch window. You can set stretch amount in tempo, samples, or absolute time.

VST AND PRO TOOLS

The PCI/NuBus Power PC/680n0 situation is very complex, and deserves some explanation. Pre-Power PC Macs cannot run *VST*, and Macs with PCI expansion slots (all Power Macs now in production) cannot drive existing Pro Tools systems, which require the older NuBus expansion slots. So, what of NuBus Power Macs, such as the 7100, which could conceivably drive a Pro Tools system *and* run *VST* software? Sadly, although you might harbour dreams of running TDM processing plug-ins in conjunction with *VST* effects and EQ, the two will not run together. *Cubase Audio XT* is still in existence for Pro Tools owners, and is now being bundled with *Cubase Score VST* free of charge, so that NuBus Power Mac owners can access *VST* technology as well as Pro Tools — but only via separate software packages! However, Steinberg's UK distributors Harman say that it should be possible to address the hardware of Digidesign's Audiomedia cards (Audiomedia II for NuBus Macs and the new Audiomedia III for PCI Macs) from *VST* via the Apple *Sound Manager*. Incidentally, if you haven't already, check out the review of the new Audiomedia III PCI card on page 104 this month.

THE WAVE EDITOR

Audio Editor operations are non-destructive of Files on disk but Wave Editor operations work directly on the audio File. You can Undo your last operation, but going further than that will change the audio File permanently. So if you want to experiment in the Wave Editor, duplicate the File first and work with the duplicate. Once in the ▶

Introducing the coolest upgrade path in all of digital audio.

Pro Tools® digital audio software is already the overwhelming choice of professionals. Here's one more reason to use it: Now Pro Tools comes in a wide range of products, starting at the amazingly low price of £599 (Ex VAT)*. With each upgrade, you'll actually build upon the value of your system. So you're not just making CDs and soundtracks. You're making a sound investment, too. For free Pro Tools product information, just call **0800 898331**.

PRO TOOLS

now available for **PCI-based Macintosh Systems**

Pro Tools® III

The ultimate workstation, it accommodates a wide variety of realtime Plug-Ins. 16-48 tracks of record/playback. 8-64 channels of high-quality analog and digital I/O.

Pro Tools Project™

All the capabilities of PowerMix and Audiomedia II or III, plus 8 tracks of simultaneous record/playback and 8 channels of analog and digital I/O.

Pro Tools with Audiomedia II™ or Audiomedia III™

Get 2 channels of high-quality analog and digital I/O, as well as entry to an entire family of DSP Plug-Ins. Audiomedia III is designed to work with PCI-based Power Macintosh computers.

Pro Tools Software with DAE PowerMix™

An amazing value that turns your Power Macintosh into a multitrack digital workstation, with no additional hardware.

Pro Tools PCI Preferred Dealers:

Audio Engineering, Dublin 03531 6717600 Digital Village, Barnet 0181 440 3440 MediaSpec, Glasgow 013552 72500
Natural Audio, Herts 0181 207 1717 Syco, London 0171 625 6070 The Synthesizer Company, London 0171 258 3454

digidesign
A Division of Avid AVID

(RETAIL PRICE EXCLUDING VAT £703.81)

©1996 Digidesign, a division of Avid Technology, Inc. All features and specifications subject to change without notice. Audiomedia and Pro Tools are trademarks of Digidesign.

COPIES & DUPLICATES

In *Cubase VST* there's an important difference between copying audio events and duplicating audio Files. There are two kinds of copies of audio events: real copies and ghost copies. Neither of these duplicates the actual audio material on disk in any way, and if you use a copy when working in the Wave Editor, permanent changes you make there will still change the audio File on disk. To really *duplicate* audio, creating a new File on disk, you *must* use 'Duplicate File' in the Pool. Then you'll be free to experiment with the duplicate, safe in the knowledge that the original is unscathed on disk. The audio manual refuses to hammer home the difference between copying audio events and duplicating audio Files. Indeed, when you look up Duplicating in the contents list, you're directed to a page which explains making copies of events!

▶ Wave Editor, you can zoom to single sample level, for detailed editing, and apply DSP functions: these include Fade-in and Fade-out of events; creating Crossfades between events; Inverting Phase; Normalising (to boost a quiet recording's level); Quietening (to reduce the level of a recording); Reversing; and Silencing (replaces a portion of audio with silence).

Rather more fun Wave Editor features are Pitch Shift and Time Stretch (see screen window on page 94). Briefly, Pitch Shift changes the pitch of an audio File without altering its length, and Time Stretch alters length without affecting pitch. Pitch Shift can change the key of a whole vocal, say, or just fix wrong notes, and it produces surprisingly good results as long as you make small changes. A shift of one semitone up sounds natural, and two semitones would probably be OK on a backing vocal in a mix. A downwards shift of two semitones is quite usable. Using Time Stretch for moderate tempo changes is effective too, but note that neither of these processes works terribly well on long stretches of complex audio.

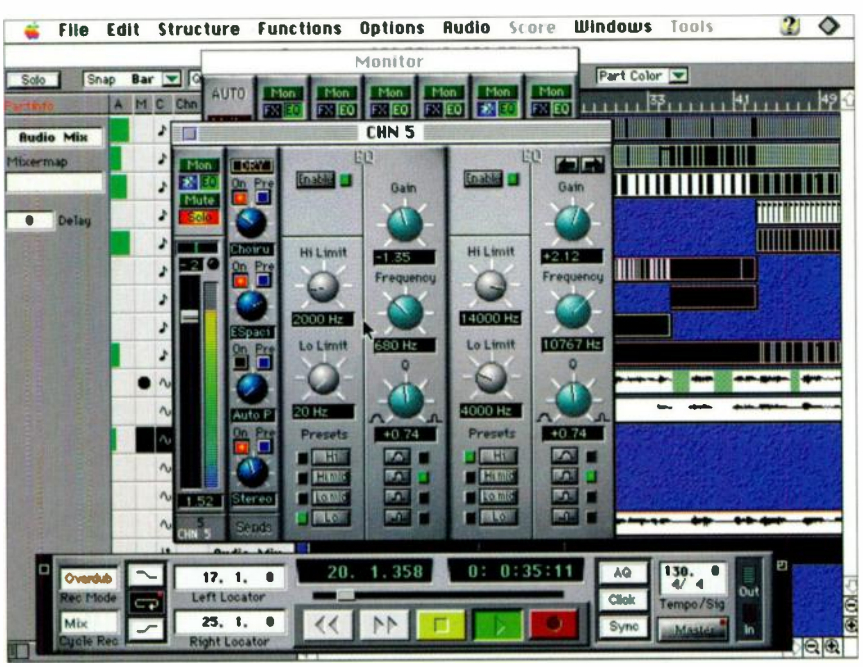
More sophisticated pitch-shifting and timestretching is available from Steinberg's *Time Bandit* (an early version of which was reviewed in *SOS* April '94). If you have it installed, it's easily accessible from within *VST*; a couple of *VST*'s audio and tempo matching operations actually require *Time Bandit*.

THE POOL

When you've made several recordings, the Pool, a kind of database for keeping track of recordings, comes into its own. On opening it, you'll see a list of audio Files. Clicking on the arrow next to a File shows its 'Segment' list. Every File has at least one Segment, which is an instruction to play a portion of the File. A Segment could play a whole File, or just part of it, and when you chop a recording into smaller bits, they become Segments in that File's Segment list. Because various operations create new Segments, the Pool can become crowded with Segments which may not be used in the current Song. The 'Purge Segments' function finds Segments which are not referenced, and deletes them from the Pool — although this doesn't affect the audio Files on disk. The Pool offers other File and Segment deletion functions, as well as showing where Files are stored, when they were recorded, their length, start and end points, mono or stereo status, and how often they're used in the Song. File renaming should be done here: if you rename Files in the Finder, *Cubase* may not be able to locate them next time the Song is opened. Though you can manually re-locate Files and tell *Cubase* their new names, it's best to avoid the problem altogether. It's also possible to drag Segments from the Pool into the other editors.

Administering recordings is easier if you understand what happens to Files when you delete them. To tidy a messy Pool, without actually deleting audio Files off disk, use the Delete key. Using Command-Delete removes Files from the Pool list *and* the hard disk — only do this if you're sure you don't want them. Another command to handle with care is Delete Unused Files: this finds Files not used in the current Song and removes them from the Pool and the disk.

The relationship between Files and Segments isn't too hard to comprehend (Files are full audio recordings, saved on disk; Segments are simply specifications for playing sections of Files), but there's another term to get used to: Audio Events. You could compare these to MIDI Note On messages for audio, since they tell a Segment where to start playing. One operation that illustrates the distinction between Audio Events and Segments is making an Audio Event play back a different Segment to the one it's currently playing. Clicking on an Event in the Audio Editor, while holding down Command and Option, brings up a menu listing all the Segments in that audio File. You can then choose another Segment for the Event to play — a verse vocal Segment could be played back by the Event that's currently playing the chorus vocal Segment. Fortunately, Audio Events are pretty much invisible to the user, and you can usually ignore them and concentrate on working with Segments.



EQ setup window and effects sends: there are two EQs showing here, but you can have as many as four per channel if your system permits it. The 'Dry' button at the top of the effects send column kills all sends for that audio channel.

EFFECTS & EQ

Apart from support for Power Mac audio, *Cubase VST*'s other brand-new features are its four effects processors and comprehensive parametric EQ (shown left). Steinberg are encouraging third-party manufacturers to develop *VST* plug-ins, so more effects and processors should be available soon.

VST's effects are accessed from the Monitor Mixer, where four effects 'sends' route pre- or post-fader signal from each channel to the effects. They're presented in a 'rack', and are very nicely ▶

READ THE SMALL PRINT TO SAVE MONEY

SAMPLER POWER PACKAGES

FREE SCSI Zip Drive and 100Mb cartridge with selected samplers listed below:

EMU ESI 32 8Mb RAM with 100Mb Zip Drive ..... £CALL!
EMU E64 with 10Mb RAM 850Mb Internal HD ..... £CALL!
EMU E64 with 32Mb RAM ..... £CALL!
EMU E64 with 64Mb RAM ..... £CALL!
NEW EMU EIV KEYBOARD ..... £CALL!
EMU EIV with 32Mb RAM..... £CALL!
EMU EIV with 64Mb RAM..... £CALL!

FREE ZIP

WE HAVE LIMITED STOCK OF THESE MONSTER DEALS SO HURRY!
If you have a particular spec, call us now for the hottest prices

AKAI SAMPLER POWER PACKAGES
AKAI S2000 10Mb RAM ..... £999.00!
AKAI S2000 10Mb RAM and SCSI Zip Drive ..... £1199.00!
AKAI S3000XL 10Mb ..... £CALL!
AKAI S3200 XL 18Mb and SCSI ZIP DRIVE ..... £CALL!
AKAI S3000XL 18Mb with Effects Card ... £CALL!
AKAI S3000XL 32Mb WITH ZIP DRIVE . £2299.00!
AKAI S3200XL 32MB with ZIP DRIVE .. £3349.00
AKAI CD 3000i 8Mb Sampler **LAST FEW** ..... £1925! **FREE ZIP**
KURZWEIL K2500R with sampling option and 32Mb ..... £CALL!
NEW KURZWEIL 2500 Keyboards from . £3149.00
BUY ANY OF THE ABOVE SAMPLERS AND HAVE FREE ACCESS TO OUR SAMPLE LIBRARY.
NEW YAMAHA SU10 Sampler at only . £299.00 **with PSU and next day delivery***
CHECK OUT THESE PACKAGE DEALS:
YAMAHA SU10 with Yamaha SY85 with 2.5Mb Sample memory .. **£1079.00 inc next day delivery***
PEAVEY DPM3 keyboard 512k sample memory with sample editing facility and Yamaha SU10 Sampler.. **£999.00! INCLUDES FREE LIBRARY**
ROLAND S760 BUNDLE with 8 outputs, digital i/ocard with Monitor and 32 MB plus the DA-400 digital to analog converter for **UNDER . £2500.00** call for the exact price on this very limited offer!

DISK DRIVES
Iomega Zip drive with cartridge and cable . £199.00
Iomega JAZ drive 1Gb removable.. IN STOCK £CALL
Syquest 135Mb EZ drive with cartridge and cable £215.00
230Mb Optical drive with 5 cartridges . £CALL!
Fixed External drives from £149.00

DIRECT TO DISK RECORDING

COMPLETE APPLE MAC/DIGIDESIGN SYSTEMS. EXAMPLE:
S/H Apple Quadra 650 20/500/CD New 14" Monitor extended Keyboard and Mouse with Digidesign Audio Media II card/Logic Audio 2. 1Gb Hard Disk **£2999.00 inc VAT. Call for pricing on other specs.**
New Roland VS880 IN STOCK SUPERB 8-TRACK UNIT.....**CALL FOR PRICING**
NEW FOSTEX D80 8-track direct to disk recorder. This new recorder from Fostex can be linked together to create a 24-track digital SYSTEM for under **£4500.00!**

FOSTEX DMT8 Back direct to disk portastudio in stock. Home studio quality like never before for only **£1399.00** inc next day delivery*.
EMU DARWIN with internal 1Gb Hard Disk 8 track system in stock .....**PRICES FROM £2750.00!!**
Special deals on AKAI DR8 with MT8 Remote .....**£CALL**

KEYBOARDS

NEW EVOLUTION MIDI 49 NOTE KEYBOARD WITH PC SEQUENCER SOFTWARE FOR ONLY.....£119.00!

KORG TRINITY
The silver bird with touch screen and optional direct to disk recording...**IN STOCK**

KORG TRINITY PLUS
Only gets better – A Trinity with a built in Prophecy!.....**IN STOCK AND ON DEMO.**
KORG PROPHECY Mega mono synth.
NEW ALESIS QS6 4 voice synth - comes with free CD ROM for Mac & PC loaded with software ....**£799.00! inc next day delivery***
ROLAND XP10 real time filter control....**£CALL!**
ROLAND XP50 our best selling workstation on demo, loads of expansion cards available.
ROLAND XP80 76-note version of above in stock
KORG X3 – NEW LOW, LOW PRICE! Korg X5 and X5D in stock.
Yamaha SY85 with 2.5Mb sample RAM **£799.00 inc free next day delivery***.
Full range of **FATAR** controller keyboards in stock.
NEW ROLAND A33 MIDI KEYBOARD.....**£369.00**
Roland RD500 NEW LOW PRICE £1699.00.

HOT NEW ANALOG

NEW YAMAHA CS1 real time controller synth keyboard **£599.00**

NEW ROLAND MC 303 it's 303-909-808 and SH '01 all in one box ! PLACE YOUR ORDER NOW - if you wait you'll be dissappointed **£ 585.00**
NEW EMU ORBIT dance module 512 presets Emulator 4 filters six outputs unique 'beat mode' need we say more ? dance your socks off for only **£869.00**

BASS STATION RACK in stock yours for **£339.00**
NEW WALDORF PULSE IN STOCK RRP ..... **£599.00 £CALL**
NEW NOVATION DRUMSTATION 808 & 909 in a rack for just **£419.00** inc next day delivery*
AKAI SG01v Vintage synth module .....**£269.00** inc free next day delivery

MODULES

AKAI MODULES IN STOCK £299.00!
KURZWEIL MICRO PIANOS IN STOCK
Call for the hottest deal
ROLAND EXPANSION Modules in stock.
ROLAND SC50 Sourd Canvas .**£479.00** inc free next day delivery*.
PEAVEY Spectrum Filter Modules .....**DEAL!**
PEAVEY Spectrum Organ Module .....**DEAL!**
PEAVEY Spectrum Bass Modules.....**DEAL!**
PEAVEY Spectrum Synth Modules.....**DEAL!**
PEAVEY Spectrum Filter Modules .....**DEAL!**
KORG 05/X5DR Modules in stock
Yamaha MU80 64 voices with 32 midi channels .....**£ NEW LOW PRICE**

EMU Classic Keys
EMU Vintage Keys plus

RECORDING

Fostex D5 Pro DAT Machine with 10 free TDK 60 DAT **£879.00** inc next day delivery*
Tascam DA20 DAT Machine with 5 free TDK 60 DATS **£699.00** inc next day delivery*
Tascam DAP1 Portable DAT with 10 free TDK 60 DATS **£1349.00** inc next day delivery*
Sony DTC 60ES DAT Machine with 5 free TDK 60 DATS **£680.00** inc next day delivery*
Lexicon Alex in stock
Lexicon Reflex in stock
Lexicon Vortex in stock
LA Audio CX2 .....**£219.00** in stock
LA Audio GX2..... **£219.00** in stock
Full range of Alesis effects in stock
Aphex Big Bottom .....**£269.00!!**
Alesis Monitor one's .....**£299.00** inc next day delivery*
Alesis Monitor Two's **£649.00**
Fostex XR3 – XR5 – XR7..... **all in stock**
MACKIE MS1202-VLZ in stock.....**CALL!**
MACKIE MS1402-VLZ in stock .....**CALL!**
MACKIE CR1604-VLZ in stock .....**CALL!**
MACKIE SR series 24-track 4 bus.....
Limited Offer.....**£1199.00**
Behringer 24/8/2 Eurodesk. Call for the lowest price around

SOFTWARE

SPECIAL DEALS
SPECIAL LOGIC P6 for friends 2 for the price of 1 **last few – CALL!**
Cubase for PC – LOADS of Steinberg – Emagic – Motu Opcode software for Apple and PC in stock.
Mac and PC MIDI interfaces always in stock.
Time and Space CD Jukebox in store LOADS of CD's in stock.
New Cubase VST for Mac in Stock.....**CALL!**

SPECIAL INSTRUMENTS

Ro and VG8 Guitar simulator in stock on demo.....**CALL!**
Project Music is an exclusive AKAI EWI Wind Synth Centre.

SECOND HAND AND EX DEMO GOODIES

S/H Roland S10 Sampling Keyboard with library **£399.00**
S/H Yamaha DX9.....**£189.00**
S/H Roland S550 with moniter and library .....**£ 699.00**
S/H Roland D110 (2 units).....**£289.00**
S/H Akai S900 with library.....**£599.00**
S/H Digidesign Audio Media II card with software.....**£549.00**
S/H Akai S2000 with 10Mb and 200Mb hard disk as new **£1099.00**

SPECIAL OFFER FOR SATURDAY SHOPPERS - SPEND £1000 OR OVER IN PROJECT ON A SATURDAY AND HAVE A FREE INDIAN CUISINE MEAL FOR 2 WORTH £35 - CALL FOR DETAILS

Instant Credit facilities available call for a quote. All major credit cards accepted.
*next day delivery does not include Saturday or Sunday delivery.
INTERNET WEB PAGE: http://www.millhouse.co.uk/project
EMAIL: 100764,2103 @compuserve.com.

PROJECT Music

OPEN TUESDAY TO SATURDAY 10.00 – 6.00

TELEPHONE 0181 570 4444

433 - 437 GREAT WEST ROAD, HOUNSLOW MIDDX. TW5 0BY

MUCH, MUCH MORE IN STORE

VST EFFECTS EDITING PARAMETERS

- ESPACIAL: Room Size, Reverb time, Early Reflections, Output Level.
- CHOIRUS: Delay, Feedback, Width, LFO Frequency, Glimmer, Level.
- STEREO ECHO: L&R Delay Times, L&R Feedback Amount, Link, Balance, Level.
- AUTO-PANNER: LFO Frequency, Width, Waveform, Level.

The Echo has a maximum delay time of one second per channel, or two seconds mono if the channels are linked.

▶ styled, with metallic finish and 3D controls. The effect types are:

- Espacial, an editable reverb.
- Choirus, a chorus/flange hybrid, also fully editable.
- Stereo Echo, a simple programmable stereo delay.
- Auto-Pan, also programmable (see box for effect editing parameters).

Effects can be configured as four of one type, two of two types, or any combination, to a maximum of four processors. Equally welcome are the banks of preset effects, and the ability to save custom effects, individually or in banks.

Speaking subjectively, the quality of the effects is easily as good as standard hardware processors, and all changes can be heard in real time. It's tremendously useful and very intuitive to have effects on tap within an audio sequencer, and now those of us who can't afford a TDM system can feel the benefit! Having four processors gives plenty of scope, but remember that the Audio Mixdown feature mentioned earlier records all EQ and effects settings for audio tracks, thus freeing up effects for 'live' processing — like recording effects to tape in a traditional studio.

Each band of EQ has a frequency range of 20Hz-16kHz. Steinberg have thoughtfully provided four presets — Lo, Lo mid, Hi mid and Hi — for instant access to four bands of EQ in useful frequency ranges. Control is also provided for gain (+/-12dB), centre frequency, and bandwidth. Once again, presets are provided for bandwidth, from wide to very narrow. The EQ is very good,

The Arrange page: audio tracks are shown as waveforms in the lower part of the track display. The Transport bar is at the bottom, and the Track Inspector, left, is where audio channels are selected and tracks record enabled.

and is capable of being as drastic or as subtle as you want, with all results in real time.

THE GOOD & THE BAD

We found odd problems when working with *VST*, but none were insurmountable. Most difficult, perhaps, was getting used to how careful you have to be with Power Mac input levels to avoid distortion. You also have to be a little careful with playback levels. You can boost a signal by up to 6dB, and this is generally plenty, but you may get the odd crackle of distortion if you boost all your audio channels at the same time. Just pull back a fader or two and it cures the problem.

Other niggles include the fact that EQ setup pages are usually accessed from the Monitor Mixer via 'FX' buttons — most people would intuitively click on the adjacent 'EQ' button, but this only works the first time you select the EQ page for that channel; subsequent clicking on the EQ button simply turns EQ on and off. To add to the confusion, the manual states that the EQ button opens the EQ page, while an accompanying diagram indicates the FX button! Also, setting exact values in the effects window with the mouse is incredibly difficult; the manual gives a technique for fine control over parameter dials, but this simply doesn't work well enough on the effects display, and you can't simply type a value into the display window.

In places, it feels as though the loose ends of the audio side aren't completely tied up. For example, the manual says audio tracks can't be put into Group Tracks (as MIDI tracks can) but if you try to anyway, the software lets you go almost all the way there but won't complete the procedure. There's not even an alert to say "Not with audio please!" And even if you save a Song before quitting, when you close down the software, a dialogue asks if you want to save your Song — *Cubase* doesn't sense that you've just done it. Another irritating point is that the manual says explicitly that *Cubase* automatically groups stereo recordings: *it doesn't*, which can be

CUBASE MIDI SEQUENCING IN BRIEF

The MIDI sequencing side of *Cubase* is so well known that there's little point in going into great detail here — check out past *SOS* reviews and features (listed in a separate box elsewhere in this article) for a more in-depth summary of its features. However, for anyone who's never used *Cubase*, here, briefly, is what the program's MIDI side offers. And remember, we're only scratching the surface.

At the heart of *Cubase* is the Arrange window (shown above), where you'll do the majority of your sequence recording and organising. The track list, which includes track names, MIDI routing information and so on, is on the left, with the linear tracks to the right. Each track also has an 'Inspector' box for altering playback parameters, including transposition, volume, velocity offsets, program change numbers, and patch names. The horizontal bars representing MIDI tracks can be pretty freely cut, copied, split and moved around to create the finished product, and MIDI data can be extensively manipulated in the main editors:

- KEY EDIT: a typical piano roll editor, with notes shown as horizontal bars, and a controller information and velocity display underneath.
- LIST EDIT: a list of raw MIDI data, including notes, velocity values, programme changes, and System Exclusive data.
- SCORE EDITOR: using traditional notes and staves. Layout options in *Cubase* are comprehensive, but are enhanced further with *Cubase Score* and *Cubase Audio XT*, both of which rival dedicated notation software.
- DRUM EDIT: a dedicated editor for drum parts, showing notes and velocities as diamonds on a grid.

In addition, Logical Edit and the Interactive Phrase Synthesizer (IPS) offer more esoteric facilities for changing data or creating new parts from old. IPS could be used to create a real-time arpeggiator, for example, while Logical Edit allows you to selectively transform one kind of MIDI data into another. Both are impossible to sum up in a few words.

For studio or film and video professionals, *Cubase* offers a range of synchronisation options, plus a sophisticated Master Track for tempo and time signature changes. Tracks can also be 'time locked'. This feature allows you to use multiple tempi in an arrangement, create crossfades between songs of different tempi, and keep certain events at absolute positions, while changing the tempo of the rest of the song.

Comprehensive MIDI mixer options are also available, and creating your own from scratch is fairly straightforward. Users with MIDI Machine Control-equipped hardware can use *Cubase* to control track selection, recording and playback on their equipment.

One notable feature of *Cubase* is that its interface is similar across all platforms. There are differences (some keyboard shortcuts, for example), but in general, users crossing platforms should find themselves in a familiar environment. Of course, the downside of this is that every version has resemblances to the original Atari program from 1989. One exception is the new Mac *VST* extras, which feature very polished graphics.

vexing when you move them about and only one half of the stereo track responds, thus throwing out your track positioning. Sometimes, the Wave Editor temporarily refused to audition processed waveforms, though it soon recovered on each occasion, and finally, using Mixdown (not Audio Mixdown — see the 'Manuals' box for the distinction) to group several tracks onto one track was unpredictable in operation. It didn't always mix down all the chosen tracks, affecting perhaps three or four out of five selected, for example. This point has been passed on to Steinberg, who are now working to fix the anomaly.

There are many nice touches which balance the above, though: audio continues playback during other operations, even when you're changing effects and EQ settings; faders in the Monitor Mixer can be linked in adjacent odd-even pairs by holding down the Option key while moving one fader, and the Option-linking of channels usefully extends to effects and EQ settings; Power Mac native code means that *VST* runs very fast even on our 75MHz machine; and the sound quality of *VST* audio recordings (16-bit, 44.1kHz sample rate) is subjectively rather good. *VST* also seems stable: during our time with the software, it only crashed once.

CONCLUSION

The bottom line is that Steinberg have added powerful *Cubase Audio*-like features, plus an as yet unprecedented selection of digital effects and EQ, to their basic MIDI sequencer for a starting price of £329 — and that's simply amazing. For integrated MIDI sequencing and audio recording on a Power Mac, there is nothing as cheap with a similar feature set. Although the Power Mac's audio hardware is not as good as you would get from a Digidesign board, the audio quality obtainable with *VST* is easily good enough for demos, and exceeds the performance of cassette-based multitrackers.

Many a home studio-based musician will have been looking forward to such a cost-effective, all-in-one solution to MIDI sequencing and digital audio, and in this context, *VST* is a great success. SOS

info

£ *Cubase VST* £329; *Cubase Score VST* £499; *Cubase Audio XT* £699 (bundle includes *Cubase Score VST* & *Time Bandit*).
All prices include VAT.
A Harman Audio, Unit 2, Borehamwood Industrial Park, Rowley Lane, Borehamwood, Herts WD6 5PZ.
T 0181 207 5050.
F 0181 207 4572.

CUBASE IN SOS

REVIEWS:

- *Cubase* (ST) August 1989
- *Cubase* (Mac) October 1990
- *Cubase v2.0* (ST) December 1990
- *Cubase* for Windows February 1992
- *Cubase v3.0* (ST) April, May 1992
- *Cubase Audio* (Mac) November 1992
- *Cubase Score* (Mac) October 1993
- *Cubase Audio DAE* (Mac) October 1994

FEATURES:

- *Cubase* MIDI Mixer: October, November 1992
- Living with *Cubase* on the Falcon: September 1994
- *Cubase* Logical Edit: March-May 1995
- *Cubase* SY85 Mixer Map: June & August 1995
- *Cubase* Basics: September-December 1995.

From: *Guitar Institute, Drumtech, Basstech*

.....The Market Leaders in Pop Music Education Now for....

"KEYBOARD PLAYERS"

- 1 Year Diploma Course (Fulltime Sept '96)
- 3 Month Fulltime Course (July/Sept)

Phone Now for a Free Brochure

KEYBOARDTECH
KEYBOARD SCHOOL

Tel: 0181 749 3131

The Powerhouse, 74 Stanley Gardens, Acton, London W3 7SD

Memory & Disk and more..

A/V SCSI 2 3 Gig. (GB) seagate £ 533

SIMMS 8 Mb (72p) < 70 n/s £ 92

CD Mastering £ 15 per 74min CD

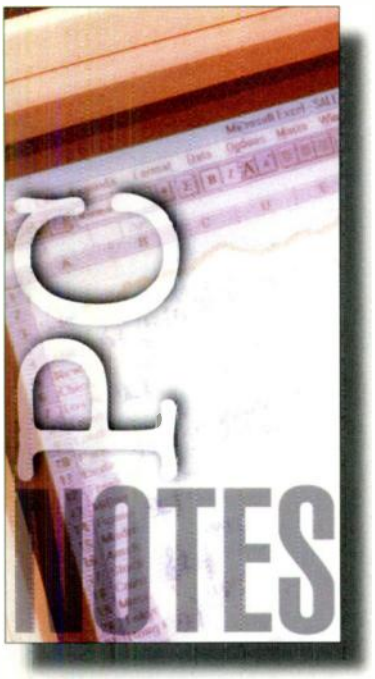
All scsi Hard Drives are FAST scsi 2 with access times of < 9 m/s all drives are 3.5" sized with onboard burst cache memory

Hard Drives SCSI	Hard Drives E/IDE
FAST SCSI-2 < 9 m/s <> 5 MB per /sec transfer 3.5" with onboard caching	enhahced ide drives 3.5" onboard cache average 10-11 m/s
1 Gig. (GB) 'NEC' £ 196	1 Gig. (GB)....NEC...£ 149
2 Gig. .Conner... ..£ 397	1.6 Gig. (GB)....NEC...£ 179
4.2 Gig.Quantum. . £ 674	2 Gig. (GB)....NEC...£ 245

CD RECORDERS - x2 Speed - £ 669

Fields & Jarvis
0181 374 1034

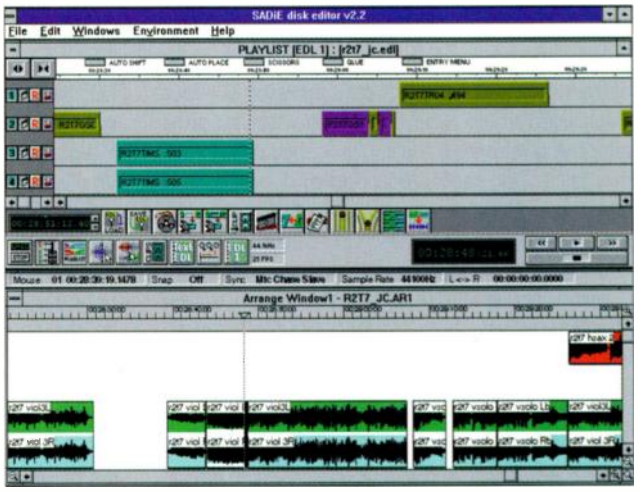
All goods new, boxed - 1 - 3 years warranty - all prices exc. Vat



Faced with unfinished album sessions on analogue tape and a studio full of PCs and digital gear, BRIAN HEYWOOD gets a chance to find out how flexible modern equipment really is.

Early in January, my band and I decided to make a concerted push to finish the album that had been on hold since our old drummer went off to Australia (maybe it was something we said?). Nightwatch is my folk/rock/jazz fusion band; we've been together about 10 years now, but we've never quite got around to recording a full-length album. The timing seemed ideal, the new line-up had settled down, and I didn't have any major projects tying up the studio. As the production relied heavily on the PC-based systems in my studio, I thought it might be of interest to the readers of this column.

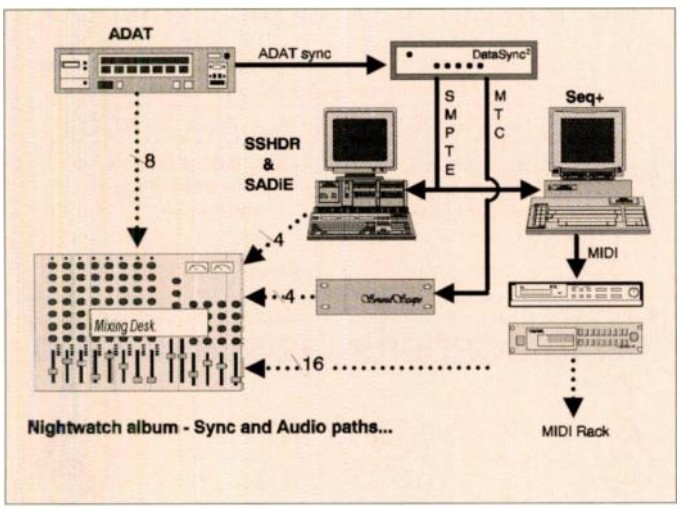
The studio is really quite modest by commercial standards, with three recorders: a single ADAT (eight tracks), Soundscape SSHDR1 and SADiE hard disk recorders, both the latter being hosted on a 486DX33 PC. Sequencing is provided by a 486DX50 PC running Voyetra's *Sequencer Plus Gold* — a DOS-based package — and interfaced to the MIDI instruments via a Voyetra V24s interface. The synthesizers used for this project were a Yamaha TG77 and TG500, a Roland Sound Canvas (CM300) and an Akai S950 sampler. We had up to 16 audio tracks at our disposal, which is actually one more than when we did the original sessions for the album on 16-track tape, since we didn't need to allocate a track for timecode.



It was quite feasible to have both hard disk systems using one display at the same time, using the 'Maximize' buttons whenever more detailed control was required. The Soundscape waveform displays helped to show what was going on.

REELING IN THE YEARS

The original sessions had been recorded using a Fostex 16-track, so we had two reels of half-inch tape with some basic rhythm and melody tracks that we didn't want to lose, plus timecode on track 1. The first job was to transfer the material we already had to the ADAT. So I arranged with the truly wonderful Vic Lennard to hook his Fostex 16-track to the ADAT via a JL Cooper DataSync2 and a Fostex synchroniser. As we had to redo all the drums, we didn't need to transfer them and — as there were never more than eight tracks of other instruments — the ADAT had enough tracks to take the material. Once we had worked out how to get the two sync boxes to 'talk' to each other, the process went very smoothly, with the only slight glitch being caused by a piece of discontinuous timecode.



Sync'ing two hard disk recorders to the ADAT was simple using the JL Cooper DataSync2.

Back in the studio, I transferred most of the tracks onto the hard disk systems, since we wanted to record the new drum parts onto the ADAT. The reason for this was two-fold: firstly, the new drum parts were likely to need the most 'space', since they would need to run through almost all of the tracks; secondly, we wanted to keep the tracks together on the same recorder, and the hard disk systems only have four individual outputs apiece. The first of these points shows an advantage of traditional tape-based recording: you have considerably more storage space than is common and affordable in a hard disk system. Consider a 42-minute ADAT tape: you get the equivalent of 8 x 42 x 5.025Mb (digital audio requires about 5Mb of disk space per minute) — 1.7Gb of storage per reel. Just for the drums we would have needed more than 2Gb of hard disk storage (we went into a second ADAT tape). Hard disk systems store data much more efficiently than a tape-based system, but in this case, this feature would have not made any difference.

LET'S WORK TOGETHER

For the rest of the project, the ADAT was the 'sync master', which is to say that the computers all derived their synchronisation from the ADAT via the DataSync2. This was because we had no way of getting the ADAT to 'chase' external SMPTE timecode generated from the computers. This system turned out to be very robust (at least when the ADAT was working) and only had the slight downside that the ADAT had to be continuously cycled when performing overdubs — which slowed things down a bit and increased head and tape wear. The JL Cooper device is a little gem, as it directly converts the ADAT's internal sync signal into MTC and SMPTE — and even MIDI clock and SPP (Song Position Pointer) if required. This meant that we could drive the Soundscape system directly off the MTC output while SADiE and the sequencer were being driven by the SMPTE timecode output.

Creating the final version of each track was a three-stage process: track-laying, mixing, and post-production. The track-laying consisted of overdubbing new performances onto the various recorders, which sometimes got slightly confusing, especially if we were swapping ▶

▲ APPLE ▲ WAVES ▲ DYNAUDIO ▲ DIGIDESIGN ▲ E-MAGIC ▲ STEINBERG ▲ MACKIE ▲

YAMAHA ▲ NORD LEAD ▲ AUDIO TECHNICA ▲ AKAI ▲ EMU ▲ ROLAND ▲ DENON ▲ KORG ▲ QUASIMIDI ▲ ALESIS ▲ SENNHEISER

FOSTEX ▲ BEHRINGER ▲ DYNATEK ▲ SONY ▲ TASCAM ▲ MACROMEDIA ▲ AKG ▲ DIGITECH ▲ OPCODE ▲ DRAWMER ▲ MOTU

Why are we the UK's most recom-mended pro-audio dealer?

CALL:

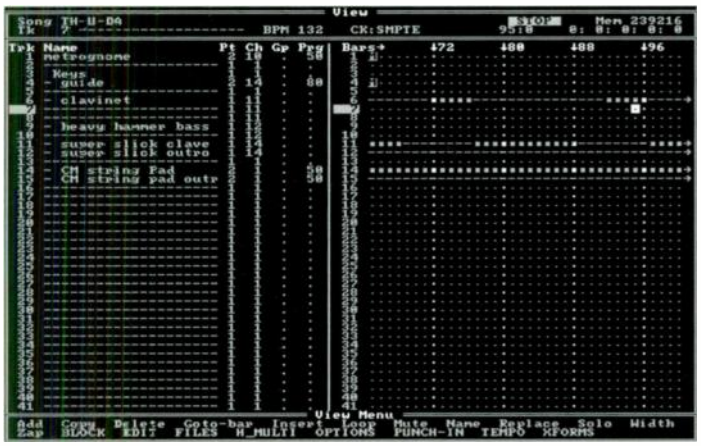
Natural audio

Natural Audio Ltd.
Suite 6, The Kinetic Centre,
Theobald Street, Borehamwood, WD6 4SE.
Tel: 0181 207 1717 Fax: 0181 207 2727 Email: 100565.3561@compuserve.com

WRH

between the two hard disk recorders: their user interfaces have substantial differences, especially with respect to their keyboard shortcuts. On the whole, I think I preferred using the Soundscape over the SADiE for track-laying, although it was slightly annoying to have to define the start and end points of each take before commencing recording (thankfully, this requirement has been removed from the latest version of the Soundscape front-end software).

The live parts were laid down in sync with the sequencer, which we used to record a live performance rather than pre-sequencing the parts. The live instruments tended to be placed on the same tracks for each song, so that the basic monitor/mix layout remained constant. While this removed some of the flexibility of the system, it prevented us from getting confused when recording new tracks. This also paid off at mixdown, since the EQ for these tracks stayed pretty much the same. It wasn't too much of a problem to transfer an ADAT track to SADiE, correct any minor glitches, and then transfer it back, though we only really did this with the tracks recorded two years previously. When recording live tracks, we tended to repeat the overdub if there was some problem. The whole point of this approach was to keep the sessions as natural as possible, so the technology wouldn't get in the way of the creativity and feel of the recordings.



Voyetra's Sequencer Plus Gold still provides the best sequencing solution for me, due to its multitrack recording facility and rock-solid synchronisation.

MIXING IT

After taking a break for a couple of weeks, the producer and I settled down to mix the tracks. As we don't have an automated desk, we used a technique of setting up a static — or at least a very simple — mix, and then recording it onto DAT. Each segment of the mix was recorded with a couple of seconds of material on each side of the edit points, so that we could crossfade between them. The segments might be several minutes long or only a couple of seconds, depending on what we were trying to do. As we created the mix in stages, we were able to

CUT THE HYPE, LET'S GET REAL

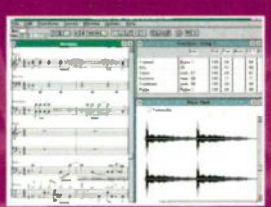
Musicator Audio combines MIDI sequencing, music scoring and up to 16 individual tracks of hard disk recording, in a single, elegantly designed Windows™ program.

Record and playback using single or multiple sound cards. View, edit and mix Audio and MIDI tracks side-by-side, Import wave files. Drag and drop them at will. Mix everything down to one track.

THE FINEST PC SOFTWARE FOR:
• HD RECORDING
• MIDI SEQUENCING
• MUSIC NOTATION

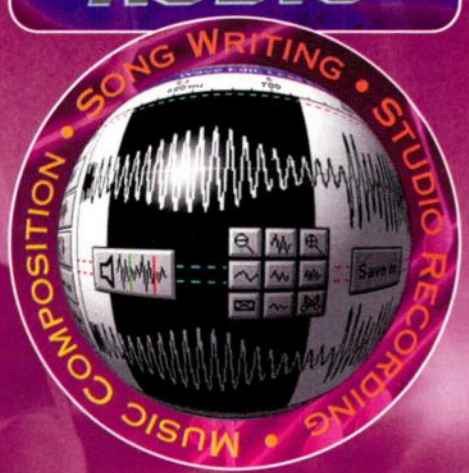
Do other programs give you recordable, realtime control of volume and pan for each audio track ? Can you meter the output level of each audio track in realtime?

NOTHING BEATS A LIVE SOUND



Record vocals and live instruments directly to hard disk and synchronise them perfectly to your MIDI tracks. Import wave files and drop them anywhere in your sequence.

Musicator AUDIO



Leading The Digital Audio Revolution

A SEQUENCING AND SCORING POWERHOUSE

Create giant scores and in seconds extract individual parts. Musicator Audio leaves other programs in the dust. Transcribe any tuplet and beam the notes any way you want. Write drum parts. Draw in your MIDI controllers. Tweak notes on the Piano Roll. Add chords, lyrics and dynamics. Sync MIDI to SMPTE. You can even export notation to Pagemaker™ and other DTP programs.

MUSICALLY CORRECT RESULTS

Most Notation programs play back exactly what's written, sounding very mechanical. Musicator Audio's sequencer lets you control every performance gesture and musical nuance. Edit your music the way it sounds (MIDI data) vs. the way it looks (notation). Musicator knows that performed music is not always the same as written music.

Only Musicator Audio gives you the best of the best. Why bother with inflexible multi-track tape decks or expensive hard-disk recorders? ~Musicator Audio does it all in a creative and easy to use environment.

For further information please contact
ARBITER GROUP PLC
Wilberforce Road, London NW9 6AX

Distributed exclusively by ARBITER GROUP PLC Tel: 0181 202 1199 Fax: 0181 202 7076 INTERNET: arbiter@cix.compulink.co.uk WEB SITE: http://www.demon.co.uk/arbiter

generate an extremely complicated final product.

The post-production stage consisted of digitally copying the audio segments from the DAT back onto SADiE and then stitching them together in the editor's Trim window, with crossfades to ensure that the joins were seamless. Then it was simply a matter of putting the finished tracks in the right order, balancing their overall levels, setting the inter-track gaps to the correct length, and copying the material back to DAT via the S/PDIF digital output. The DAT could then be used as a production master. We backed up the EDL (Edit Decision List) of the master from SADiE to DAT, so that the mix can be tweaked at a later stage if required. One nice feature of the SADiE is that it allows you to burn a Red Book standard 'gold disc' CD using a CDR drive (in our case, a Yamaha CDE100) and then play the mix in any domestic CD audio player — which is a great way of sending the finished product to interested parties.

THE LAST WORD

As this was the first album-length project I had recorded with this particular studio configuration, I learned a few things about how to best use the equipment. The first is: don't forget to back up your data. This does not apply only to the hard disk systems: the ADAT went down during the course of the project, causing damage to a 30-second section of tape. Unfortunately, the ADAT data had never been backed up, so that section is lost forever. If you don't have two ADATs, consider hiring a machine for the day on a regular basis — say for once a week, or at key points in the project.

In an ideal world, I think I'd prefer a single hard disk system working with the ADAT, so I'm rather looking forward to seeing the planned new Soundscape hardware, which it seems will expand the number of separate inputs and outputs — the Soundscape would be my system of choice for track-laying and mixing at present if it had enough outputs. We could also mix directly to SADiE rather than to DAT, simplifying the mix and post-production phase, and reducing the wear and tear on the DAT recorder. One last point about using a hard disk system in this kind of project is that you can never have too much hard disk space. We ended up with only 40 seconds of free space on the Soundscape system. Still, we couldn't have done it without the two hard disk systems. SOS

LET YOUR FINGERS DO THE WALKING

While I'm talking about hard disk recorders, Sypha have just released the 5th edition of their excellent *Tapeless Audio Directory*. This A4-format book describes over 300 non-linear audio systems, ranging from Windows soundcards and software packages up to expensive professional dedicated systems. The directory is an indispensable aid to anyone buying a system for professional use — or just for keeping in touch with what's going on in the tapeless recording world. The coverage of some of the low-end systems is fairly brief, but as contact details are included, more information is always available for the cost of a phone call. Highly recommended. It's available from the *SOS* Bookshelf at £14.95 plus £2.50 UK p&p (£4.50 overseas). The order code is B304.

THE Sample Editor For Windows™- And More

SONIC FOUNDRY

SONIC FOUNDRY'S™ SOUND FORGE™ 3.0, is a full-featured Windows based sound editor intended for musicians, sound designers and multi-media developers. Sound Forge offers advanced editing, audio-processing effects, creation of loops and regions and generation of playlists. An expandable plug-in architecture tailors Sound Forge to any application.

WITH SCSI SUPPORT

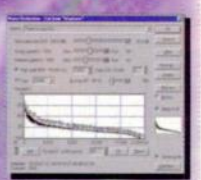
ELECTRONIC MUSICIAN 1996 EDITORS CHOICE

MULTIMEDIA WORLD 1995

PC 1995

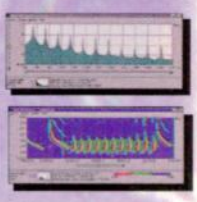
NOISE REDUCTION PLUG-IN

Now there's no need to slave away filtering noisy recordings. Sonic Foundry's Noise Reduction plug-in is designed to automatically remove background noise such as tape hiss and electrical hum. Click Removal is also included, allowing you to eliminate clicks and pops automatically.



SPECTRUM ANALYSIS PLUG-IN

If you need to identify that particular frequency component, you'll find the Spectrum Analysis plug-in a great addition. Spectrum analysis includes Spectrum Graph and Sonogram display for easy frequency (or pitch) identification.



SOUND FORGE XP

Sound Forge XP, a general purpose sound editor, provides the same, easy to use interface found in the professional edition, and is intended for sound designers, multimedia developers and hobbyists requiring a powerful yet affordable sound editor.

BATCH CONVERTER PLUG-IN

The Batch Converter plug-in is a time saving utility for those needing to convert tens, hundreds or even thousands of sound files to different formats automatically. All plug-ins require Sound Forge 3.0.

Windows 95

Call 0181 202 1199 for a FREE demo disk.

Distributed exclusively by ARBITER GROUP PLC Tel: 0181 202 1199 Fax: 0181 202 7076 INTERNET: arbiter@cix.compulink.co.uk WEB SITE: http://www.demon.co.uk/arbiter

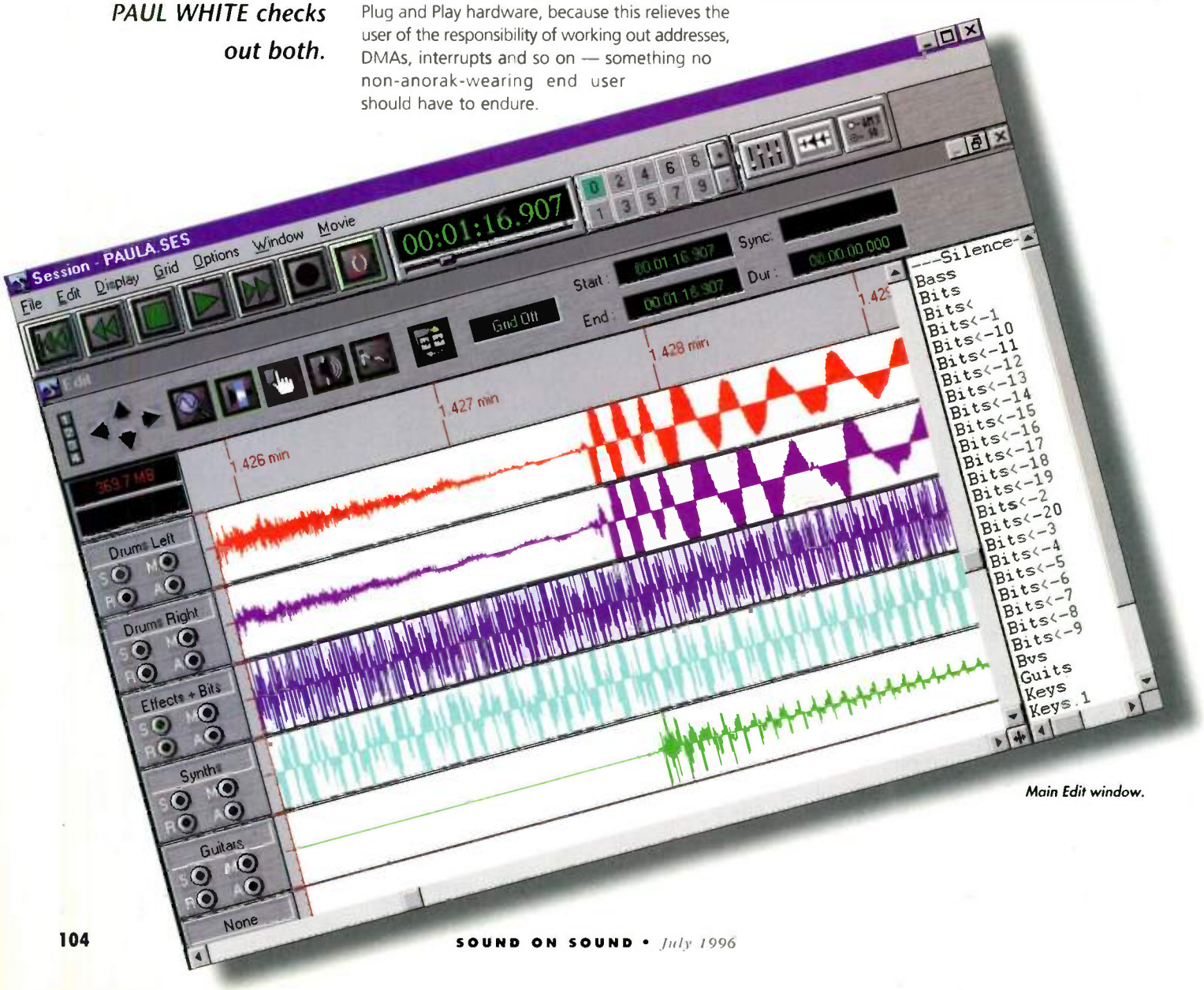
Session in progress

DIGIDESIGN SESSION DIGITAL RECORDING SOFTWARE FOR WINDOWS • DIGIDESIGN AUDIOMEDIA III PCI CARD

Digidesign's Session digital recording software has now made the transition from Apple Macintosh to Windows-compatible PCs, a feat made possible by the simultaneous release of the company's first PCI-format digital I/O card, the Audiomedia III. PAUL WHITE checks out both.

As a relative newcomer to PCs (see the Leader column in *SOS* May 96 for the full story), I've made a conscious decision only to work with Windows 95; vintage operating systems hold far less appeal for me than vintage audio equipment! I've also decided that wherever possible, I'll only deal with Plug and Play hardware, because this relieves the user of the responsibility of working out addresses, DMAs, interrupts and so on — something no non-anorak-wearing end user should have to endure. The old approach of Plug and *Pray* holds no appeal for me whatsoever, though anyone who ever spent a whole summer trying to solve Rubik's cube might find it has its attractions.

Session for Windows is the first piece of PC software I've had to write about, but for me, the similarities between its user interface and that of ▶



Main Edit window.

Millennium Music Software

1 HURTS YARD, NOTTINGHAM NG1 6JD
TEL: 0115 955 2200
FAX: 0115 952 0876

ensoniq

We have the UK's best prices on Ensoniq & that's guaranteed!!!

0%

In Stock Free next day delivery on TS10/12.

Call us for the best UK deal on: Ensoniq TS10

ASR10 Keyboard & Sampler

Ensoniq DP4 Plus

Supreme quality 4 channel effects processor. 4 independent ins and outs

£999

Ensoniq DP2

Dual Channel effects processor

£599

Yamaha Pro Mix 01

£1?99

Free Delivery

E-MU

ESI 32 Sampler with SCSI Much better than the competition at just

0%

£999

digidesign

SESSION

Session 8 PC Inc Cubase Audio

Only £2495.00

Soundscape

Now in Stock

0%

Iomega Zip/Jazz Drives

The perfect way to backup your data. Parallel or SCSI versions available

Only £199.00

Compatable with ESI32 and E64

Jazz Drive 1 Gb removable hard drive

£539.00

YAMAHA

0%

QS 300 synth	£POA
Yamaha MU80	£Cheap
Yamaha MU50	£Even Cheaper
Yamaha NS10m	£319

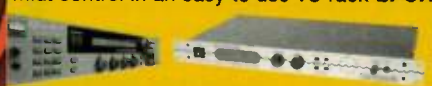
lexicon

Lexicon Reflex	£349
Lexicon Alex	£299

FATAR

Studio 610	£199
Studio 610 Plus	£259
Studio 900	£539
Studio 1176	£699
Studio 1100	£789

Technox Superb analogue sounds with full midi control in an easy to use 1U rack **£POA**



Quasar - The mother of all analogue synth modules **£POA**

SAW

Software Audio Workshop

AKG acoustics

£3000

Only £299

Microphones

AKG C3000 *Buy	£299
AKG C1000	£199
Audio Technica ATM 4033	£499
Audio Technica ATM 4050	£749
Samson S11	£49.95
Sennheiser	£Call

Studio Outboard / Processors

Digitech Studio Quad	£POA
Digitech Studio Vocalist	£POA
Digitech Multi Vocalist	£POA
dbx 266 Compressor	£249
dbx Spectral Enhancer	£279
Event 20/20 monitors (kickin')	£POA
Alesis Quadraverb 2	* Buy £549!!
Alesis Midiverb IV Excellent Value	£339!!
Alesis 3630 compalim	Industry standard £239
Samson E62 EQ	31 Band p'side bal ins & outs £279
Samson E30 EQ	15Band p'side bal ins & outs £209
Alesis Matica 500 25Dwpc	£Call
Alesis Matica 900 45Dwpc	£Call
Samson Servo 150	£219
Samson Servo 240	£279
Samson Servo 500	£379
Alesis Monitor Ones plus Samson Servo 240 Deal Price	£Call

(The above to perfect match Ohm for Ohm. Watt for Watt)

Call us for further details on other processors we handle.

EMAGIC LOGIC AUDIO

FATAR ALL IN STOCK

MACKIE.

0%

Although many have tried to copy the outward appearance of the Mackie 8 buss no one has come close to achieving the legendary headroom and eq of these fantastic consoles. Call us to arrange a demonstration. These desks REALLY DO MAKE A DIFFERENCE.

Consoles

1604 VLZ	£849
1402 VLZ	£499
1202 VLZ	£359
SR 24.4	£Best Prices
SR 32.4	£Best Prices
24:8:2	CALL
32:8:2	CALL

Call for details on automation systems for Mackie desks!

1604 ..... 1 Only @ £699

All stands, meter bridges etc In Stock!

Ultramix and Otto mixer Automation

Call for Details on how to automate your desk!!

SAMSON

Samson MPL 1502 ..... £269

Samson MPL 2242	£599
Samson MPL 1640	POA
Allen & Heath GS1	£699
Yamaha Pro Mix 01	CALL

FINANCE AVAILABLE SUBJECT TO STATUS

(0115) 955 2200

E&OE

Digidesign Session PC/AudioMedia III

pros & cons

DIGIDESIGN *SESSION* PC/AUDIOMEDIA III BUNDLE £892

pros

- Good audio quality.
- Four simultaneous inputs and outputs (two of which are digital).
- Flexible software with good editing features and automation.
- Can be run alongside a MIDI sequencer using MTC.

cons

- Poor stereo file handling.
- No punching in or out on the fly.

summary

A good value digital audio package, with relatively few compromises when compared to a basic (non-TDM) Pro Tools system.

SOUND ON SOUND

Pro Tools give it a comfortable familiarity (and *Session* was, of course, originally a Mac program — David Mellor reviewed it on that platform back in *SOS* December '95). The software is designed to run using the new Digidesign Audiomedia III PCI card, which, in addition to handling digital-to-analogue and analogue-to-digital conversion, also includes a 56000 DSP chip — and this chip removes much of the heavy digital processing load from the host PC (see the 'Trump Card' box elsewhere in this article for more on the Audiomedia III). With this setup, *Session* can provide up to eight tracks of audio recording, and similar editing and mix automation features to non-TDM versions of Pro Tools. In addition, because the PC is a true multitasking computer, you can use *Session* in sync with your regular sequencer; I had *Session* running alongside *Cubase Score*, using internally routed MTC to link the two, and everything ran perfectly.

To run *Session for Windows*, you need a Pentium PC running at a minimum clock speed of 75MHz with at least 8Mb of RAM — and ideally 16Mb or more. Plug and Play BIOS must be installed, and you'll need a 800x600 SVGA monitor and card with 256-colour resolution.

Installing both the Audiomedia III card and the *Session* software is quite straightforward, and Windows 95 guides you through the whole software installation process, prompting you to insert disks as required. No copy protection is used on this software, which makes installation and re-installation a less worrying experience. At present, *Session for Windows* is bundled with the Audiomedia III card, but very shortly, the card and software will be available separately. If you have a PC-based Session 8 system, you might like to know that *Session* software will also be acting as a replacement for the current Session 8 PC front-end software in the near future.

THE *SESSION* INTERFACE

Session's interface is based on a relatively small number of windows, and before getting down to the interesting stuff, you need to visit the I/O Setup Window, which lets you select the sample rate (11.025, 22.050, 44.1kHz or 48kHz), internal or external digital sync, and which of the inputs and outputs are digital (again, see the 'Trump Card' box for more on this). There's also an analogue gain fader which provides gain adjustment when you're recording from a source with no output level controls.

The main screen for most users will be the Edit window, shown in Figure 1. Here the audio waveforms on the various tracks are displayed, along with a 'Region Bin' on the far right in which all the regions created by editing the original sound files are listed. At the top of the screen are all the familiar edit tools for selecting regions, moving regions and scrubbing the audio, as well as other tools for entering level and pan automation (see the 'Mixing and Automation' box) and one for switching Shuffle Mode on and off. With Shuffle Mode on, audio regions can be dragged to any position on the timeline, whereas if this mode is turned off, region starts can be made to snap to the end of previous regions — useful if you're working with song segments or drum loops. There's also a 'snap' option, which acts as a kind of quantise, insofar as any regions snap to the nearest line on the time grid. The grid may be set to work in either bars and beats (providing you enter the appropriate tempo information), locators, timecode, or the starts and ends of regions. The bars and beats way of

TRUMP CARD: THE AUDIOMEDIA III

The Audiomedia III card is Digidesign's first PCI-format card, which means that it can be used in both PCs and the newer Power Macintoshes equipped with PCI slots — though of course different versions of software will be required to support the card for each platform. The card and driver software currently provide PCM playback support, and work with any compatible Windows applications, including *Cubase/Cubase Audio PC, Wavelab, Sound Forge, Cool Edit, Cakewalk Pro Audio. Logic Audio* is expected to follow shortly.

On the PCI Mac front, it is envisioned that the card will shortly be usable from within third-party sequencing software including *Cubase/Cubase Audio, Logic Audio, Studio Vision Pro, Digital Performer*, and so on.

The card is surprisingly compact, featuring one S/PDIF digital input, (A to D has 24-bit, delta-sigma conversion with 128 times oversampling and 18-bit output), two analogue inputs, one S/PDIF digital output and two analogue audio outputs fed from 18-bit converters. All the I/Os are on phono connectors which protrude from the rear of the PC, and in proper PC tradition, none of them are actually labelled, so you have to refer to the manual! The digital ins and analogue ins can be used at the same time, giving the system true 4-in, 4-out capability, and the noise performance is a creditable 88dB weighted, providing a linearity roughly equivalent to 15 bits. If you select the analogue ins to feed tracks 1 and 2, they also feed tracks 5 and 6, with the digital ins feeding the remaining tracks. If you're only using the analogue input, you have to go to the Input selection page and switch inputs to get the analogue inputs feeding tracks 3,4 and 7,8. When used with *Session*, the outputs are configured as one main stereo mix and two aux sends; you can select whether the analogue or digital outputs carry the main mix, and the other outputs automatically take on the role of aux sends.

During mixdown, the inputs may then be used as aux returns or to mix in MIDI instruments, though you will either need an effects unit with a digital output or a spare DAT machine to use as an analogue to digital converter if you want to use the digital input with analogue equipment, such as a mixer. This being the case, I would like to see a version of the card available with four analogue ins and outs as well as the digital I/O, even if you could still only use a maximum of any four at once. It's all very well assuming that the end user is going to mix directly to DAT, but if you're running alongside a MIDI sequencer, you're probably going to have to go via a mixer, and there are few budget mixers with digital inputs. Perhaps now's the time for some enterprising company to market a small box full of competent but non-esoteric A/D and D/A converters at a realistic price...

SX-700

Studio Effects Processor

The new BOSS SX-700 Studio Effects Processor offers multiple effects capability, while delivering a studio quality signal-to-noise ratio.

This single rack space unit offers a full collection of 30 different effects like reverb, delay, chorus and flange, and the SX-700 provides access to as many as five of them simultaneously. Special new features include a four-voice intelligent pitch shifter and three-dimensional panning which uses Roland's RSS technology, and can be used with delay reverb. Parametric EQ, ducking delay, and tap tempo delay are other great additions.

The SX-700 operates in true stereo and realtime parameter control is possible via MIDI Control Change or an expression pedal. There are 256 patch locations and a selectable input level makes the SX-700 perfect for live sound reinforcement, as well as for studio work. Add an intuitive user interface, MIDI implementation and superior signal-to-noise ratio and you've got one great unit.. The SX-700 Studio Effects Processor: setting a new standard for studio quality multi-effects.

For further information contact:
Roland (UK) Ltd, Atlantic Close, Swansea Enterprise Park, Swansea, West Glamorgan SA7 9FJ

Tel (01792) 702701

BOSS

SX-700 Data Stream...

1U Rack, 30 effects (5 simultaneously), Sampling frequency 44.1 kHz, A/D 18 bit conversion, D/A 18 bit conversion, Peak LED, 16 character display, 2 lines with backlit LCD 128 preset patches + 128 user. Easy to use editing features with parameter control from an external pedal (FS-5U, FS-5L, EV-5 and FV-300L - PCS-33) may be connected. *Includes RSS effects.*

Visit our web site for more information on Boss and Roland products: http://www.rolandus.com

WRH

Music Village

Specialists in modern music technology

10 High Road · Chadwell Heath · Nr. Romford · Essex **Tel · 0181 598 9506**

- The very best deals on all Hi-Tech & Pro Audio products!
- Friendly, professional, knowledgeable staff!
- Fastest possible insured mail order facilities!
- Unsurpassed after sales service!
- Instant credit, Access, Visa, Amex, Switch!

Music Village Pro Audio

High spec demonstration facilities including a state-of-the-art digital recording studio, jam packed with all the very best pro-audio products around – Drawmer – TLA – Digidesign – Akai – Lexicon – Tannoy – K.Rok – Mackie – Roland – Yamaha – Tascam – Alesis – Fostex etc, etc. Some of our more recent customers include: British Airways (2 Protools systems), Take That, East 17, Human League, Simply Red, Let Loose and Duran Duran. So give us a call now and join this esteemed list.

Music Village Sound Reinforcement Centre

A dedicated soundproofed demonstration studio featuring the best in modern P.A equipment – Soundcraft – Studiomaster – CAudio – JBL – Electrovoice – Animation – Soundtracs – Mackie – Carlsbro – Shure – AKG – Yamaha etc, etc.

Order with Confidence

Samplers

The very best deals on Akai, E-mu, Roland, Kurzweil, Ensoniq

Akai S3200XL with FREE EXTRA 16Mb RAM & new 540Mb MCD removable hard drive, plus free membership of DIGITAL and DANCE VILLAGE libraries

RRP £4349 **ONLY £3499**

Akai S3000XL £PLEASE RING
Akai S2000 £PLEASE RING
Akai CD3000i - A few left **£1799**

UNBEATABLE DEALS ON ALL SIMMS UPGRADES

Hard Disk Recording

Macintosh 7100 in stock

State of the art desktop music production from: Digidesign, Cubase Audio, Soundscape, Akai, Vestax, Yamaha, Roland, C-Lab Falcon, Mac, PC.

Mixing Desks

Yamaha ProMix 02

Ground-breaking Digital Mixer, call for stunning demo and amazing price

Plus Unbeatable deals on Soundtracs, Soundcraft, Behringer, Studiomaster, Mackie, Allen & Heath, Phonic, etc.

Fostex DMT8 **NEW! Version 2 software**

M.V EXCLUSIVE! PACKAGE DEAL

DMT8 **PLUS 2** really useful signal processors, the **Yamaha EMP100** Multi-FX, PLUS the **Phonic PCL3200** Dual Compressor / Limiter / Gate

Total RRP £2027 our price only **£1799**

Amazing Korg Offers!

Trinity, Prophecy, X3, X5, X5D, X5DR

05RW module Mega Deal **£399**

Allen & Heath GS1

Scoop Purchase!!

A true 8 Bus mixer for under £800!

- 16-8-16 (total of 32 inputs)
- 3 band EQ with mid sweep • 5 aux sends
- inserts on all channels • phantom power
- MIDI muting and midi tape transport control (MMC)

Optional expander provides additional 8 bus (plus 8 more mic inputs) giving access to all 16 tape inputs and returns. £ POA

HURRY – There are very limited quantities The GS1 was £999

MV price including free meter bridge just **£639**

Roland VS-880

8 track hard disk recorder

- 8 tracks, each with 8 virtual tracks, i.e. 64 tracks in total • switchable data compression
- digital parametric 3-band EQ
- fully automated MIDI mixing
- SCSI (connect up to 7 drives)
- switchable sampling rate
- optional on-board digital fx

ALL drive options available including Zip, EZ, Jaz at the very best prices and up to 5 year warranties!

RRP **£1499**

Roland MC303

Groovebox

This is THE dance machine!

448 classic analogue sounds from TB303, Juno, Jupiter etc. Plus 12 drum kits featuring 909 & TR808 sounds, preset dance patterns, arpeggiator, 28 note polychonic, digital fx, real-time phrase sequencer, 8-track sequencer

CALL TO RESERVE YOURS NOW!

RRP **£559**

Kawai K11

M.V EXCLUSIVE! OVER 55% OFF

64 note velocity sensitive keyboard, aftertouch, 32 part multitimbral, 384 great sounds, 7 drumkits, digital reverb, computer interface

Was £899 now only **£399**

Keyboards and Modules

Call for the best deals on Roland, Yamaha, Korg, Kurzweil, Alesis, E-mu, Technics, Ensoniq, Kawai etc.

XP80 keyboard – Roland's stunning new workstation now in!
XP10 keyboard – great Roland sounds at an unbelievably low price

Roland M Series Modules

MDC1 – Dance module
MVS1 – Vintage module
MSE1 – String ensemble module
MOC1 – Orchestral module

ALL AT UNBELIEVABLE PRICES!

SCBEVL – 64 note polyphony – NEW LOW PRICE

Yamaha CS1X

Control Synthesizer

480 quality voices, 11 drum kits, 128 exceptional preset/128 user performance programs, 8 real time analogue like control knobs, scene controller, 32 note poly, 16 part multitimbral or one performance + 12 multi's (4 simultaneous), 20 pattern arpeggiator, host computer interface, audio input for optional QY22 or SU10 sampler

incredible value RRP **£599**

Roland A90 in stock

Mother Keyboards

Roland, Kurzweil, Fatar, Samick, Evolution, from **£49** to **£1799**

or.....**pick up a package**

e.g Evolution MK149 PLUS Korg 05R/W module (including sequencing software) only **£495**

K-ROKs and the Awesome Tannoy System 215's on Demo

Monitors

Unbeatable Deals on monitors and monitoring systems by Yamaha, Alesis, Soundcraft, Tannoy, KRK, Phonic etc. **Example package:**

Pair of Absolute 2's PLUS Samson Servo 150 Amp only **£449**

Phone our mail order Hotline now

0181 598 9506

or fax us on 0181 599 7236

barnet, 230 High Street Tel · 0181 440 3440

cambridge, 86 Mill Road Tel · 01223 316091

education division Tel · 0181 598 9955

Fostex GT10

Ultra high quality 5 track cassette machine (separate sync track) with built-in MTC1 synchroniser, full MIDI functionality and Dolby 'S' noise reduction

M.V EXCLUSIVE! Was £999

now only £429

Microphone Madness!

Shure SM58 £99 Shure SM57 £89
AKG C1000 £199 AKG C3000S £279
Octava MK219 £219 Rode NT2 £POA
Audio Technica ATM 4033 plus 8441 cradle (was £695) Now £499
Audio Technica ATM 4050/CM5 (was £995) Now £799
Guaranteed lowest prices on all Mics

Soundcraft Spirit Studio LC 24-8-2

M.V EXCLUSIVE!

- extra deep for up to 48 inputs at mixdown
- extremely quiet (-128dB) EIN mic amps
- direct out on every channel • rugged steel chassis
- group/direct output recording from every channel
- 3 band EQ on every input, swept mid and low bands, HF shelf, EQ in/out and high pass filter
- 8 auxiliary sends • 2 stereo effects returns
- fully controllable submixer input
- stereo solo-in-place on every input channel
- fader flip swaps channel and monitor signals, saving repatching • high quality connectors, pots and faders
- individually switched phantom powering on each channel

save over £1000! Was £2421 only £1399

NEW!!

Fostex D80

8 Track Hard Disk Recorder

- simultaneous 8 track recording and playback to removable caddy-held hard disks
- 3U high rack mounting unit with removable front panel/handle • cut, copy, paste & move editing
- recording at 44.1kHz CD quality with no compression
- 5 'virtual reels' for unique project areas
- stack together 2 or 3 machines via on board MTC for 16 or 24 tracks
- analogue and digital I/O • full locate functions
- 850MB IDE drive supplied as standard gives 18 minutes of 8 track recording time (40 minutes with 1.7gig drive)

RRP only £1499

M.V EXCLUSIVE! PACKAGE DEAL

D80 plus Soundcraft Spirit Studio LC 24-8-2 Desk only £2699

MV Portastudio Added Value Packages

From the company that originally conceived the P.P.D. (Portastudio Package Deal), comes the latest in a long line of superior bargain offers!
Not One but Two Added Value Packages for you to choose from...

Added Value Package One Retail Value £49.00 inc VAT

- Cables
- CD quality Headphones
- Three Maxell XD chrome tapes
- Head Demagnetiser
- Head Cleaning Kit

Added Value Package Two Retail Value £100.00 inc VAT

- Phonic MM7 Mic & Case
- CD quality Headphones
- Three Maxell XD chrome tapes
- Cables
- Head Cleaning Kit

Portastudio	PLUS.....	Added Value Package One	OR Added Value Package Two
Fostex XR3 The new budget standard		£249	£279
Fostex XR5		£335	£365
Fostex XR7		£449	£479
Tascam Porta 03		£199	£229
Tascam Porta 07		£349	£379
Tascam 424 MkII		£469	£499
Tascam 488 MkII 8 track portastudio		£999	£1029
Yamaha MT8X		£349	£379

Digital Tape Multitracking

Alesis ADAT XT

The next generation of the ADAT format, stunning audio quality and new features

Tascam DA88
Fostex RD8

Call now for the very best deals on all these superb products!

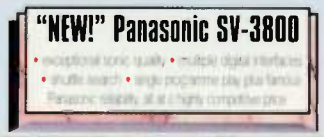
M.V EXCLUSIVE! PACKAGE DEAL

ADAT XT plus Soundcraft Spirit Studio LC 24-8-2 Desk save a fortune only £3799

Drawmer

TLA

Give your recording the rich, warm glow of valve technology! The range of TLA processors offer the smooth sound, very low noise floor, quality controls, trim and, especially, affordability that only TLA can deliver. To feel the glow, give us a call and arrange a demo!



"NEW!" Panasonic SV-3800

- exceptional sonic quality • multiple digital interfaces
- shuttle search • single programme play plus famous Panasonic reliability at a highly competitive price

DAT Machines

Sony, Tascam, Panasonic, Fostex

There's never been a better time to get into Digital Mastering with high performance machines at affordable prices.

from £499

Second Hand

Key: Ch = Chadwell · B = Barnet
C = Cambridge

		Key
Mixers		
Allen & Heath Saber 32, 16 buss, 6 auxes, 4 band EQ (2 sweeps), fully modular, 56 inputs with EQ and muting on remix, c/w stand	£ 4995	Ch
Allen & Heath System 8:24	£ 1295	Ch
Yamaha Promix 01	£ 1275	Ch
Seck 18:8:2	£ 699	Ch
Seck 12:8:2	£ 599	Ch
Seck 12:8:2	£ 599	C
Carlsbro Promix 12:2	£ 349	Ch
Carlsbro DMX16:2	£ 449	Ch
Studiomaster P7 16:8:2	£ 1499	Ch
Studiomaster Diamond Pro 16:2	£ 499	Ch
Alesis 1622	£ 399	Ch
Sansui MX12	£ 299	Ch
Phonic 1202A	£ 349	Ch
Soundcraft 12:2r	£ 349	B
Keyboards		
Akai X7000	£ 399	Ch
Ensoniq Mirage	£ 299	Ch
Ensoniq VFX SD	£ 449	Ch
Ensoniq SD1	£ 599	Ch
Roland Vk100	£ 899	C
Roland JX1	£ 199	C
Roland FP8 Stage Piano	£ 899	C
Roland XP10	£ 449	Ch
Roland JX10	£ 599	Ch
Roland JV35	£ 599	Ch
Roland JV50	£ 699	Ch
Emu Proteus MPS	£ 599	B
Korg X3	£ 699	Ch
Korg T3	£ 799	Ch
Korg Poly 800	£ 229	Ch
Korg DW6000 polyphonic analogue	£ 299	Ch
Elka MK55	£ 299	Ch
Modules		
Yamaha TX802	£ 499	Ch
Korg 05R/W	£ 349	Ch
Korg M3R	£ 399	Ch
Gem S2R	£ 899	Ch
Voce DMI64	£ 299	Ch
Cheetah MS6	£ 299	Ch
Emu Proteus 1	£ 349	Ch
Emu Proteus FX	£ 399	Ch
Roland MDC1 Dance Module	£ 349	Ch
Roland MVS1 Vintage Module	£ 349	Ch
Roland MT100	£ 199	Ch
Roland SC155	£ 399	C
Roland MKS70	£ 599	C
Roland SC55	£ 349	B
Roland JV880	£ 399	C
Roland D110	£ 249	Ch
Roland U220	£ 349	Ch
Roland U110	£ 299	Ch
Roland S330 sampler	£ 499	Ch
Akai S01	£ 449	C
Akai S950 (+ memory upgrade)	£ 799	Ch
Kurzweil Micro Piano	£ 299	Ch
Elka EM22 duophonic analogue	£ 149	Ch
Drum Machines / Sequencers		
Brother MD140	£ 99	Ch
Roland R5	£ 199	Ch
Roland TR626	£ 129	C
Yamaha QY300	£ 499	Ch
Yamaha RY30	£ 249	Ch
Yamaha QX21	£ 79	Ch
Recording		
Fostex DMT8 (8 track HDR)	£ 1199	Ch
Fostex M80 (8 track Reel to Reel)	£ 599	Ch
Fostex 4050 (Auto locator/SMPTE/remote)	£ 499	Ch
Akai MG14D (12 track Reel to Reel)	£ 1299	Ch
RTL Event	£ 199	Ch
Fostex B16 (16 track Reel to Reel)	£ 1499	Ch
Fostex R8 (8 track Reel to Reel)	£ 999	Ch
Tascam 38 (8 track Reel to Reel)	£ 799	Ch
Tascam Porta 1	£ 199	Ch
TOA MR8T (8 track cassette)	£ 599	Ch
Acoustic Tiles (100 available)	Half Price £ 15	Ch
Tascam 38 (inc nr)	£ 999	C
Fostex A8 (8 track Reel to Reel)	£ 599	C
Alesis Monitor 2 (pair)	£ 499	Ch
Alesis Monitor 1 (pair)	£ 249	Ch

WRH

Music Village

Chadwell Heath Tel · 0181 598 9506 Fax · 0181 599 7236
Barnet Tel · 0181 440 3440 Cambridge Tel · 01223 316091

Phonic MM122 Compact Mixer

Unbeatable value at just **£249**

Power Amps

	RRP	Special
Omniphonics Footprint	£ 399	£ 279
Samson Servo 150	£ 225	£ POA
Samson Servo 240	£ 269	£ POA
Samson Servo 500	£ 399	£ POA
Alesis RA100	£ 399	£ 280
Yamaha P1500	£ 449	£ POA
Yamaha P2500	£ 599	£ POA
Yamaha P3500	£ 699	£ POA

The legendary Crown Power Amplifiers – Now in stock, you won't believe our prices!

C Audio – Very special deals on these superb British made Amps.

Sample package deal: Footprint & Soundcraft Absolute 2's – Only **£499**

Novation DrumStation

PLUS – BassStation Keyboards and Racks always in stock at the very best prices!

DrumStation RRP only **£449**

Phonic PCL3200

Dual Compressor/Limiter/Gate

- Hard Knee or Soft Knee processing modes
- Stereo Link/Dual-Link Switch
- Bypass/Compare
- Side Chain Jack
- On-Board Gates with Independent Threshold and Rate Control
- Balanced or Unbalanced Operation
- Full Input/Output and Gain Reduction Metering

Unbeatable Value **£179**

Philips DCC 170/730

Including £35 worth of FREE tapes

Unbelievable value at **£249**

3 FOR 2

Phonic UM97's

High quality dynamic Mic (SM58 copy) £45 each or 3 for just **£99**

Phonic BKX8800

Only **£169**

Phonic PEQ3400/3600

2x15 Band Stereo/2x31 Band Stereo Graphic EQ's

Only PEQ3400 **£149** PEQ3600 **£199**

Outstanding Outboard

Digitech TSR12 £299

Digitech Vocalist II £399

Digitech StudioQuad £POA

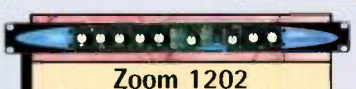
SPL Stereo Vitaliser £349

Alesis, ART, Digitech, Behringer, Lexicon, Roland, Yamaha, Phonic, Aphex, ART

Behringer Price Crash

CALL NOW!!

Composer – Comp/Exp/Peak Limiter
Dualfex – Dual Enhancer
Ultrafex 2 – Enhancer
Autoquad – Quad Expander/Gate
Edison – Stereo Image Processor
Ultra Curve – 64bit Dual D.S.P
Multicom – Quad Compressor/Limiter
Multigate – Quad Gate
Intelligate – Gate/Ducker



Zoom 1202

Grab one quickly! only **£149**

DOD R512

Brilliant Spec – Unbelievable price only **£179**

Art Tube MP

Professional Tube Mic Pre Amp

Ideal for recording vocals into the digital domain only **£149**

MACKIE

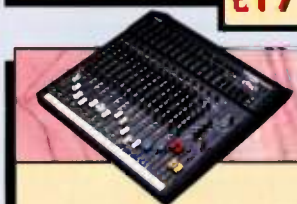
Special Clearance Prices on the 1604 and 1202.

Unbeatable deals on SR Series, 8 Bus Consoles and New 12, 14 & 16 Channel VLZ Models

Evolution Music Creator Pro

Full size MIDI keyboard PLUS FREE Sequencing Software

Only **£119**



Soundcraft Folio SX

NEW Multipurpose DAT quality mixer

Outstanding Value at just **£599**

Soundcraft Folio Rac Pac

Superb 4 Bus Multi-purpose Mixer

Was £899 Only **£695**

working is useful if you're working with regions that are whole numbers or multiples of musical bars, but there is no way of importing tempo data from your sequencer. Considering the ease with which *Session* runs alongside a sequencer, this would have been a valuable addition. As it is, it's often easier to use an audio version of your sequencer, so that both MIDI and audio can be viewed against the same tempo reference.

To the left of the screen are the Record Ready, Mute, Solo and Automation buttons, plus a floating transport palette (also shown in Figure 1), which carries the transport controls, the time indicator and 10 numbered buttons which function as autolocate points. These are arranged as 10 banks, giving 100 points in all. There are also icons representing the three main operating screens, so that you can go directly to them without having to enter a keyboard command. Multiple windows can be opened simultaneously, but you have to be careful where you put them, unless you have a very large monitor. In common with other PC software I have seen, I felt the windows were rather larger and chunkier than strictly necessary, giving the interface a sort of 'Fisher Price' Pro Tools look, but this probably has more to do with Windows 95 than Digidesign. As it is, even with a 17-inch monitor, you're continually dragging windows around so that you can see the appropriate bit of each, although in most situations, you can manage with just one window open at a time, plus the transport controls.

Audio is recorded as .WAV files, a format with which most PC users will be familiar, and if you have a CD-ROM drive, you can import .WAV samples or drum loops to use in your compositions, though these are converted into dual mono files on loading. For multimedia users, *Session* can also import .AVI format movies, allowing you to create sound tracks as you watch. Unless you have a very fast Pentium machine, the movie window should be kept as small as possible, so as to minimise the drain on CPU resources.

When you make a recording, it appears both in the waveform window and in the Region Bin as a mono sound file; stereo recordings or imported files materialise as two mono sound files, so it's up to the user not to let the two halves get separated. For me, this way of handling (or not handling) stereo audio files is perhaps the greatest weakness of the system.

Using the Selector tool, regions of the file can be defined and added to the Region bin, and because editing is non-destructive, you can use the same region as many times as you like simply by dragging it from the Region Bin into the desired track. There's also a very powerful crossfade editor, where you can define the time and shape of the crossfades between regions; the fade-in and fade-out curves may be edited independently. Regions may be moved using the Grabber tool, and you can play a recording back from any point to check what you've done. Regions may also be copied and dragged from track to track, but there's no fancy DSP processing such as reversing, normalising or virtual effects. It's also impossible to do punch-in recording on the fly, though it's very easy to set up auto punch-in/out points, which may be dragged using the mouse if their position needs fine-tuning.

As with Pro Tools, you can overlap regions, but if you do this, only the one on top will be heard during playback. There's also a function called Playlist, which is actually a type of virtual track system, allowing you to create alternate versions or arrangements for tracks. Only the currently selected Playlist appears in the track window, but because Playlist data is really just a list of edit points based on your originally recorded files (not the audio data itself), you can save a number of alternative Playlists without taking up any significant amount of disk space. A useful trick is that if you run out of tracks for bouncing, you can close down a Playlist and use its track as a bounce destination, then move the result back to one of the original source tracks before restoring the original Playlist.

> "Despite the budget nature of *Session*, it is every bit as flexible as early Pro Tools systems, and includes some features that even Pro Tools doesn't have."

Arrow buttons let you zoom in and out of the waveform display in both horizontal and vertical directions, and there's a nice touch here — there are four Zoom Presets activated by dedicated buttons, which means you can jump from one scale to another without having to press the Zoom buttons dozens of times.

When it comes to editing, most of this involves changing the lengths of regions or moving regions about, and one very practical feature is supported by this software, which my old Pro Tools II doesn't have; you can now select all the regions to the right or to the left of the currently selected region

in one go rather than having to go around 'rubber banding' them or selecting them individually. Also, like Pro Tools, once you've placed a region where you want it, you can lock it to prevent it being moved accidentally.

If you run out of tracks during recording, you can bounce tracks, just as you would on a tape machine, and if you need to archive a session so you can come back to it later, you can dump the whole project to DAT via the digital output port on the Audiomedia III card. Backing up multitrack recordings in this way is always slow, but at least it's cheap!

USABILITY

Despite the budget nature of *Session*, it is every bit as flexible as early Pro Tools systems, and includes some features that even Pro Tools doesn't have. *Session* has a decent scrolling display, colourful (if a little PC game-like) graphics and a very professional range of editing and crossfading tools. The automation works reliably (again, see the 'Mixing & Automation' box), and, as already mentioned, I got *Session* running in sync with *Cubase Score* without any problems.

If there *are* flaws, these result from *Session*'s Pro Tools ancestry. Even Pro Tools relies on a bodged track linking system to handle stereo files which have been split into two mono files, but *Session* doesn't even do that — you just have to handle the two channels very carefully and make sure each gets the same treatment. Similarly, automation data is related to absolute time, not to the regions it controls, so if someone asks you to open up a gap in some dialogue after you've finished doing the automation, you have to select and move all the automation points by the same amount. Considering the effort that's gone into creating a 'tape and tracks' analogy, this is far less than ideal.

When you record automation data from the Mixer page fader, the data shows up as new break points on the Edit page automation graph, which is fine, but if you go back over a piece of automation, it doesn't seem to replace the original, but rather merges with it. To get rid of automation data, you have to select it and then bin it. A replace mode button on the automation page might have been neater. Even so, the automation facilities provided are pretty impressive, even to the extent of having proper fader grouping, and on the whole, the automation is easy to use.

I don't know if it's because I'm mainly a Mac user, but some of the tools in *Session* feel rather less positive than they do in Pro Tools; you have to line them up with the target object quite carefully, and the fact that the cursor is often an icon (such as a trash can) rather than a neat pointer makes this tricky to do precisely. It doesn't take too much getting used to, but at first it's like trying to drive a car with a particularly quirky gear shift.

On the sound front, the Audiomedia III card was impressive, with none of the digital background chatter I'd half expected to find on the analogue outs. If you turn up the gain sufficiently, you will hear a small amount of noise,

MIXING & AUTOMATION

If you're one of those people who prefer to mix using faders rather than mice, and you have a MIDI interface on your PC, you can plug in a hardware MIDI fader unit (such as those made by Peavey, JL Cooper, or Penny and Giles) to provide a real control surface when it comes to a *Session* mixdown. If you want to automate a mix controlled by one of these hardware devices, you need a MIDI sequencer into which to record the appropriate controller data. To make setting up such hardware interfaces easier, a useful Learn facility is included, which necessitates waggling the on-screen and real faders so that they can recognise each other.

Finished *Session* tracks can be automated both for level and pan, and for those who like the graphical approach, this can be done from the Edit window by selecting Automation and then choosing level or pan. This system works exactly like Pro Tools, where you create break points along a line, then drag them about, just as you would with the envelope in a synth editing package. Automation points may be moved or erased, and you can also move or erase several at once by marking them with the selector tool, and then performing the appropriate action on any one of them.

The other way to automate the mix is to go to the Mix page (shown in this box), and record the level and pan fader movements, in real time. This page is set up very much like a typical console automation package, and includes the ability to subgroup up to four sets of faders. A small trash can icon may be dragged to grouped faders to ungroup them.

It's also worth mentioning that the two aux sends and the master faders may be automated via MIDI using your sequencer. In fact, you can do all the automation from your sequencer if you want to.

Session's Mix window.

but it's good, honest analogue hiss, not whistles and whines. I'd certainly have no qualms about undertaking serious audio projects using this hardware.

IN CONCLUSION

Viewed as the poor person's Pro Tools, *Session* offers virtually all the key facilities of non-TDM Pro Tools systems in a similar operating environment — and some features are actually better than in the current version of Pro Tools. The package is very easy to use, well documented, and there are numerous keyboard shortcuts for commonly-used functions. What's more, these are usually sensible to the point that you can guess at them and come up with the right combination.

I was particularly impressed by the ease with which *Session* could run alongside *Cubase* to provide audio capability, and, as commented above, the analogue output sound quality was rather better than I had anticipated for a sound card residing in such close proximity to noisy data busses.

The trouble with software reviews is that you can never paint the whole picture — the *Session* User's Guide runs to over 350 pages, and even that's keeping things concise. Having said that, you can learn the salient features of *Session* in far less time than it takes to read the manual if you're in any way familiar with digital audio recording software or even with MIDI sequencers. As a practical tool for recording music, the *Session* package is restricted only by the lack of stereo file handling and a real-time punch in/out system. Musicians working alone are used to having a footswitch to punch in with, but with *Session* you have to set up auto punch in and out points every time, which could prove to be a creative hindrance. To be fair, you only get real-time punch-in on expensive computer-based hard disk systems, because it's not very easy to implement digitally (especially if you want to punch in on multiple tracks at the same time) — but that won't prevent those of us who were brought up on tape from missing it.

As for other applications, *Session* is useful for editing existing stereo material (though not nearly so powerful as *Sound Designer* in this respect), and it can also be used to compile music, dialogue and sound effects for use in multimedia productions, soundtracks or radio programmes. Being realistic, anyone using Audiomedia III will probably have other software such as Steinberg's *WaveLab* or *Sound Forge* for handling specialised editing tasks, and those using 'Audio + MIDI' sequencers will tend to use them wherever possible, rather than running two programmes side by side.

Though imperfect in some areas, the *Session for Windows*/Audiomedia III bundle offers extremely good value and has the potential for high-quality, multitrack audio recording, plus the ability to back up to DAT. There's even a Tascam DA30 setting to get around the problems that sometimes arise when these Tascam DAT machines are used with Digidesign hardware — not that this was Tascam's fault! With mainstream Digidesign systems becoming so expensive, this package could be just what the company needs to put it back on the 'real world' map. SOS

info

£ *Session* for Windows/Audiomedia III bundle £891.83; Audiomedia III card only £703.83. Prices include VAT.
A Digidesign UK, Avid Technology Ltd, Westside Complex, Pinewood Studios, Iver Heath, Pinewood, Bucks SL0 0NH.
T 01753 653322.
F 01753 654999.

CC Music MAIL ORDER

YOUR FIRST CHOICE FOR HI-TECH & PRO-AUDIO

YAMAHA
Promix 1 Mixer - Special Deals ..... £Call
SY85 - Last few going fast £899.00
SY35 - Megadeal! Ideal controller Keyboard £379.00
SU 10 - Brilliant new portable Sampler ..... £Best!
NEW! CSX 1x - Brand New Dance Keyboard Now In Stock £599.00
QS 300 Sequencer - Dance workstation ..... £Phone
NEW! MDF 4-Mini Disc, Mini Studio, Mini Price! ..... £Call
QY8 - AWM, 8track, 28 note polyphony £209.00
RY20 Rhythm Machine - 300 Sounds, 900 patterns ..... £Crazy
RY8 Rhythm Machine - 128 sounds, 250 patterns £199.00

KORG
X5 - 32 Voice synth, GM, PC Interface £649.00
X5D - 64 Voice synth, GM, PC Interface £739.00
X5 DR - 64 voice, 16 part multitimbral, PC interface £579.00
X3 - 32 voice, GM, Sequencer, Disk Drive £919.00
Prophecy - Analog, FM, Physical Modelling, Mega! ..... £Bananas
Trinity/ Plus - The Business! the Workstation reinvented ..... £Call

ROLAND
NEW! VSS 880 - Hard Disk Multitracker w/Mixer From £1499.00
XP10 - What a Bargain £550.00
XP50/XP80 - Expandable workstation, Seq, 64 voice ..... £Phone
JV 1080 - Sound Module ..... £Call
NEW! A90ex - Expandable Master Keyboard ..... £Call
MSE1 String, MV51 Vintage, MDC1 Dance, MOC1 Orchestra £449.00
S760 Sampler - Superb Packages Available ..... £Call for details
NEW! MC-303-The box everybody's talkin' about! £565.00

ALESIS
ADAT XT - 8 Track Digital Multitrack ..... £2???.00
QS6 - New Budget Quadrasynth £599.00
S4 - Quadrasynth in a box! ..... £Call
Quadraverb 2 - FX Unit ..... £Call
Midiverb 4 - FX Unit ..... £Call
Microverb 4 - FX Unit ..... £Call
DM5- Drum Module Rack ..... £Call

FOSTEX
NEW! D80 - 19" Rack 8 track HD Recorder, Expandable £1499.00
DMT 8 - New V2, 8 track HD Digital Multitracker ..... £Call
R8 Multitrack - 2 Only £799.00
XR 3, XR18, XR5, XR7, D5, D10 also in stock ..... £Call

TASCAM
DA 20 DAT Recorder - ..... £Call
NEW! 424 MkII ..... £Call
Porta 03 - FREE Mic and Tape £199.00

MACKIE
1604 - Crazy deal £799.00
1402 VLZ - ..... £Call
Full range of 8 Bus Mixers in stock ..... Call for Prices

NOVATION
Bass Station - 19" Rack, Meaty, beefy £399.00
NEW! Drumstation Rack- 808 and 909 Drum Sounds £449.00

EMU
ORBIT A Must for budding Re-mixers!! ..... £Call
Coming Soon The Launch Pad ..... £Call

SAMSON
NEW! MPL 2242 MIXER - £479.00
MixPad - 9 into 2 Mixer Ultra compact £199.00

LEXICON
Alex - Quality Reverb on a Budget ..... £Call
Reflex- Superb Sound Quality ..... £Call

SOUNDCARDS
Turtle Beach Range inc. Tahiti, Tropez and the New TBS 2000
Simultaneous Record and Playback with your PC from only £169.00

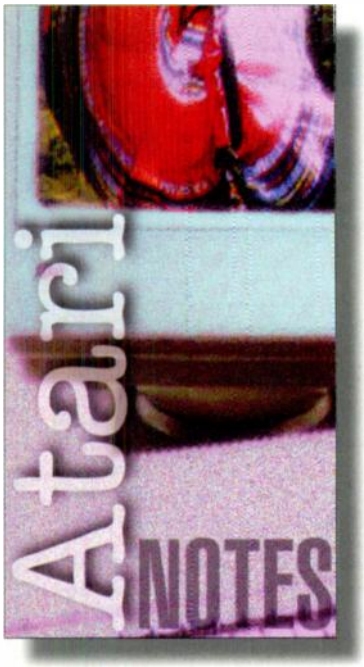
SOFTWARE
NEW! Wavelab - 32 bit sample editor, superb ..... £Call
NEW! Cubasis Audio - 64 MIDI Tracks PLUS 8 Audio Tracks £249.00
NEW! Cubase 3.0-(colour)Now with Audio £329.00
Cubase Score 3.0 - MIDI Seq./ Score Editing AND Audio £399.00
Cubase Audio 3.0 - MIDI Seq./Audio recording £699.00
Emagic Logic/ Logic Audio - MIDI Sequencing ..... £Call
NEW! V4.1 Cakewalk Pro Audio - MIDI and Digital Audio Software £329.00
SAW Plus - Brilliant! 32 Audio tracks, Multiple outs £699.00

Call our Software specialists for best Prices on PC Systems, Hard Drives, Memory, Removable media, Etc.

Friendly, Helpful service!
Lowest prices!
Fast delivery!

0% Finance Available on Selected Items
Written details available on demand. Offer subject to status.

MAIL ORDER HOTLINE- Ask for Andy!!!
FREEPHONE - 0800 627 627
33 Otago Street, Glasgow. G12 8JJ E-Mail: cc uk@aol.com
Phone: 0141-339 0566/ 7766 Fax: 0141-357 2703



The C-Lab Falcon MkX has flown through its CE tests and finally landed in the UK. OFIR GAL checks the spec and assesses the new machine's chances of taking off.

The C-Lab Falcon MkX builds on the success of the Falcon as a complete solution for the modern musician. The new case design makes it easier to upgrade and expand than its predecessors.

Yes, it's late, but it's here at last. After months of delays, the repackaged, enhanced and revamped C-Lab Falcon MkX is finally sitting before me — disguised in a dark 440 x 290 x 60mm metal case. It was actually ready for release before Christmas, but was delayed by Eurocrats and the requirement for CE approval.

C-Lab took over the manufacture of the Falcon from Atari in 1995, with the intention of marketing the machine as a music tool, something Atari failed to do properly. With built-in MIDI ports, a DSP chip, and the lean and mean TOS, *Cubase Audio* and a range of hardware add-ons, it was a ways a mystery why Atari could not capitalise on this niche market. C-Lab have managed to do just that with the Falcon MkII.

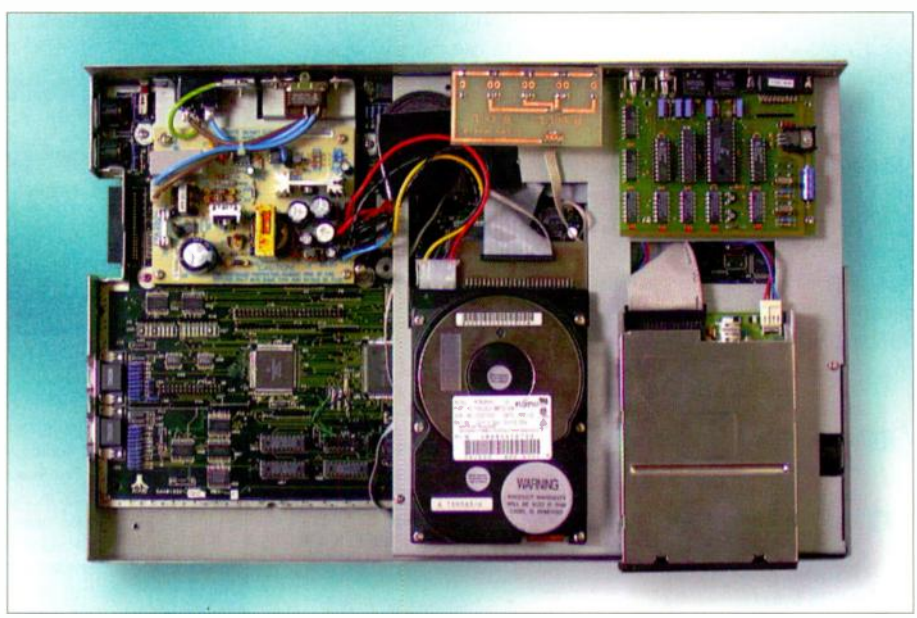
THE FALCON MKX

Building on the success of the MkII, the MkX is aimed squarely at musicians, housed in a slick and robust metal case you could take on the road. As it's designed around the original Atari motherboard, the case has to allow for the various ports, especially the cartridge port, which cannot be relocated easily. This prevents the case from being a true rackmount unit, but in all other respects, the MkX is built like a musician's tool rather than an office machine. All the ports are labelled clearly on the top of the case, which can also house several optional add-ons. The floppy drive is located at the front, and to its left are two bays for additional drives.

The basic spec is more or less the same as the original Falcon ,which is somewhat disappointing considering that almost four years have gone by since Atari launched the machine. Based around the Motorola 68030 CPU, clocked at 16MHz, the Falcon's true power, from a musician's point of view, comes from its sound system and DSP. The original Atari sound system featured an integrated A/D and D/A converter capable of eight 16-bit audio channels with sampling rates up to 50kHz. The C-Lab models have improved audio circuitry with similar capabilities. The DSP allows the machine to perform real-time audio mixing, and effects such as EQ and reverb, and has remained unchanged in the C-Lab machine. The original Falcon performance was hampered by quirky SCSI implementation, which meant that hard disk access was not 100% reliable when put under strain. Applications like *Cubase Audio* suffered from various crashes and hangs due to disk access problems, and C-Lab addressed these by modifying the SCSI board. Users of the previous C-Lab models have enjoyed better reliability when working with large amounts of digital audio.

THE SAME, BUT DIFFERENT

Essentially, the new model is the same machine as the MkII, in an improved case that allows for ▶



In addition to the internal SCSI drive, you can install a removable drive, or even a CD recorder. The internal S/PDIF interface can be seen at the top left of the picture.

INDIGO

£599 2001 4 Channel Valve Mic Pre Amp

£599 2011 2 Channel 4 band Valve EQ

£599 2012 2 Channel Parametric Valve EQ

£599 2021 2 Channel Valve Compressor

£599 2031 2 Channel Valve Overdrive Unit

£599 2051 Mono Valve Voice Processor

CLASSIC

£699 EQ-1 Dual Valve EQ

£1295 EQ-2 Stereo Parametric Valve EQ

£995 C-1 Dual Valve Compressor

£895 PA-1 Dual Pentode Valve Pre-amp

£345 PA-2 Dual Valve Mic Pre-amp/DI

£395 VI-1 8 Channel Valve Interface

£295 VI-S 8 Channel Switching Unit

TWO SERIES ONE PHILOSOPHY

Choose a valve signal processor from TL Audio and you're assured outstanding quality and the acclaimed warmth which only TL Audio Valve Technology can deliver.

The question is, which series to pick - Indigo or Classic?

Not an easy choice, as they both offer a combination of superb design, quality manufacture and unique sound.

It's more a question of application.

The Indigo range offers intuitive, easy-to-use valve processing at an incredibly affordable price, whilst the Classic products feature superb on-board mic pre amps and unparalleled control of all signal parameters.

The choice is yours!

Alex Marcou - Abbey Road Studios (House recording engineer) - "The EQ-1 has a hard sounding digital sound like cold ...sounding analogue - a joy to listen to. The compressor has the EQs, Pre Amps & compressors give an excellent"

Andy Jackson - Pink Floyd (sound engineer) - "All the lead vocals on the "Division Bell" album mix were run through the EQ-1. I certainly prefer the EQ-1 to other tube equalisers for vocals. The new EQ-1 is probably the best all round EQ I've ever used."

Chris Porter (Producer) - "Take That - "I bought one of the first EQ-1s and I've enjoyed using it immensely. It gives a unique quality to the vocals in particular - Take That's "Back For Good" is a typical example of the EQ-1 adding depth and presence to a vocal track."

Tom Lord-Alge (Dual Grammy Award Winning Engineer) - "The Indigo 2011 EQ has given me the ability to EQ with clarity, rather than just tone. I find it to be very musical. Any problem sound I have come across, I punch in the 2011 and it allows me to add depth and clarity."

Stephen Croes (Producer, Arranger, Engineer - Fleetwood Mac, Kenny Loggins, Jennifer Warnes) - "The Indigo 2011 EQ and 2021 Compressor are exceptional - both responsive and flexible. I can stomp on the subtle, hype a sound or just detail it. These are real tools for any level of music production."

SASCOM MARKETING GROUP

Canada & USA:
Sascom Marketing Group
Tel: +1 905 - 469 8080
Fax: +1 905 - 469 1129
WEB: www.sascom.com

For UK sales: Tony Larking Professional Sales Ltd.
Letchworth, SG6 - 1AN (UK)
Tel: +44 (0)1462 490600 Fax: +44 (0)1462 490700

TL Audio

easier expansion and upgrades. Among the possibilities are RAM upgrades and high-capacity removable drives. Even more interesting is the ability to install a SoundPool S/PDIF (FDI-compatible) or ADAT interface inside the machine. The various additional I/O ports are accessible from the back of the case, neatly aligned with the audio connectors. All other ports appear as they did on the original Atari Falcon, with the exception of an RGB/TV output.

The optional S/PDIF interface is installed internally, with its ports accessible from the back of the machine. Note also the new quarter-inch jack sockets that replace the flimsy stereo mini-jacks of previous models.

Purchasers of the MkX can choose between two basic models: one uses a Mega ST or Mega STe keyboard; the other is called the MkXAT and can be used with a PC keyboard. Whichever you buy, it comes with the standard SCSI port, so you can connect any external SCSI drive to it. The basic unit ships with 4Mb of memory and no hard drive. An optional 1Gb SCSI hard disk, including the required additional internal hardware, costs £399. C-Lab are so confident about their modified SCSI board that they promise smooth operation with *Cubase Audio*, and will replace your Falcon if it doesn't work properly with that program. In case you're wondering, the IDE interface is still there, so there's nothing to stop you from adding an IDE-based internal drive as well.

Like its predecessor, the MkX has modified and improved sound hardware, but it now sports two pairs of proper quarter-inch jacks, replacing the old mini-jacks. Unfortunately, this also means that C-Lab had to remove the headphone socket. There is one more omission from the original Falcon spec: C-Lab have removed the composite video output, so you cannot connect an RGB monitor or TV any longer.

The C-Lab 'complete musician's solution' concept can be enhanced with a Yamaha CD recorder. The bundled software allows you to compile *Cubase* AIF files into a track list and then write it directly onto a CD. Better still, with the aid of programs like *Audio Master* from SoundPool, you can do the post-production work and burn a final CD that can be used to produce a glass master — without the files ever leaving your Falcon. See the box for full pricing details of the new machine and peripherals.

As part of their commitment to supporting Falcon owners, C-Lab have signed a deal with System Solutions (0181 693 3355) who will provide warranty repairs and upgrades.

GRIBNIF SOFTWARE AND TITAN DESIGNS

The closure of Compo UK, distributor of Gribnif Software, has left popular programs like *NeoDesk* and *Geneva* without a UK home. Titan Designs, a company known for products such as *Apex* and *Expose*, has taken over distribution of all Gribnif products, as well as some old favourites and a couple of new entries. Although the products are not music- or MIDI-specific they can help make your Atari more productive.

FALCON MKX PRICES

• Falcon MkX (4Mb RAM)	£899
• Falcon MkXAT (4Mb RAM)	£949
• 14Mb RAM expansion	£299
• Mega ST/STe keyboard	£30
• C-Lab MkI & MkII upgrade	£299
• S/PDIF interface (internal)	£249
• ADAT interface (internal)	£499
• SCSI board + 1Gb hard drive	£399
• SCSI board + 2Gb hard drive	£549
• Nomai 540Mb removable drive	£599
• SyQuest 1.3Gb removable drive	£999
• Iomega Jaz 1Gb removable drive	£999

For more information, phone 01422 340875, or check out the new Digital Media web site at: http://www.digital-media.co.uk

Nemesis is a new Falcon accelerator set for release in June. The final spec has not been confirmed yet, but it is likely that the CPU will be clocked at 30MHz and the DSP and FPU at 60MHz. Titan Designs are currently testing the product's reliability with time-critical applications, including *Cubase Audio*. The accelerator will also be available for C-Lab Falcon models. The following Gribnif products will be offered by Titan; prices include VAT and carriage:

- *Geneva v1.04* (£59.95): fast, full-featured multitasking OS for any Atari ST/TT/Falcon.
- *Geneva Utilities Disk* (£12.95).
- *NeoDesk 4* (£59.95): the latest incarnation of the popular replacement Atari Desktop.
- *Neodesk 4 Icons* (£7.95).
- *Neodesk CLI v2.1* (£24.95): Command Line Interface for use with *Neodesk*.
- *Geneva/Neodesk 4* bundle (£99).
- *Steno v2.12* (£24.95): text editor that operates as a desk accessory.
- *Stalker v3.05* (£39.95): communications program with background Z-modem.
- *Convector Pro v1.00J* (£79): fast and easy to use auto-tracing program.
- *Arabesque Pro v2.15* (£119): vector and bitmap editing/creation program for the Atari range.

For more information, contact Titan Designs on 0121 693 6669, or email them at 100345.2350@compuserve.com.

BITS AND BOPS

System Solutions have just announced *BitBopper*, a new Falcon-based product. Utilising the Falcon's hardware to its fullest, *BitBopper* takes an audio input and produces a video light show suitable for club dancefloors. The program can generate psychedelic video imagery, employing strobe effects and Kaleidoscopic patterns, and the software is content-sensitive, so the imagery can work with both hard-core techno sounds or with calmer ambient music. The screen objects, called 'videogobos', are always in sync with the beat. The software can also display text and can be set to respond to MIDI input, so that images can be displayed at any time using MIDI events, or even controlled directly from a MIDI keyboard.

BitBopper requires a Falcon with an RGB or TV output (which excludes the new MkX, sadly!). System Solutions can configure a system according to requirements, from single to multi-user, as well as multiple screen arrangements. Contact them on 0181 693 3355 for more details, or visit the new System Solutions web site at http://www.ssolutions.com. The company also provides online support for their complete product range via email at ssolutions@cix.compulink.co.uk.

STUDIO Quad 4 Inputs/4 Outputs.

Multi-Effects Redefined.

What does multi-effects mean to you? Plugging in multiple signal processors to achieve the perfect blend of effects? That isn't DigiTech's idea of multi-effects and it shouldn't be yours. How many times have you only imagined the ease of a single rack unit capable of true multi-effects? Check out the Studio Quad. With its ingenious user interface, large custom display, and potent S-DISC™ technology at its heart, the Studio Quad is capable of not just replacing, but thoroughly eliminating the need for multiple, expensive, single-purpose processing units.

The Studio Quad features 4 completely independent inputs and outputs that gives you the power of two true stereo processors or 4 independent mono processors. But true stereo is only the beginning. Imagine a quad drum gate where each signal path is optimized specifically to achieve the best audio performance from each drum. Imagine the power to process two true stereo sources simultaneously without sacrificing control. You can even use the Studio Quad as four mono-in/stereo-out processors.

Is the Studio Quad complex to operate? Not at all! The front panel of the Studio Quad is ergonimically designed, and features a simple yet remarkably powerful interface that gives you effortless control over this vast array of sonic textures.

Finally, a product that is everything a Multi-Effects Processor should be.

Call for a brochure or visit your local DigiTech dealer for a comprehensive demonstration. Four ins, four outs for £499.95.

New, large, custom display with easy-to-use interface.

- 4 independent ins and outs
- Multiple input/output signal path
- S-DISC™ powered
- The equivalent of 4 signal processors in 1!
- Automatic input leveling
- Dynamic parameter modifiers
- Full MIDI implementation
- Multi-function effect modules
- Full bandwidth effects
- True stereo effects

DigiTech

ARBITER
GROUP PLC

Wilberforce Road, London, NW9 6AX Tel: 0181 202 1199 Fax: 0181 202 7076 Internet: http://www.demon.co.uk.arbiter

Happiness experience

with Philips DCC

★ ★ ★ ★ ★ 18-BIT **digital quality**

Oh how they panicked when DCC was launched in the musical instrument industry. 'It's not a standard format!' they cried (it is now). 'It's not true 16 bit!' they yelped (actually it's 18 bit). 'It doesn't sound the same as DAT' sneered the Luddite know-it-alls with their hearing deficiencies. If you want to know the truth, read what the press say about DCC in the extracts printed opposite. And if you want to hear the truth - just buy one.

"...there's no denying that 18-bit fidelity has won the day with its superior dynamic range and mirror-image reproduction...DCC users know the system sounds every bit as good as DAT, some say 2-bits better...when all £800 buys you is a 'bottom-of-the-range' DAT the intelligent choice has to be DCC."

18 bit recorder with digital i/O, infra-red remote, track-titling, turbo transport. analogue cassette compatibility, traditional 700 series black-box styling. The world's best selling DCC machine.

DCC730

£249 INC. VAT

INCLUDES 5 X 90 MINUTE BLANK TAPES SAVING £35

- Buy any of these four outstanding DCC recording systems together with a DCC134 portable playback unit and save an extra £75.
- All DCC products and packages advertised here are available through a nationwide dealer network. **Call SRTL on 01243-379834** to place your order, request literature or locate your nearest stockist.

Special Package Deals

DCC730 & DCC134
Includes 5x90 minute blank tapes saving in total £110 ..... **£324**

DCC951 & DCC134
Includes 10x90 minute blank tapes saving in total £145 ..... **£354**

DCC170 & DCC134
Includes 5x90 minute blank tapes saving in total £110 ..... **£324**

FW68 & DCC134
Includes 10x90 minute blank tapes saving in total £145 ..... **£474**

★ ★ ★ ★ ★ 18-BIT

Happiness

SRTL LTD, RECORD HOUSE, EMSWORTH, HAMPSHIRE PO10 7NS

18 bit recorder with digital I/O, infra-red remote, track-titling, turbo transport, analogue cassette compatibility, chic and radical 900 series "Bauhaus" styling, technically identical to DCC730

DCC951
£279 INC. VAT
INCLUDES 10 X 90 MINUTE BLANK TAPES SAVING £70

18 bit portable recorder with digital i/O, wired remote, analogue cassette compatibility and stereo mic. input - sonically identical to DCC730/951.

DCC170
£249 INC. VAT
INCLUDES 5 X 90 MINUTE BLANK TAPES SAVING £35

18 bit portable playback unit with wired remote and analogue cassette compatibility - sonically identical to DCC730/951.

DCC134
£150 INC. VAT
INCLUDES 3 X 90 MINUTE BLANK TAPES SAVING £21

18 bit Turbo Drive DCC Mini System. 2x35 watt RMS 3-way bass reflex monitoring, Bitstream CD player, analogue cassette deck, PLL quartz digital tuner, 10 band spectrum analyser, spatial surround sound and infra-red remote control. A wonderful configuration for the home recordist at any price.

FW68
£399 INC. VAT
INCLUDES 10 X 90 MINUTE BLANK TAPES SAVING £70

DCC

★ ★ ★ ★ ★ 18-BIT

PHILIPS DIGITAL COMPACT CASSETTE

To place your order call SRTL on 01243 379834

SRTL

Happiness is purity of sound

'the recording quality is to all intents and purposes indistinguishable from DAT or CD. Indeed, if you're using the analogue input, you'll actually get a little more dynamic range than you would with a DAT machine.' ***Sound On Sound***

'... it's easy to forget you're listening to tape and not a silver disc.. the improved dynamics of the 18 bit system are again apparent... certainly there's no feeling that this is CD's poor relation.' ***What Hi-Fi***

'...the Philips exhibited excellent dynamics and a beautifully seamless sound that caught the air and space of the hall, subjectively far superior to when it was recorded from either analogue or 16 bit CD. ...All in all, I was seriously impressed with the DCC's'. ***Hi-Fi World***

'In contrast to the two MiniDisc (MD) machines, the DCC sounded bold and vital, and ultimately more engaging - there was more going on, giving the aural senses more of a workout. The treble sounded clean and crisp, without the fried-eggs quality of the MD recorders, but with plenty of detail and a more palpable sense of presence. ...the mid-band was similarly more vital and engaging. The Philips was much more consistent than the others, with none of the rather crudely-drawn quality that becomes apparent on MD when the music turns stressful...by far the best sounding of the three'. ***Hi-Fi Choice***

Happiness is picking winners

'These new generation DCC machines start out by sampling the incoming signal not at 16 bits but at 18 bits which gives rise to a potential improvement in both dynamic range and residual noise of around 12 dB... DCC sounds just the same as DAT...The way DAT keeps going up in price, DCC could well become the home recording standard of the latter half of the nineties.' ***Sound On Sound***

'...DAT is starting to get out of reach with its escalating, almost elitist price range...The DCC730 is much better and cheaper than the recordable MiniDisc; it even makes a handsome partner for a direct-to-disk system. If only you could use it to back-up data I'd give up on DAT altogether. Go out and buy one...' ***The Mix***

'Philips allegedly invested £500 million in the research and design of DCC... the low-cost DCC730 could seriously challenge DAT's hold on the high-tech market. ...could encourage small studios to adopt the format over the increasingly expensive DAT alternative.' ***Future Music***

'I've used a good quality DAT machine for years and am no stranger to the way digital tape can render analogue sound dry and antiseptic. But the Philips simply wouldn't entertain the possibility, giving a surprisingly warm and fulsome rendition. The bass was particularly well-rounded and lacked the sense of sterility so common with digital. There was no trace of hardness higher up the frequency range.' ***Hi-Fi World***

'All DCC recorders will accept a digital input at 32, 44.1 & 48khz, which is good news for anyone who wants to transfer a DAT collection to DCC. DCC's ability to handle any sampling rate you can throw at it might even precipitate a glut of second-hand DAT machines!' ***The Mix***

CALL SRTL ON 01243 379834 FROM 9.30AM TO 3.30PM FOR NEXT DAY DELIVERY

Solar Flair

GRAHAM MASSEY OF 808 STATE • RECORDING *DON SOLARIS*

It's taken a couple of years, but 808 State have at last emerged from a variety of studios with a sleek new album, the superbly-crafted* Don Solaris. *MATT BELL talks techno to head of State Graham Massey.

Unless your band is called The Beatles, three years is a long time to be absent from the world of mainstream pop music. In the even more faceless world of dance music, the 'stars' — if you can call them that — often burn out much faster, and are swiftly forgotten. But although it's *over* three years since the release of 808 State's last album, *Gorgeous*, Graham Massey is in fine spirits, and with good reason. The group's new release, *Don Solaris*, marks a return to form after *Gorgeous*, a record that Massey himself now admits to finding "weak" in parts — a victim of what he and colleagues Andrew Barker and Darren Partington perceived as the stagnation of the dance scene that they had dominated at the turn of the decade with singles like 'Pacific 202', 'Cübik', 'In Yer Face', and the albums *Ninety* and *ex:el*.

TIMELY RETURN?

However, Graham's current enthusiasm doesn't just result from satisfaction with the group's new material — he believes music is now more interesting than it was at the time of *Gorgeous*: "Programming is a lot more exciting than it used to be — the 'drum and bass' movement is widening the whole thing out completely. Of all of the things you hear when you go out clubbing, that's been one of the things that's got me really excited again. It's affecting all kinds of other music as well, and that's good for us. Once upon a time, I think people looked on what we were doing as rather flash, but it's accepted now. It's only in the last year and a half that people have been able to be that broad — things like Tricky would never have happened earlier on. There's a more open, eclectic climate".

So, perhaps the delay was a good thing. For *Don Solaris* is definitely late — in his last *SOS* interview, in November 1994, Graham was talking about a January '95 release. At the time, he claimed the group were "sitting on about 40 finished tracks". I wondered what had happened, and whether any of that 40 had made it onto the final record. "There's quite a lot of them. Basically, we hit a point where we'd recorded in so many different studios that it didn't have any continuity to it". Extensive recording had already taken place in Sheffield's Fon studios and Manchester's Planet 4, and mixes of the material had been completed, when 808's label ZTT suggested the band go and mix the album again from scratch in one place. The intention was not to do any further recording, but it didn't turn out like that: "We ended up going to The Wool Hall in Bath with Al Stone as our engineer, who's mixed Björk and the Stereo MCs. Of course, we wrote more tunes there as we mixed in the studio".

Massey feels Stone's input much improved the album: "He made it loads better, just in terms of keeping everthing sonically clear. It had got quite dense — and sometimes you can get in a bit of a pickle with that. We'd be concentrating, going 'errr — you know the fourth type of hi-hat in the eighth kit? I can't hear it!'. It's good to have an outsider come in and tell you that that doesn't matter. He's good to work off, a good critic — and

Photo: Piers Allardyce

it became a proper album, as opposed to a collection of tracks. The recording process can be quite fragmented now, because you might take a piece from your home studio, and another piece from another studio... Once upon a time, you went in the recording studio and made a record — now you're collecting little elements all the time, which you put together at the end, in the mix."

I assumed that the group must have employed hard disk recording to assemble the final tracks in this way, but this was not the full story, as Graham explained. He purchased a Digidesign Pro Tools system last Christmas to digitally assemble the album master (of which more later), but most of the tracks themselves were finished by then: "It depended what studio we were working in. Some had Pro Tools systems running with *Cubase*, but we were flying things in on two-inch analogue tape as well. It was a real curry! We used a lot more live elements on this album, and hard disk recording helped out there, because you can almost treat audio as if it were MIDI information, but you've still got that spontaneity and randomness. For example, we know a really good Latin drummer, so we got him playing along roughly to some stuff in our own studio, and then took a DAT of him down and fitted chunks of his playing into our grooves".

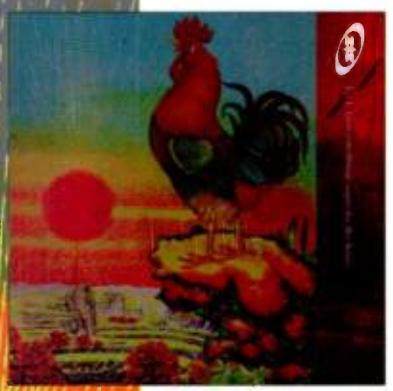
INSTRUMENTATION: GOING LIVE?

It is the more 'live' feel that sets *Don Solaris* apart from the likes of *ex:el* — although the incredibly complex 808 State programmed rhythms and basslines are still in evidence (of which more elsewhere in this article). Back in November 1994, Massey promised a more 'organic' 808 State, stating that the increased use of acoustic instruments that had begun on *Gorgeous* was much more advanced on the new record. Not only is this apparent now that *Solaris* has at last risen above the horizon, but the production techniques used on the album have been more 'organic' too, with wider use of improvisation-inpired composition, old-fahioned analogue effects, and amp miking techniques than you might expect from a band named after a drum machine. Graham: "We felt a lot more comfortable about ▶

808 State at the Don Solaris *mixing sessions, Olympic Studios, London, late 1995: (left-right) Andrew Barker, Graham Massey, Darren Partington.*

using guitars and instruments like the vibraphone and glockenspiel on this album. There's more brass and wind instruments on this one, too. They were on the others too, but it used to be a big deal to put a *guitar* in, say. Now we're comfortable with being less tied to SMPTE."

Session musicians were not required to play the brass and wind instruments, as Graham has been playing both for many years, having been part of various improvisational jazz bands before his techno conversion: "There are hardly any samples — we've really cut down on those. It's just a natural element that's always been there, from 'Pacific State' onwards."



Certainly, on the track 'Black Dartagnion', the band sound like they're trying to get every world genre into one piece of music: tablas, a jazzy bass clarinet, a didgeridoo, and a dub bassline blend together with subtle synths to create a much more natural-sounding backing than anything the group have produced before. Graham: "That was one of the earliest tracks, and survived from the Fon sessions — it's about three years old now. We didn't want to change it — we thought it was really good already. The bass clarinet is one of my favorite instruments, and there's loads of original Fender Rhodes in it too. We went to town on the electric pianos on this album — we got a Hohner Electra, which has a different sound altogether, and Wurlitzers. We used them all layered together, for that Miles Davies 'five-Rhodes-in-a-room' sound."

Other equipment was used to enhance the warm feel of the record, like the Korg G5 bass analogue processor, used by the band to impart a fat, Moog synth bass-type feel to tracks played on a real bass guitar, for example in the closing passage of the track 'Mooz'. Graham: "You can get a lot of Moog-style feeling into your bass parts with it. We've also started putting kits through it. A guy I know who does a lot of drum and bass stuff got one just to put his kick drums through, and I've heard it on loads of jungle records since then! People have obviously all got the same idea at the same time there.

"We also used a lot of cheap analogue effects pedals — one of the best things I've bought all year is a Digitech whammy pedal, which I've used in countless situations."

The keyboard solo on the closing album track 'Banuchaq' — one of the wildest I've ever heard — was played on a Moog Liberation. The signal was sent through several analogue pedals and a parametric EQ, as Graham explained: "The EQ was being tweaked as the Liberation was played. You get quite a lot of control on a Liberation with its controller ribbon, and if you get the oscillators sync'ed up and pass the whole lot through a parametric EQ set to distortion, the sound really turns into something else. That wasn't sequenced — it was just a case of going at it!"

Indeed, for the recording of much of the album, the band exhibited the same tendency to 'go at' things and improvise. For Graham, this presented a welcome return to the kind of playing he had been used to in improvisational groups: but he did acknowledge the usefulness of technology for improvisation, as a non-classically-trained musician. "You're *constantly* having to deal with the limitations of your musicianship. I know this happens for a lot of people, if they're not trained musicians — and we're not, not really — you go to a keyboard every day, and you find yourself doing the same things. But if you're recording into a

808 STATE: SELECTED GEAR

SYNTHS
- ARP 2600
- ARP Odyssey
- ARP Quartet
- ARP Axxe
- Chase Bit One
- EDP Wasp
- EM&M Spectrum Synth
- Emu Vintage Keys
- Korg Prophecy
- Korg Wavestation AD
- Moog Prodigy
- Moog Rogue
- Moog Minimoog
- Moog Memorymoog
- Moog Liberation
- Moog Opus 3
- Oberheim 4-voice
- Oberheim Matrix 1000
- Roland D50
- Roland JD800
- Roland Juno 106
- Roland Jupiter 4
- Roland Jupiter 8
- Roland JX8P
- Roland PC100
- Roland SH09
- Roland SH101
- Roland SH2000
- Roland TB303
- Sequential Pro One
- Yamaha CS30

COMPUTERS
- Atari 1040ST running *Cubase*
- Apple Mac Quadra 650 running Pro Tools

SAMPLERS
- Akai S1100
- Akai S1000

RHYTHM UNITS
- Alesis HR16
- Denon rhythm box
- Pearl Syncussion
- Roland CR78
- Roland R8
- Roland TR606
- Roland TR727
- Roland TR909

RECORDING
- Arbiter Time Dimension DDL pedal
- Boss overdrive
- Crybaby wah-wah
- Digitech whammy pedal
- Electro Harmonix Doctor Q
- Electro Harmonix memoryman
- Korg G5 bass synth processor
- Korg VCF pedal
- Morley wah fuzz
- MXR phaser
- Roland Space Echo
- Sovtec Bigmuff (x2)

ORGANS
- Bentley Acetone organ
- Fender Rhodes Stage 73
- Hohner Clavinet C
- Hohner D6 Clavinet
- Hohner Electra piano
- Vox Jaguar organ
- Yamaha DX7 mk I

GUITARS
- 6-string lap steel
- 8-string hawaiian lap guitar
- Casio MIDI guitar
- Fender Stratocaster
- Gibson Les Paul
- Guild Starfire
- Hawaiian Ukelele
- Ibanez ST50
- Kramer
- Takamine acoustic steel
- Takamine classical acoustic
- Yamaha 12-string acoustic

BASS GUITAR
- Fender Musicman

BRASS & WOODWIND
- Alto clarinet
- Bamboo flute
- Bass clarinet
- B flat Clarinet
- B flat trumpet
- Bongos
- C flute
- Cornet
- Congas
- Cowbells
- Egyptian tamborine
- Glockenspiel
- Kalimba
- Pocket trumpet
- Tamborine
- Tenor recorder
- Timbales
- Traford soprano saxophone
- Trombone
- Vibraphone

MISCELLANEOUS
- Alto melodica
- Cromatic harmonica
- Electric violin
- Peavey Gold Amp
- Stylophone (x2)
- WEM Dominator bass combo

THE STATE OF SYNTHS TODAY

Though 808 State's enormous number of synths — featured on every album sleeve in tongue-in-cheek gear lists — is undiminished, it would seem that they've not bought much that's new since the making of *Gorgeous*. When I make this point to Graham, he concurs: "It's true. More and more, you get tired of buying. There used to be this feeling that buying a new synth would expand everything, all your sounds — but when you've bought your umpteenth synth, you realise it's only added a little bit to your power. You get a bit more choosy. We're in a fortunate position — some people only get one choice, don't they?

"It seems analogue synth mania is finally falling off over here. But it's moved abroad. It was always a pretty British thing — when we were over in the States a couple of years ago, you could still pick vintage gear up cheaply there. You can't any more — and now the Japanese have gone mad for it as well."

A couple of modern synths have caught the group's eye, however. Graham: "We got a Korg Prophecy when they came out, and it seems manufacturers are finally starting to listen to what people really want. That synth is really organic. I love the feedback loops in it — you can make everything go absolutely mental. The JD800 is still one of our main instruments for the same reason — you want something, you can just reach out and push a slider. It's our master keyboard, but it's been on a few tours and is a bit battered. Some of our music is now shaped by the fact that several keys have been kicked in and are missing..."

Graham's colleague Andrew Barker has recently parted with one of his two prized Roland TB303s — and the high price he fetched for the unit allowed him to go straight out and buy the object of *his* desire, a Waldorf Pulse monosynth. Graham: "It's brilliant — just like a Memorymoog in a box. *And* it's stable. On the other hand, I saw one of those Quasimidi Ravens the other day — and I was appalled at how easily you could do rave music with the thing — it was like the Antichrist!"

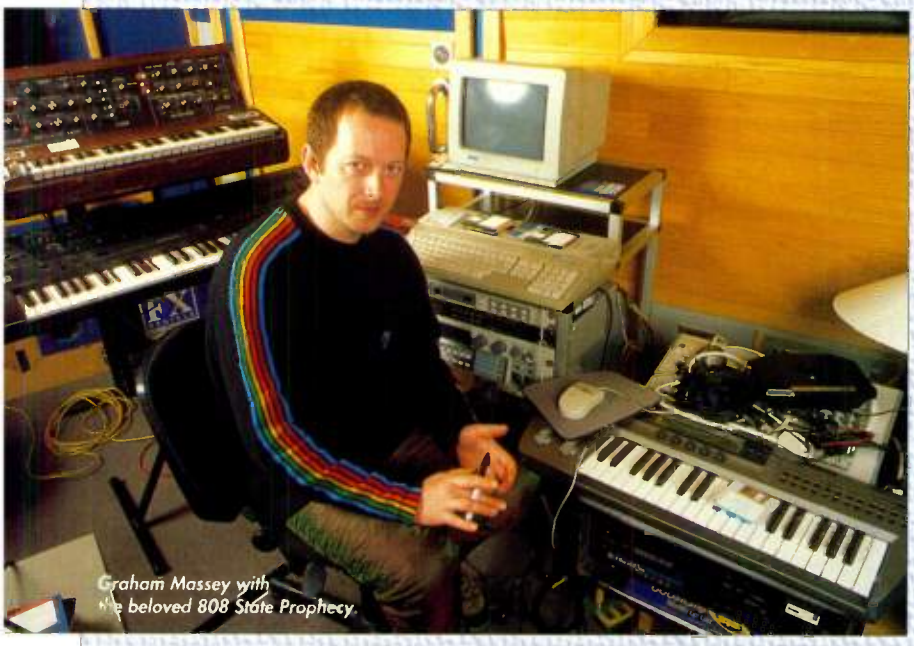


Photo: Piers Allardyce.

Graham Massey with the beloved 808 State Prophecy.

computer, you can change what you record later. You have a link from your brain to your hands which is only good enough to do certain things — but then you have the link from your brain to the computer, which is capable of much more. But it's still your brain — and they're still your ideas. That's what's great about technology. Despite that, being in an improvisational band for years was a tremendous help to composing; you need to improvise to create in the first place. I think a lot of programmers now would benefit from being in a jamming situation. I know jams are sometimes really terrible, but it's a great skill to learn if you can. I've been trying to do it a lot more myself lately — just get in a room with humans and play. I've done remixes where I've brought a lot of session musicians in: percussionists, and flute and sax players — and while I've been waiting for the album to come out, I've been doing a few other projects that are more musician-based; I like having that human element again."

WHOSE (INSTRUMENTAL) LINE IS IT ANYWAY?

On some of the songs, improvisation, hand in hand with technology, took the group far away from their original ideas for the track. One of the few new synths used on the album (see the 'The State Of Synths Today' box) was a Korg Prophecy. Graham had written a drum pattern with a North African feel to it, and when the group dicovered that the

THIS IS A USER LIST FOR A RANGE OF MICROPHONES:

Black Crowes
Bon Jovi
Bonnie Raitt
Bruce Springsteen
Crosby Stills & Nash
Doobie Brothers
Elastica
Hall & Oates
Hole
Jesus and Mary Chain
John Mellencamp Tour
Lenny Kravitz
Lindsey Buckingham
Natalie Merchant
Offspring
Pearl Jam
Pulp
Queensryche
Radio Head
Red Hot Chili Peppers
Roxette
Smashing Pumpkins
Sonic Youth
Soundgarden
Stone Temple Pilots
Suede
The Beach Boys
Yngwie Malmsteen
1996 MTV Video Awards

BUT WHICH ONE?

The above list indicates that the artiste and/or the artist's band and/or the artist's tour have used an Audix OM series microphone. It does not necessarily represent an official endorsement of the product or allegiance to the brand. E&OE.

Photo: Piers Allardyce.

Darren Partington (left) and Andrew Barker (right) pictured at Olympic Studios during the mixing of Don Solaris *late last year.*

▶ Prophecy keyboard could be set to different tunings, they elected to try an Arabic scale to fit the tone of the rhythm pattern — which was unused in the final version of the track, named 'Balboa'. Graham: "We played loads of Arabic flute over the top, then we took out about four bars that sounded good, wrote basslines to go with them, and worked out mid lines from the same improvisation. That track was one of the ones that we wrote in the studio at the end".

The arpeggiated and extremely unpredictable chord progressions at the end of the track 'Kouhoutek' came about in a similar way. Graham: "That came from another piece. We had the front part, and needed an ending. I had this tape which we'd done at our studio, with chord progression exercises on it — I was just messing around with some chords and the arpeggiator on our Jupiter 8. We edited some of the chords out and ended up with a section of about 24 bars, with some really good juxtapositions. It shouldn't really relate to the rest of the track, but somehow it does. We'll very often take a successful piece of a tune that isn't working properly as a whole, and work it into another track by changing the key."

Like the unexpected chord progressions on the fade of 'Kouhoutek', many 808 State tracks exhibit bizarre melody or bass lines. Another good example from *Don Solaris* is the sax line with a deliberate off-key note on the track 'Joyrider'. But Graham defends his choice: "Sometimes, it's limited musicianship, a lack of 'proper' knowledge that leads to strange chords in our stuff. But that happens in all kinds of other music. A 'wrong note' in something can be the most *right* note, because to do the obvious thing all the time is boring. We often squabble about certain notes in the middle of the night, and some things get left. It can be very hard to get tuning right, especially when you're dealing with sub-bass. You almost ignore a sub-bass line until you put it up on big speakers — and often, when it's in tune on large monitors, it twists out of tune again when you play it on something else quietly... it's only in tune when it's loud. That makes it hell to mix. You have to decide: should you make it in tune when it's quiet, or in tune when it's loud? Or do you just forget it? Often, we leave it, and again, on this album, Al Stone was good at encouraging us not to worry about things like that so much."

MIXING IT

The mixing sessions for *Don Solaris* (carried out using SSL consoles, mostly at The Wool Hall in Bath, but also at Olympic studios in London, where the photos accompanying this article were taken) were a vital part of the making of the record. Far from being a simple matter of balancing levels, this was the stage where heavy processing was applied to the tracks recorded, in some cases distorting them out of recognition, as Graham explained:

"Once upon a time, electronic music was quite a sterile environment — you wouldn't mike gear up, as the whole point was to DI everything. That was the thrill — everything was plastic and clean. It's all gone the other way now; you're trying to pretend it's *not* a D50 anymore, it's an old organ, or whatever. And distortion's 'in' as well, so we used the studio facilities a lot to give us room sounds — we'd send individual lines through miked-up guitar amps, and we used a lot of cheap processing, like crappy MXR phasers instead of the AMS in the

WANTED — ONE CASIO FZ1

Rather as with their synths (see the 'State Of Synths Today' box elsewhere in this article), 808 State have not been gripped by upgrade frenzy where their sampler is concerned — they're still using an Akai S1100. Graham: "It's fine — except we sometimes take our stuff down to Bunk, Junk, and Genius for remixes — and our Akai disks don't fit in the S3200 down there. If we were going to upgrade, we might keep our S1100 and move up to an Emu or something — except then you have to convert your library sounds... Sometimes, though, it's good to have a clearout! I've still got a load of old Casio FZ disks that are like antiques now. I'd like to get those sounds back again, because there were a lot of good ones on the FZ sample disks, really upfront strings and things — and the FZ had a great resonant filter too. If I see one going cheap, I might get it. Anyone want to sell me theirs?"

MASTERS OF THE RHYTHM: DRUMS & BASS

On *Don Solaris*, as on all their other albums 808 State do not use sample CDs to provide them with percussion loops, but build up their incredibly complex rhythm patterns themselves. Surely, I ventured, it would be easier to get them off the shelf? Graham was firm: "We haven't got any CD-ROMs. We don't have any big objection to doing it, but we never get so stuck that we have to resort to something like that. It's just not as challenging." I asked how they go about building up their patterns.

"All kinds of ways. Rhythm usually comes first when we start a track, though we do do it other ways. We really like just programming on drum machines sometimes, like the Roland TR909 or R8. Or, we'll take weird preset patterns out of our CR78 or our Denon preset rhythm unit. That's an old preset organ accompaniment box, with wicked sounds in it — kind of like a TR808, but with its own character. I got it in an organ shop for about a fiver, and it's been on loads of our tracks. Once you've got your basis, you stack further patterns over the top. Sometimes, you'll be flicking around trying to get two patterns in time, and you'll hit a point where they're not in time, but they're doing a rhythm that works anyway. At that point, someone shouts 'Stop! Let's see if we can do anything with that' — rather than try and fit everything into four-on-the-floor 'pockets'. You just have to be aware enough to recognise when something's working, even when the rhythms aren't supposed to go together.

"Sounds also dictate rhythms. Rhythms are almost like another layer of music in themselves, with different tones and textures: a Buddy Rich-style crusty vinyl sound will dictate a certain feel to a track, and a big fat 808 sound on the bass will dictate another. So, when we're making up rhythms, we're not just thinking like a drummer would, we're thinking sonically. Because you're not actually playing the kit, you're free to think about the sounds you're using. When you stick a drummer in a room and record him, there's only one sound — and that's *such* an old idea! You're just dealing with technique then, and though that's very important, there's a lot more to drumming than that. We've got more of a palette now, and that's brilliant."

808 State's fluid, portamento'd basslines are also extremely distinctive,and contribute a great deal to the group's impact on dancefloors. Here Graham shared a couple of secrets: "We get some really good basslines by putting a polyphonic line through a monophonic synth — sometimes chords played through a monosynth result in very odd bass ideas, depending on the way the synth handles note priority. We also do the same thing we do with drum patterns — we'll write basslines in *Cubase* to go with a rhythm, and then copy the bassline to another track and shift it on a few beats in time — to the next 'pocket', where it fits rhythmically, but sounds totally different to how it used to."

studio. To give a big 'soundscape' feel on 'Bond', we had the drums playing through some big speaker stacks into a room, and then we miked those up.

"We used some digital outboard too — Lexicon reverbs from whatever studio we were in — but what I *really* love is analogue squelch boxes, like the new Mutator filter, which I've just tried out [*see the Mutator review on page 126 this month — Ed*]. That's wicked! We didn't use it on the album, though — it wasn't out then. We like to use a lot of old analogue effects, like the Roland Space Echo and an old Echoplex, to give the album a real flavour, rather than having everything too clean. At the other end of the scale, we also used digital distortion — our sampler feeding back on itself. We sampled that, chopped it up, and used it in 'Bond'. It sounds like a motorbike — in fact, anything that sounds like a motorbike is usually a piece of equipment going wrong. We have DATs with different kinds of sounds stored on them, so when equipment starts to die on us, it's 'quick! Stick it on the motorbike DAT!'".

DON SOLARIS — TRACKS

- 'Intro'
- 'Bond'
- 'Bird'
- 'Azura'
- 'Black Dartagnion'
- 'Joyrider'
- 'Lopez'
- 'Balboa'
- 'Kohoutek'
- 'Mooz'
- 'Jerusahat'
- 'Banachaq'

At the mixing stage, the songs varied wildly in their complexity. Involved pieces like 'Bond' went across 48 tracks, while the comparatively spartan 'Lopez' only used eight tracks. SSL automation was used to mix the entire album, which was then placed into Graham's then-newly-purchased Pro Tools system so that he could create a crossfaded master.

MASTERING THE SITUATION

When he spoke to *SOS* in November 1994, Graham was looking forward to getting to grips with a digital editing system such as Pro Tools, so that he could create records with no clear track boundaries. At the time, he said, "An editing system is something we could use really well... we've done maybe three mixes of each track, and then lots of little sections ready for editing — we want to merge the whole thing, make it one continuous piece. I like the idea of using music as raw material to build a bigger picture; that's something the new album will definitely show". I was surprised on listening to the album that this appeared not to be the case. Tracks crossfaded into one another, but remained fairly distinct musical entities. I asked Graham why he had changed his mind.

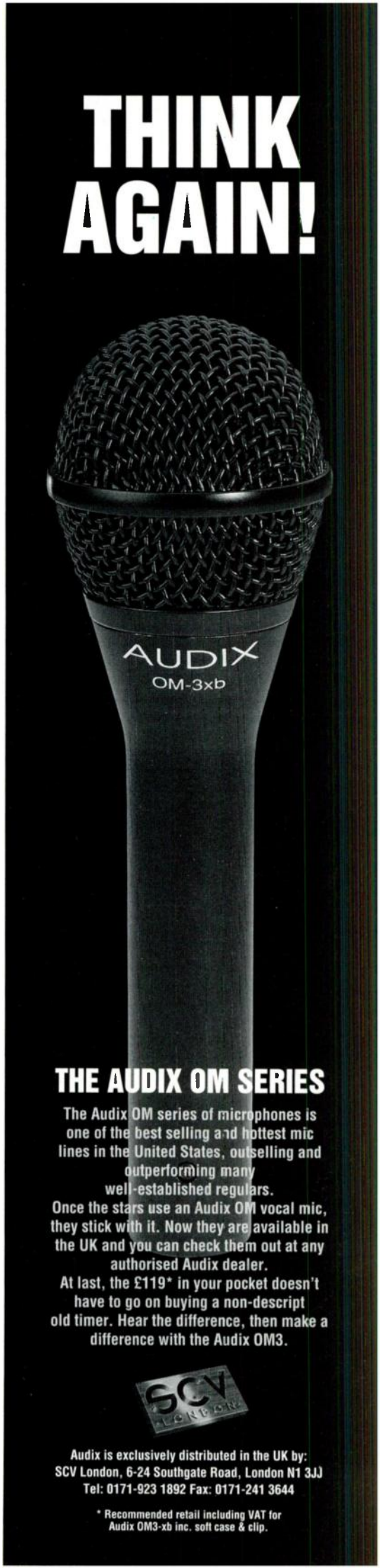
"That was an idea I had that I *was* going to do. There's elements of it in there — that's what the 'Intro' is for at the start, it's like an overture of pieces from other tracks — but it didn't turn out the way I thought. I was quite ambitious when I started, and did a few psycho versions at home, but the album lasted two hours, and it was all getting a bit long-winded! Gradually, I got that out of my system, and toned it down to something that worked. I think you would need to do an album in a different way from the start to pull that kind of thing off successfully. I've been doing stuff since just to try it out, really loose stuff that you can jam together. You don't end up with songs so much, just themes."

Unable to decide whether to master onto analogue tape or DAT once the crossfading was complete, the group elected to test both: "We had it cut from half-inch first, and it was a bit muddy for us. Half-inch tape sounds great with minimalist stuff, but this album was too dense for that. So, we went back and cut it again on DAT. Certain tracks were suited to half-inch, and others weren't, but we cut the whole thing from DAT in the end. And now we're going to sell all our half-inch for recycling, because it costs a fortune!"

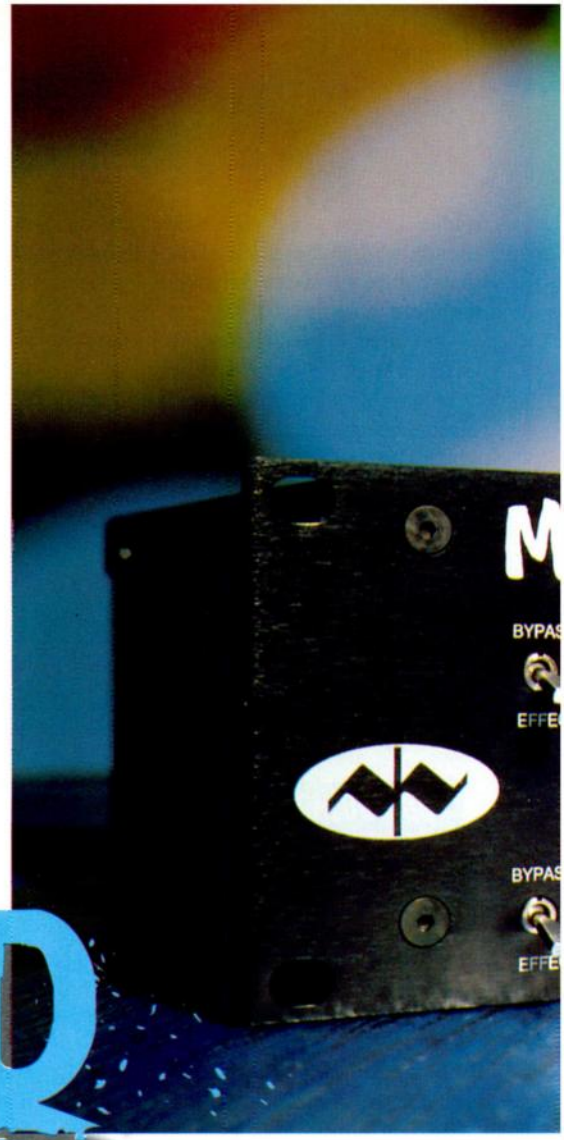
THE *DON* ARTICLE

With the album now on release, and the striking 'Bond' already picked as the first single. I wondered which tracks Graham thought would make good follow-up 45s. He seemed most keen on the commercial 'Jerusahat', or the simple 'Lopez', with vocals sung by the Manic Street Preachers' James Dean Bradfield. "Instrumentals seem to be a bit more acceptable in the charts lately — you've had Robert Miles' 'Children' and the X-Files track. I'd like to try and put 'Jerusahat' out as a single. I think it'd sound great on the radio." Was this his favourite on the album? "No, that changes all the time. I think the album as a whole is quite balanced, and that's the main thing — it's been concentrated over a period of time into something quite solid. Of course, my picture of it is a lot bigger, because I know all the other stuff that was going to go into it... I could get picky about some aspects of it, but you've got to stop doing an album at some point, put in a full stop — and do another one!"

Don Solaris *was released on June 17th, on the same day as the new single, 'Bond'. 808 State are planning a British tour for later this year.*



The predictability of modern digital sound sources, while convenient, may have you longing for some of the chaotic complexity of analogue. PAUL NAGLE looks at an analogue filter which could put the surprise value back into your music.



altered States

MUTRONICS MUTATOR STEREO ANALOGUE FILTER

With the thirst for analogue warmth in a cold digital age seemingly unquenchable, the number of devices aimed at the retro market shows no sign of slowing. While some companies are busy packaging old sounds in new boxes, others are concentrating on devices through which you can force your squeaky-clean sounds, to have them emerge suitably endowed with retro-credibility. New boys to this market are Mutronics, and their first offspring, the Mutator, aims to bring the warmth of the analogue filter to our warm analogue ears.

CONTROL FREAK

The Mutator is basically a pair of 24dB-per-octave analogue filters with envelope follower capabilities. This latter point means that the input volume level of a sound can determine the cutoff frequency of the filter — in other words, the filter 'follows' the 'envelope' of the input signal. An external audio source can also be used as the control signal, allowing the Mutator to superimpose the envelope of one sound onto the filter contour of another — in much the same way as an external key input on a compressor might enable one sound to control the compression characteristics of another.

Since the Mutator is a two-channel device, the controls for each channel are largely duplicated, although there are some important differences that I'll point out as we pass along. Over on the far left of the front panel is the Bypass/Effect switch, enabling quick and convenient wet/dry comparisons. How often this simple control is forgotten by manufacturers who should know better! Next up is the Internal/External control source switch, which determines whether the treated signal or an external audio feed will be used as the control source to drive the envelope follower. The Gate/Envelope switch tells the Mutator how its envelope will react to the control source. In 'Gate' mode, the control source becomes a trigger, turning the envelope follower fully on as soon as the signal reaches the threshold set by the Sensitivity knob, and fully off again as soon as the signal falls back below the threshold. In 'Envelope' mode, the control source is continuously tracked by the envelope follower, to provide a variable control voltage for the VCF (Voltage Controlled Filter) and VCA (Voltage Controlled Amplifier), with the Sensitivity knob taking on the task of controlling the envelope drive level.

The envelope controls themselves are quite basic for anyone used to the multi-stage variants found in most of today's digital synthesizers, providing adjustment of attack and release times only. This is probably the weakest area of the Mutator's spec. It would be nice to have a full implementation of an ADSR envelope, which would give a much more interesting opportunity to provide filter modulation over an otherwise static signal. One way around this is to use an external control source to provide the envelope follower with the ADSR characteristics required — when used with a synth this could be achieved by programming a second sound to play in unison with the first, and feed this from a separate output into the Mutator's External input. Usefully, the envelope follower is equipped with an LED level indicator that shows the current output

level. This LED makes setting drive and threshold levels relatively simple.

The onboard LFO (Low Frequency Oscillator) is capable of running from approximately 0.1Hz (one cycle every 10 seconds) to 100Hz (100 cycles per second). This is a good, healthy range, allowing subtle changes in timbre over time, or clangorous, pseudo-ring modulation effects. Four waveforms are available for the LFO, these being the familiar triangle, square, ramp and inverted ramp. A single LFO depth control is provided, doing duty for both the VCF and VCA. A 3-way switch determines whether the LFO will modulate VCF only, VCA only, or both. In keeping with the Mutator's suitability for stereo signal processing, Channel 2 will happily make use of Channel 1's LFO. The LFO waveform sent from Channel 1 may be inverted, for dramatic stereo auto-panning or filter frequency-dependent sweep effects.

The voltage from the envelope follower arrives at the VCF via an Envelope Sweep control knob. This knob is capable of generating both negative (turn to the left) and positive (turn to the right) control voltages to govern the filter's cutoff frequency — it's good to see the possibility for negative envelope sweeps. Apart from the more obvious uses, such as those delightful squelchy synth 'twangs', the Mutator can also perform frequency 'ducking' — perhaps to drop the high frequencies from a heavy guitar backing during vocal passages, for instance?

VCF cutoff and resonance both have their own dedicated controls. With resonance turned way up, the filter can be driven into good old fashioned self-oscillation. A switch on the far right toggles the VCA in and out of circuit.

THOROUGHLY MODERN MIDI

The review machine came equipped with the optional MIDI board. This option allows the Mutator to respond to various MIDI message types. At its most basic, the MIDI board might be put to work triggering the Mutator's envelopes from MIDI Note On commands. The filter cutoff tracks the incoming MIDI note number and may also be swept across its entire range by use of pitch-bend commands. Resonance is controlled from a modulation wheel. The Mutator's response to MIDI controller numbers is hard-wired at the factory, so if you don't like a particular controller assignment you'll have to use some form of external MIDI processor to do some re-mapping. I found the assignment of mod wheel to resonance the most problematic, since it precluded the use of mod wheel vibrato. I got around this by programming my MIDI patchbay to filter out mod wheel messages to the Mutator. The VCA level will respond to standard MIDI controller 7 volume messages, but an option to apply key velocity to VCF cutoff and VCA level would have been welcome.

MIDI channels are selected with a rotary switch on the rear of the machine, which is a tad ▶

pros & cons

MUTRONICS MUTATOR
£502/£740

pros
- Filter definitely exhibits that 'something' that we all find appealing in vintage synths.
- Dedicated knobs and switches for quick 'n' easy use.
- Capable of dramatic dynamic stereo effects from a mono source.
- External trigger/envelope mode.
- Quirky LFO retrigger feature (with MIDI option installed).

cons
- Limited (and optional) MIDI control.
- No patch storage capability.
- Simplified Attack-Release envelope may put off some synth power-users.

summary

Beautiful-sounding filter with real analogue controls and a penchant for bizarre, off-the-wall stereo effects, marred only by a very basic envelope implementation and limited MIDI control. If you are looking for an add-on analogue filter for your digital synths, this device could prove a little frustrating, but as a production tool the Mutator has a lot going for it.

SOUND ON SOUND

SOCKET TO ME

Each of the Mutator s audio channels has four associated sockets on the rear. The audio in and out are pretty much self-explanatory. The external input is where a second audio source is plugged in to act as a modulation source. The final socket is a simple CV (Control Voltage) input, which will allow modulation of the filter cutoff, perhaps from a modular synth system or a MIDI/CV converter. The audio in, external in and CV in of channel 1 are normalised to channel 2, which helps with setting up for stereo operation (ie. 1-in, 2-out). Power is supplied to the Mutator via a standard Euro-plug connector with easily accessible fuse — none of those nasty wall-warts or line-lumps here, thank you very much.

The basic Mutator's rear panel (although the MIDI version was tested for this review). This version also sports the inconveniently-sited rear panel MIDI channel selector.

▶ inconvenient! While Channel 1 responds on the chosen MIDI channel, Channel 2 makes use of this channel + 1 (or channel 1, if the selector is set to 16). Unfortunately, there is no way to allow both of the Mutator's audio channels to share the same MIDI channel. Also on the rear panel (although I am assured by Mutronics that they will make it to the front in production models!) are two switches responsible for toggling the Mutator's use of MIDI Note On/Off commands.

We've already visited 'Gate' mode, which merely triggers the envelopes. When the Mutator is in 'Envelope' mode, MIDI Note On commands can be used to reset the LFO back to the beginning of its waveform cycle. This voltage will be held until a MIDI Note Off command is received, at which point the LFO will continue to produce its normal waveform. This simple feature is an extremely inspiring tool for creating all kinds of subtle — or not so subtle — rhythmic variations. You could use this facility to keep a repeating synth pulse in time, or just make random stabs to add a little anarchy to the proceedings.

WELCOME TO THE HOUSE OF FUN!

With my mouth watering like a vampire in a blood bank, I plugged in, looped a couple of favourite sequences and began to play around with the filter controls. The Mutator began to burble and squeak in a most appealingly analogue manner. I found the envelope follower extremely responsive and was able to achieve excellent results with a variety of recorded sources, such as bass or rhythm guitar tracks, synth pads and backing vocals. By triggering the VCF and VCA from a drum track and feeding the bass guitar track through the Mutator, I was able to generate a whole new bass part! With more subtle settings, I found that I could add rhythmic emphasis to synth pads without making the effect too obvious, the drum hits just lifting out the higher frequencies in the sound. The LFO retrigger option had simple bass lines squawking and zipping across the speakers like a demented parrot! Even pedestrian sustained chord parts took on a whole new meaning with a little stereo LFO filter sweep and some externally triggered stabs. At a pinch, the Mutator also does a reasonable job as a pair of single-ended noise reduction devices or as basic noise gates, although the results are not as refined or controllable as one would expect from a dedicated processor.

The next job was to plug in my trusty MiniMoog and see just how good the Mutator's filter really is. I was pleasantly surprised to discover that the answer is "pretty damned good, actually!" I had to check that I'd opened up the Moog's own filter because it was occasionally difficult to tell the difference — now that *is* a good filter! The more I attempted to overdrive the Mutator, the warmer it sounded. A sampled sawtooth waveform from an Akai S1100 sampler emerged from the Mutator with an altogether different character, thicker and much more worthy of attention in a busy mix. This is without doubt the best-*sounding* retro filter I have come across. Hear it and weep. In fact, the only real drawback is that lack of a full ADSR envelope, which would really be the icing on the cake. I seemed to spend far too long setting up separate feeds from my sampler to provide envelope templates, when a simple twist of a control would have been much less traumatic. The Mutator's inability to have both channels trigger from the same MIDI note message made setting up for auto-panning a bit awkward too — a 'MIDI link' feature would certainly be on my wish list for future developments.

PRODUCING THE GOODS

As a production tool, the Mutator is pretty much in a field of one. I can think of no other device that would achieve quite the same results — and certainly none that would be as quick to operate. Into one side goes a relatively mild-mannered musical part and out the other climbs a party animal with a 12-pack and an attitude! When in use as a synth retro-filter, the Mutator is a little clumsy due to its limited envelope, its basic and inflexible MIDI specification and the lack of any programmable memories. For those who are prepared to put in the effort, the results are the best that I have heard from the new breed of analogue filters, but the Mutator is arguably more at home in a production environment than hanging off the back of a sampler.

This machine has its little idiosyncrasies, but then so do all the best things in life. I have a strong suspicion that the Mutator will carve out a niche for itself and will invoke the kind of fanatical devotion reserved for similar niche products — the Roland Dimension D and dbx Boom Box immediately spring to mind. This device scores highly as a production tool, and should certainly be checked out by remixers everywhere. In the right hands, it is a highly creative device that could just give your productions that elusive edge. SOS

info

£ Mutator (no MIDI) £581.63; optional MIDI board £158.63; MIDI Mutator (MIDI board pre-installed) 740.25. Prices include VAT.

A 27 Britton Street, Faringdon, London EC1M 5NQ.

T 0171 608 3636.

F 0171 490 0474.

SUMMER Sizzlers

Huge Discounts - Don't Miss Out!

Digidesign Sample Cell II (Mac)	£395
Digidesign Audio Media II (Mac)	£395
Akai DR4d + H/D + Midi Board (1 only)	£999
MidiQuest PC1 1in 1Out Interface (PC)	£39
Atari Prodigy Sequencer ST (1 only)	£1.00
Digidesign Audio Media II + **E Magic** Logic Audio Package (Macintosh)	£899
Pentium P100 8Mb RAM, 1.2Gb Hard Drive, Quad CD ROM, 32 Ch. Midi Interface, 15" SVGA Monitor, K/B, Mouse	£1099
E Magic Sound Surfer Software (PC)	£39
Steinberg Cubase Compact (PC)	£39
KCCM Resample Pro (PC)	£49
Steinberg Midex Plus Interface (ST)	£129
Peavey Analogue Filter (ex demo)	£199
E Magic Logic Software (PC)	£279
MaxPax Midi Recording S/ware (PC)	£29
Opcode Vision Software (Mac)	£79
Dr. T Quick Score Deluxe (PC)	£5.00
Adaptec SCSi Interfaces (PC) FROM	£5.00
E Magic Micro Logic Software (PC)	£29
Atari Sound Tools H/D Recording System	£49

01623 422 668

Gene 15" SVGA Monitor (ex demo)	£149
Falcon 030 4/65 Computer (used)	£299
Tannoy CPA5 Satelites + Bass Bin Monitors	£199
Micropolis 2Gb AV Hard Disk inc. Case	£599
Steinberg Cubasis Audio Software	£179
Falcon D2D 4T/FX H/D recording S/W	£49

Call us now for other fantastic Summer Sensations!

THIS MONTH ONLY!

Yamaha DB50XG PC Daughter Board

Stunning PC sound board featuring a massive 12Mb of quality ROM sounds, three independent 24 bit digital signal processors, XG General Midi and 18 bit delta-sigma output. It runs on all major operating systems and plugs directly into any Waveblaster™ compatible device..

£115

WHILST STOCKS LAST!

Soundscape DIGITAL TECHNOLOGY LTD

Official Top UK Dealer

Authorised Reseller

- Suppliers of P.C., Atari & Macintosh hardware.
- Full range of software for all platforms in stock.
- Special Discounts for academic and educational orders*
- Hard Disk Recording and CD Authoring specialists.
- Complete running systems of hardware / software and expander packages our speciality.
- Prompt delivery service.

Cash

Finance available subject to status, written quotations available upon request

All prices include V.A.T unless stated. **Multi Media Music** is a division of Academy of Sound Ltd. 182-184, Chesterfield Road North, Mansfield, Notts NG19 7JD

* Educational and academic discounts are only available when accompanied by an official written order.

Prices correct at time of going to press and are subject to availability.

OFFICIALLY THE U.K.'S TOP Soundscape DEALER 1995

Soundscape V1.17

This best selling hard disk recorder is available as either a single unit, multiple modules or as a complete running PC package. Check this spec • 2u 19" rackmount unit • 8 physical tracks • Modular units can be linked together to give upto 128 tracks of pure digital wonderment • 24 bit internal signal processing • 16 bit linear • 22.05 / 32 / 44.056 / 44.1 / 47.952 / 48kHz sample rates • 16 bit sigma delta A/D conversion (64x oversampled) • 18 bit sigma delta D/A conversion (64x over sampled) • Fader automation • Very quick non-destructive editing • Automatic de-glitching • 8 realtime parametric EQs • Microsoft Windows 3.1 compatible • Realtime fade in/ out • Automated fade in / out • Volume contouring • Fully automated volume and pan controls • Assignable fader groupings • Powerful noise gate..... There really are far too many features to list in this advertisement, so give us a call today to arrange a full no nonsense demo of this great multi track recording tool.

To celebrate our Soundscape Top Dealer Award, this month we're offering you **Soundscape** plus **FREE Time Stretch Option worth £150** plus **FREE 1.2Gb Hard Drive!!**

ONLY £2500

9 Months Interest Free Credit

£1000 deposit + 9x £166.66 per mth

REVERB CHIP • COMING SOON!

TIME+SPACE — No.1 Source for Samples

THIS IS ONLY A SMALL SELECTION OF OUR PRODUCTS — SEE 100'S MORE BEST SELLERS IN OUR FREE 72-PAGE COLOUR CATALOGUE!

NEW RELEASES NEW RELEASES NEW RELEASES NEW RELEASES

BLACK 'N' BLACK KILLER VOCALS

A double CD set rammed full of Murderously, Deadly digitally recorded vocals. Created by McIntosh & Charles of 'Black 2 Black' fame, these CDs contain all the vocals you'll need to make slammin tracks.

Double Audio CD £59.95

JUNK PERCUSSION

To the percussionist the world is a different place. Everything can be used to make a sound, and renowned percussionist Roger Turner has the vision to play instruments and objects from the everyday and throwaway, creating exciting sound and rhythm. This highly respected Junkyard Shamen has played a superb collage of rhythms, textures & fills which will inspire and prove invaluable in all areas of music production.

Audio CD £59.95

CUCKOOLAND UNHINGED

Are Cuckooland Insane? Reality is strange and this incredible selection of rhythms, textures and FX will have you making music in very new ways. Grooves from 67 to 170 bpm provide rhythmical backing unlike anything you have heard before, the textures and FX are not of this world. This collection is ideal for all - from Trip Hop to Film - new styles of music will definitely evolve from this great CD!

Cuckooland is our state of mind. Audio CD £59.95

THE ULTIMATE PIANO COLLECTION

★★★★★ FIVE STARS! (Sound on Sound)

New from East-West. Four of the finest pianos ever built: Steinway D, Steinway C, Fazioli F228, and Bosendorfer 225. Every key sampled in various attacks, with and without sustain pedal. The best Piano CD-ROM available - and the best possible with today's memory capabilities. $260,000 worth of grand pianos ready to play - on a silver disc. One of them will surely fit the music you're working on. Come and demo this amazing disc and we're sure you'll be convicted it's the best.

Available on AKAI CD-ROM: Vol 1 (all 4 pianos): £249.00, Vol.2 (Fazioli & Steinway C): £149.00, Vol.3 (Bosendorfer & Steinway D): £149.00

SAMPLE MATERIAL

Sample Material is a sonic collage from the sound libraries of visionary New York producer Bill Laswell and the 'Material' cadre containing Loops, Textures, Riffs, and Single Sounds. Atmospheric Ambiences, TranceScapes, Ethic Loops & Riffs, Metafied Grooves & Kaos. A Sampling Product covering the broadest spectrum of musical genres. Ammunition for all Sonic Wizards who wants to create music with no boundaries. "EVERYTHING IS PERMITTED, NOTHING IS TRUE."

Audio CD £59.95, AKAI CD-ROM £149.00

Music & MIDI for MAC/PC

Over 600Mb (over 3000 items!) of freeware, sharware, plus demos of 56 music software packages such as Circle Elements, Cubase Score, Deck, Logic, Performer, Pianist, Vision, etc. You also get loads of drivers and Mixer Maps, MIDI-files in many styles (Classical, hit, jazz, rock - over 600 files), and System Sounds. Also many invaluable utilities: e.g. format converters (WAV-AIFF), internet sound utilities etc.

Only £29.95! (please specify PC or Macintosh)

DRUM DOCTOR II

With over 1500 new samples, Ross Garfield has dramatically raised the standard even higher for this sequel to "The best drums on Earth". Even better sounds, more takes per instrument, 5 dynamic levels and more programs. Audio CD £59.95; Samplecell & Kurzweil. £199.00

THAT JUNGLE FLAVOUR

New from Zero-G and EXTREMELY HOT! Flavours from every tree in the Jungle - Intelligent, rough, hard, steppin' breaks and FX for todays Drum'N'Bass samplists. Over 350 new transformed breakbeats and 600 of the latest stabs, pads, noizes and FX make this library the most extensive Jungle collection to date!

Audio CD: £59.95

XX LARGE MOST WANTED

The Rhythm Box is back with a vengeance! Over 2500 of the original preset drumloops from 37 classic analogue drumboxes including Roland, Korg, Elka, Farfisa, Hammond, Casio, Univox, Wersi and many more..... All loops are tuned exactly and bundled in speeds of 80 to 160 bpm.

Double Audio CD £59.95

CD-ROM (Akai/Emu, Roland, Samplecell) £149.00

TRAVELOGUE 1

This 1000+ samples of ceremonial drumming, male & female chants, musical bows, hand clapping, funeral xylophones, royal horns, choirs, grinding songs, crying widows, village noises & much more. A trip to Africa? - Pack your bags!

Audio CD £59.95

LOOPZILLA 2

This new sequel features over 2 hours of Hiphop, R&B, and Funk samples. "Loopzilla 2" combines the best elements of programmed grooves & live playing with new melodic and funk elements. Tons of Slo' Jamz, R&B and Hiphop from Atlanta, Miami, New York & Oakland.

£69.95 for this red hot 2-CD package.

INTERFACE DANCE

Superb all-round dance collection - NOW ONLY AVAILABLE FROM TIME+SPACE (exclusive worldwide distribution). INTERFACE DANCE has definitely cracked it. Extremely well-organised, this CD encompasses many areas of production including Nu-NRG/Euro, Techno/Industrial, House/Garage, R&B/ HipHop, Jungle and Hardcore. Drum Loops, Hits, Synth & Bass multisamples, Vocal Shouts/ad-libs & FX, TB303 basslines, Horn hits & stabs, Piano, Sax & Hammond, Guitar riffs, MC/Ragga vocals and more... fantastic reviews in the press!

Audio CD: £59.95

LOOPMATIC

This superb tool is specifically designed to provide a fast and flexible working environment for analog sweeps, effect loops, digital sweeps, RND loops & drum sweeps. Each sound has been sampled with it's filter cutoff set at 32 different levels, so there are literally thousands of ways the sounds can be used, from creating smooth sweep effects to random blippy sequences. 320 different categorised sounds are included on this mixed-mode CD, containing an Akai CD-ROM section with over 10,000 samples!!

Mixed-mode Audio/Akai CD £59.95

ALI-BABA & THE 40 RAVERS

The Orient offers a massive range of beautiful instruments and percussion that can be used in many styles of music, and this new library captures just about all of them from Tunisia, Iran, Irak and Turkey! Hot off the press, this double CD contains phrases, individual notes and hits of instruments, percussion, turkish orchestras, moving atmospheres and oriental choirs. Call for more details!! Double Audio CD £59.95

MEGATON BOMB

Five star review - *"An almost ridiculously complete 2-CD package of loops, drum hits and other assorted goodies - everything from construction kits containing multi-layered arrangements to drop-the-needle turntable noise, from TB303 Bass riffs to Sci-fi dialogue. If they let us give 6 stars for selection, this package would have scored even better.* ☆☆☆☆☆" (Keyboard USA). The collection features ambient, hardcore, trance and techno on a 2 disc set for only £69.95

DOUBLE PLATINUM DRUMS

Brand new from Ilio Entertainments in L.A. Multi-Platinum record winners, producer John Boylan and drummer Michael Botts have put together one of the smartest, most tightly assembled collections of drum loops to date. Phenomenally well-recorded and mixed in true stereo with the same high quality you expect from platinum records. These acoustic kits are played with raw, rockin' energy and plenty of feel. Loops & hits, Dry & Room, Intros, fills & ends for complete tracks!

Audio CD 2-disc set: £79.95,

CD-ROM 2-disc set for Akai, Roland or SampleCell: £199.00

TOTAL CONTROL

The worlds first sample-CD with realtime-filtered & arpeggio-ed analogue sounds. Total Control makes a brand new analogue synth out of your sampler with 4500 spanking new sounds, fractal loops & inspiration sets, all on a mixed-mode double CD-ROM including a 500mb Akai section!!

Mixed-mode Audio/Akai double-CD £59.95

GROOVE TO LOOP

This new CD is full of funky drum loops, recorded by 9 session drummers. Over 500 loops covering Funk, Dub, Ambient, Jungle, Trip Hop, Techno & Reggae. Also contains a selection of programmed loops. The CD is really full of Hot Grooves for every dance style.

Audio CD £59.95

DEF HOUSE

Brand New! Dedicated specifically to House music production, this high-profile stormer from Universal Sound Bank in France hits its target square on. Focussing ma[illegible] Loops, you'll find it delivers tons of top-class material for all kinds of house music. We expect this one to enter the hall of fame! DEFinitely not to be missed.

Available NOW in four formats: Audio CD: £59.95, or choose a version formatted specifically for Akai, Roland, or Ensoniq samplers - £149.00

ABRACATABLA

New from AMG: produced by Talvin Singh (one of the leading exponents of UK ethnic fusion, who works with top acts like Massive Attack & Bomb The Bass). A huge selection of mostly ethnic percussion. Highly comtemporary ensemble grooves with extremely intricate, tight performances, broken into various mixes/combinations/sounds.

There is also a section of solo patterns complete with very comprehensive sets of single hits. Super tight performances and great sound quality! Audio CD: £59.95

CREATIVE ESSENTIALS SERIES

"Dance Vocals" is just one of thirty brand new sample CDs in this amazing new series from Time+Space. Over 200 samples on each disc. Every sound is provided in three formats: Audio, WAV for PC, and AIFF for Mac. Available at Virgin, HMV, and all good stockists of music software. Call now for full details!

"There isn't a hint of naffness to this product, and that appears to be a trait inherent to the Creative Essentials Series... A generally excellent series" (The Mix).

Each volume in the series is only £19.95 inclusive.

RAVE T.R.A.X.

A hot new source of original dance samples from Germany. Expertly arranged into construction kits for Jungle, House, Trance etc. and featuring Drum & Percussion Loops, Synth Hooks, Chords, Sequences & Basslines, Vocal Hooks, Ad-libs, Single Drum & Perc samples, and Multisampled Synths & Keyboards. All BPMs and keys are given. Audio CD £59.95

SYMPHONIC ADVENTURES

New library of orchestral samples from Everglades in France. As soon as we heard this supertative disc we knew it was a winner. Explores the darker side of the orchestra. Perfect for film composers or for any music that needs powerful stings, effects, phrases, suspense, moods, etc. A truly huge set of immaculately performed and immaculately recorded stereo samples. This tremendously versatile orchestral libary will not disappoint and we recommend it highly!

Audio CD: £59.95, CD-ROMs (coming soon): £149

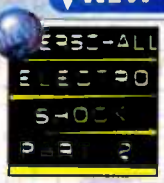
96th Street by BLACKBEAT

O.D. Hunte's sequel to his successful 'Freekee Jack Swing' CD. This CD follows a similar format, but concentrates on the split loops and adds a large selection of individual sounds on top of these. The loops are divided into three styles - Rap Street Loops, Future Funk Street Loops, and Caribbean Street Loops. Each loop features four alternate versions, a standard drum loop, one with bass, another with vocal—fx, and lastly with everything together. This sequel will not disappoint. Audio CD: £59.95

Invest in the World's best Sounds on CD & CD-ROM

WE ARE INTERNATIONAL DISTRIBUTORS FOR A.M.G. • BEST SERVICE • BIG FISH • EAST-WEST • E-LAB • ILIO ENTS. •

NEW RELEASES | DANCE | DANCE | DANCE



ELECTROSHOCK PART II

The sequel to a very successful techno dance library, this 2-disc set looks set to do equally well.

CD1: 70 minutes audio plus MAC (AIFF) & PC (WAV) ROM data.

CD2: 68 minutes audio plus AKAI ROM data.

Huge collection of fresh analog+digital stuff for serious technoheads, including rare vintage synths and construction kits.

2 Disc Set: £59.95

JUNGLE WARFARE

If you need Jungle this is unmissable. • Loops • Rolls & fills • Perc Kits • Pads & Chords • Bass • FX • Vocals.

"Excellent fidelity, balance & punch, & variation in feel & sound... there's no serious competition. Rated 5 stars out of 5 ☆☆☆☆☆" (Sound on Sound, UK). *"Kicking grooves... a wide range of styles... highly useful... AS UP-FRONT AS YOU CAN GET."* ("The Mix", UK).

Audio CD: £59.95

X-STATIC 1 - REMIXOLOGY

The XXXX-Largest CD ever?? 4000 samples from the now deleted X-STATIC GOLDMINE 1 and XL-1. If you don't own these two classics then this new CD is essential! All of the 600+ loops are now tempo-mapped for ease of use. Choose either format at the same price!!! - Audio CD, or Akai S1000 CD-ROM. At £59.95 it's got to be one of the best value dance CD-ROMs ever.

Audio CD: £59.95. CD-ROMs: only £59.95 !!!

BLACK II BLACK Volumes 1 & 2

By Steve McIntosh & Joe Charles. One of the biggest & best set of kickin' R+B samples around. All loops,Vocals, Brass lines, & Drum hits were specially recorded. Features: Reggae, Ragga, Swing, Jazz house, Euro house, Mad house, Slo jamz, Rap, Guitar licks, Bass lines, Garage, Disco.

"☆☆☆☆3/4" (Sound on Sound).

Each volume is available on Audio CD: £59.95 each, or on Akai CD-ROM : £149 each.

BEATS 'N' THE HOOD

The ultimate beats collection for serious Hip Hop, Swing and R&B production.

Grooves with attitude and altitude to lift your music into a new dimension.

"I MUST HAVE AUDITIONED WELL OVER 10,000 DRUM LOOPS DURING MY TIME, BUT NONE AS COOL OR EFFORTLESS AS THESE" (Sound on Sound, UK. - April'96). Audio CD: £59.95

PHAT & PHUNKY

Another dynamite set from East-West. Over 2000 samples on 2 CDs: 165 grooves, each with its component samples given separately (drums & instruments) together with the sequence data for each loop on a separate MIDI-file floppy disc (PLEASE STATE ATARI/IBM or MAC version when ordering). This arrangement gives you complete flexibility to customize all loops to any tempo or content you like. 2-CD audio set: £59.95

FUNKY ELEMENTS

Both audio CD volumes now combined into one CD-ROM (Over 500Mb / 1900 samples!) - all prog-rammed into killer patches ready to play. Fat with feel, this disc is guaranteed to serve up that ol' funk sound.

"☆☆☆☆☆ *Five Stars*" (Sound on Sound). Loops, drums, horns, guitars, all you need. A best selling library. Akai, Roland or SampleCell CD-ROMs: £149.00 (or buy the 2 volumes separately on audio CD: £59.95 each)

DANCE / INDUSTRIAL 2

A 2-CD set of Loops, plus all the component percussion elements used to make them, plus their programming on an accompanying MIDI-file floppy disk. An extremely professional approach from East-West (USA).

"☆☆☆☆☆ *5 stars*" (Sound on Sound).

154 loops and 1500 samples on 2 CDs. Comes with Midifiles on floppy (state Mac or Atari).

Audio CD £59.95. CD-ROM: £149

FLAMENCO SOUNDS

Recorded exclusively in Spain. A wealth of rhythms and flavours in true Catalonian style by original, respected, Flamenco musicians (inc Ketama, Tino De Geraldo and Pedro Andrea). Guitar rhythms, Male & Female vocals, tapping feet, castanets, & Cajon rhythms. Rich assortment of peasant-style sounds to help bring out the Gipsy in your music! BPMs and key references are included where necessary. £59.95

L.A.RIOT 3

2-CD Set. 1000's of Hip Hop & R&B samples. • Mad-hard construction kits • Bomb-ass breaks • Basses • Loops • Horns • Scratches • Dope FX & Squeelies • Crazy guitars • Vocals • Synths • Piano • Rare groove elements. Every 5 construction kits are same BPM & key for mixing & matching. Fresh, well-organised and a true goldmine for the serious producer.

"Sheer authenticity & attitude... An all-American urban soundscape of immense realism... A hard act to follow... Quite simply a classic. ☆☆☆☆☆ *5 Stars"* (Sound on Sound, UK). 2-CD audio set: £59.95

EUROTECH

☆☆☆☆☆

"5 stars... A hit release" (Sound on Sound magazine).

Specialising in Euro-dance/ Europop. This style of music has dominated the charts all over Europe over the last few years & seems set to continue to. A very commercially attractive set of sounds, and all original. The loops are fast (192 of them are over 140bpm!). A nice balance of experimental & straight. All bpms given. A hot & hard techno resource.

Audio CD: £59.95. AKAI CD-ROM : £149.00

ZERO-G TECHNOTRANCE

A massive library of classic techno synth & FX samples, each presented with a short demo to show its effectiveness.

One of the world's very best techno sample CDs, having achieved 5-STAR reviews in USA, Germany & UK.

Audio CD: £59.95. PC 'WAV' CD-ROM: £29.95. Also available on Akai S3000, Roland or SampleCell CD-ROMs for only £99.00.

DEF HOUSE

Brand New! Dedicated specifically to House music production, this high-profile stormer from Universal Sound Bank in France hits its target square on. Focussing mainly on loops, you'll find it delivers tons of top-class material for all kinds of house music. We expect this one to enter the hall of fame! DEFinitely not to be missed. Available NOW in four formats: Audio CD: £59.95, or choose a version formatted specifically for Akai Roland, or Ensoniq samplers - £149.00)

XX-LARGE EXTREME

With its latest production, the XX-Large Team presents the biggest Dance Drumloops collection worldwide!

1750 absolute new Stereo Drumloops. House, Jungle, Rap, Hip-Hop. All of the loops are tuned accurately on beats per minute and arranged in groups from 80 - 180 bpm.

In addition, more than 100 current Dance Sounds: House Organs, Jungle Basses..... You can't live without it!!! Audio CD: £59.95. CD-ROM: £149.00

VOCAL BYTES VOLUMES 1 & 2

Volume 1 has OVER 1000 VOCAL GEMS. PRODUCED BY HIT U.S. REMIXER E.K.O. & MIDIMARK PRODUCTIONS in the USA. FOR HOUSE, TRANCE, RAP, AND DANCE • ALL ORIGINAL • ULTRA CLEAN TO SUPER NASTY Audio CD: £59.95.

Volume 2 features 12 more singers: soulful, funky, crazy. Vocoder samples from the oldskool unit, the Roland RVC-300. New Talk Box samples from the Heil talk box. Well over 1,000 original samples. No royalties to pay! Audio CD: £59.95

TECHNO TOOLBOX

Features the sample libraries of Germany's most respected Techno producers including Eye O, Harthouse/ Ralf Hildenbeutel, Jam El Mar (Jam & Spoon, Dance 2 Trance), Cet Merlin (Spacefrog, Energised), Genlog, and more. Coveted key sounds of many of the world's top techno producers: custom drum, synth, bass, loop samples. "Within the first 3 minutes of this CD I had goosepimples" (Frontpage Mag, Germany). Audio CD: £59.95.

VINYLISTICS 2

R&B/Jungle/Trip Hop - whatever the trendmakers call it - it all comes down to the Right Flavor of the Grooves. Many future styles will probably rely on breaks like this. Tons of Grooves, Hits & Loops to give you a unique feel for Raregrooves. Produced by PHAT FABE aka Fabian Thorsson (Nene Cherry & Shabba Ranks). Tempo-maps provided (plus MIDI-files on CD-ROM version).

Audio CD: £59.95. CD-ROM (incl audio CD): £149.

DANCE MEGADRUMS

4500 well-organised samples. 90 complete and different Drum machines as well as ultra rare analogue Ryhthm-boxes with several sound variations. Also 1500 latest dance Drumsounds (BDs, SDs, Hats, Percs, Analogue Drums and Perc). 400 Mb ROM part. All Drum machines laid out in keygroups, ready to play. Available as Double-CDs mixed mode Audio/ Akai CD-ROM. Only £59.95 !!

ON A JAZZ TIP

Hip Hop In Full Swing! Stomping grooves, licks and loops, played in predetermined keys and tempos to be used inter-actively: Bass, Guitar, Keys, Horns, Drums and Perc., Jazz pads, riffs and chords. Perfect for all HipHop, Rap, Soul, TripHop, Acid Jazz and Funky flavors. For any music project that needs a sting, swing or that Jazz Thing. Produced and played by musicians who love and respect music. Audio CD: £59.95

LOOPISMS AWE-32 COMPILATION

Every loop & sample from D-Zone's Loopisms series volumes 1 to 6. 1850 loops & samples for Jungle/house/rap). PC CD-ROM for use with AWE-32 Soundblaster soundcard: £29.95.

Also available: "LOOPISMS WAV COMPILATION" - the same but in straight WAV format for use with any PC software or soundcards: £29.95. Many other D-Zone titles available - call for details!

N.B. D-Zone have asked us to point out that the samples on D-Zone titles are not all licensed for use in your commercial music releases.

SAMPLING SOUND SYSTEM

Advance news of a new series of smaller libraries from Sounds Good in Sweden. Each disc in the series will be mixed-mode Audio / PC WAV / Mac AIFF. Anticipated pricing: £19.95 each, with Akai CD-ROM versions also becoming available for £39.95 each. Titles include Drum Tools (Laidback, Brushed, & Popped), Country, Roots Reggae, On The Latin Tip, G-Soul, Trippy, House, and more! More news very soon!!

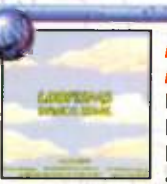
CALL FOR RELEASE DATES!

XX-LARGE 1500 DRUMLOOPS

One of the largest selections of dance grooves available on a single CD. From German developer Best Service and already a classic! 1500 hypnotic loops, in groups of 80, 85, 90, 95, 100, 105, 110, 115, 120, 125 and 130 bpm!! Workaholics take note this is your basic tool - styles include hip hop, rap, hardcore, house, techno, all in stereo - 1500 happening loops, exactly tuned and carefully sorted. An exclusive tuning chart lets you tune any loop to the exact bpm you need - FAST! The collection is available on audio CD (£59.95) or on CD-Rom for Akai, Ensoniq & Samplecell samplers (CD-ROM: £149.)

SLY DUNBAR Reggae Drumsplash

The World's No.1 Reggae drummer & Producer (half of Riddim Twins Sly and Robbie). There's nothing else like this on the market! • Reggae • Ska • Dancehall • Bhangra. Comes with MIDI-files on floppy disk for the loops. READ THE FANTASTIC REVIEWS - undisputably the NUMBER ONE sample CD on the market for reggae production. Audio CD plus MIDI-file floppy disk (please state Mac, Atari or PC): £59.95



LOOPISMS DANCE ZONE

New from D-ZONE (UK). Features 125 Korg Prophecy samples plus slammin extended loops.

Each sample is provided in 3 formats: Audio, AWE-32, and WAV. Also features Apogee's great game "RISE of the TRIADS" for PC plus other demos of PC software. Only £12.95 !!

N.B. D-Zone have asked us to point out that the samples on D-Zone titles are not all licensed for use in your commercial music releases.

TIME+SPACE

No.1 Source for Samples

SAMPLEHEADS • SOUNDS GOOD • SPECTRASONICS • TIME+SPACE • VOICE CRYSTAL • WC MUSIC RESEARCH • ETC...

MISC. | PERCUSSION | ETHNIC / WORLD | CLASSICAL

FUNKY ASS LOOPS

Produced by the New Power Generation (who do all the drums & programming for Prince). "Seriously HOT! 5 stars for content value and sound quality" (Keyboard, USA). This super-funky disc will prove to be the inspiration for many hits. All grooves played live - but not just with traditional drums - you won't believe the sounds used, and you get all the separate component samples as well.
Audio CD: £59.95. CD-ROM: £149

PERCUSSION SLAM

Hot new disc from Invision (USA), comes with loops, samples and standard MIDI-files. Multiple layers of percussion instruments were played live and the MIDI-files were created directly from the loops. Killer material for Dance, Pop, Latin, R&B, HipHop, etc. Enhanced construction kit format includes: multiple tempos of each groove, alternate instrument mixes, fills, MIDI-files & samples. Gives you the power to quickly create and modify tracks. Performed by Rafael Padilla and meticulously recorded at Mama Jo's Studios.
Audio CD: £59.95 Akai CD-ROM: £149.00

HEART OF ASIA

This product got a 5 star review in every magazine in UK, US & Germany. One of the most comprehensive collections of Asian instruments & phrases. Digitally recorded in the field, this remarkable 2-disc set includes over 1 gigabyte of exotic Chinese, Malay, Nepalese, Tibetan Javanese, Hindi, Sanskrit, Mandarin, Thai & Indian samples, including instruments, phrases, opera divas, chants, speech, gamelan orchestra, monks. Perfect for your next film score, album or remix project.
Audio 2-CD set: £79.95. CD-ROM 2CD set : £299.00

PETER SIEDLACZEK'S ADVANCED ORCHESTRA

Introducing a new generation of Orchestral samples for the electronic musician. Short & Long notes, played in two dynamic degrees for every instrument ... trills, grace notes, quick runs, arpeggios, crescendi, glissandi and more! The complete Symphony Orchestra at your fingertips? Peter Siedlaczek's Advanced Orchestra gives you the touch! Available late June. Call for more details.

XX-LARGE THE KILLER

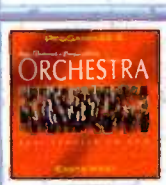
Over 100 minutes (different samples on L & R tracks). 750 synths, chords, organs, voices, pads. Techno/ trance hooks. 250 Basses. 750 Drumloops (80% in stereo, tuned and grouped into BPMs from 130-200 BPM). Analog Drum Machines (adjusted to every possible variation). *"Really good value ☆☆☆☆☆ 5 stars"* (Sound on Sound).
Audio CD: £59.95. CD-ROMs: £149.00

CARMICHAEL'S CRUNCHY NUT LOOPS

Crunchy Nut Loops - A collection of Phattening Grooves from Drummer Jim Carmichael (Freak Power, K-Creative etc.), played with v be in mind, these loops are encrusted with funky substance and fortified with extra compression to start your day in the positive way. Audio CD: £59.95

HEART OF AFRICA VOLUMES 1 & 2

Vol.1 is a 2-CD set of phrases & instruments from all over African continent. Following the success of Heart of Asia, this sequel was a smash hit even before it was released...
Audio CDs: £79.95 CD-ROMs: £199.

Heart of Africa Vol.2 has all new tribal phrases, vocals, performances & SFX from a huge tribal competition in Kenya. This material is very primitive & really enhances the volume 1 samples.
Audio CD: £59.95 CD-ROMs: £149

Peter Siedlaczek's

ORCHESTRA

One of our most popular products An entire orchestra at your fingertips, mostly playing tuttis. The string sections are perfect for those lush string pads & lines and eleven other categories are provided . Aural dimension & realism at an affordable price.

Audio CD: £59.95. CD-ROMs: £149.00

LOOP SOUP

This 2-CD package contains ALL the rhythm loops from all the great AMG dance CDs - (from Norman Cook, Megabass Remix!, Pascal Gabriel, Coldcut, and from both of the AMG "Now!" CDs). A monster collection by some of the UK's best dance producers.
Audio 2-CD set: £59.95

DNA BEAT BLOCKS FEATURING

ARMANDO BORG

A professional library of percussion rhythms on CD. Key features are incredible musical versatility, fantastic variety, masterful playing, over 500 percussion loops with accompanying MIDI-files on floppy disk (created by analysing Armando's playing), with bpm's from 50 to 170. Audio CD: £59.95 (please state Atari, PC or Mac for the floppy disk)

SUPREME BEATS

The most comprehen-sive library of percussion grooves & instruments ever developed, featuring percussionists from all over the world. This highly acclaimed library is now available on 2 CD-ROMs: 1: AFRICAN/ CONTEMPORARY & 2: WORLD/DANCE. *"A feast of human feel, energy & emotion... a knockout... Supreme Beats is a winner, 20 stars out of 20."* (Keyboard, USA)
Audio Vols.1-4 (4-CD boxed set): £199. Audio Vol. 5 (NEW!): £59.95. CD-ROM Vol.1: £149, Vol.2: £149 (CD-ROM versions include all the sounds from Vols 1-5 audio CDs)

Peter Siedlaczek's

ORCHESTRAL COLOURS

Siedlaczek's name means pure class. Rich & evocative orchestral samples to bring colour & inspiration to your music • Hits & Finales • Moods & Timbres • Orchestral layers, chords, arpeggios, tremolos & Glissandos • Runs & Sequences. A film composers dream. *"Quality is immaculate. You've never been able to access such usable orchestral realism so cheaply before. ☆☆☆☆☆ 5 stars"* (Sound on Sound). Audio CD: £59.95. CD-ROMs: £149

HALLELUJAH

WORLD CHOIRS & VOICES from many countries and cultures. Produced by Peter Siedlaczek/ B.Jojic/ K.Kandler.

- Dance & Pop Choirs
- Gregorian/Monk Choirs • Gospel Choir
- Background choirs • Classic soloists
- Ragamuffin • Choir of Nuns • Vocal hooks
- Total fascination! ☆☆☆☆☆ *5-stars"* (Sound on Sound Magazine, UK).

Audio CD: £59.95 CD-ROM: £149.

GOTA YASHIKI's GROOVE ACTIVATOR

Drum & Percussion grooves, chops & fills. Gota's work with the likes of Soul II Soul, Bomb The Bass, & Simply Red is already part of pop folklore. His ability to make machines groove is legendary. This CD is very different, and a guaranteed source of inspiration. Quality, originality and creativity of the first order. Audio CD: £59.95

NEW WORLD ORDER 1 & 2

Journey # 1: Fantastic Collection of Ethnic & Percussion loops. Tribal Rhythms, Ritual, Djembe, Talking Drums, Calypso, Reggae, Haitian Voodoo, Afro-Cuban, Latin Funk, Tabla Loops, Indian Ensemble, Rhythms from Japan, Ireland, Texas & New Orleans. Journey # 2. Extensive performances on a multitude of acoustic Instruments from all over the World. Loads of seldom heard Folk/Historical Instruments, plus vocals. Loops, Riffs, Slides, Chords, Scales etc. All sounds are original recordings
Audio CDs: £59.95 each. CD-ROM (Akai): £149 each

MIROSLAV VITOUS' SYMPHONIC ORCHESTRA

REALISM! An orchestral sample library that even top conductors are proud to own. Two years in the making. FIVE CD-ROMs exploring every subtle nuance. Very expensive, but of the highest quality. See catalog for full details, or call to discuss. We highly recommend a full demo at our private CD-ROM auditioning suite. Many film composers have bought this library and been delighted. A mini version is also available on a single CD-ROM.

ALPHADANCE II

2 CDs featuring 90 minutes of audio & 300Mb CD-ROM section - all for only £59.95. House & techno organs, Strings, Sequencer lines, Combination Pads Attack Banks, Vocals, Acoustic Percussion Loops & Drumloops, Rave Basses (multisampled, with short demos), Dirty Loops, Lead & Hook Synths, Transformer sounds, Synth Drums. The CD-ROM section has everything mapped, in keygrouups, ready looped, ready for takeoff.
2 CD set including 300Mb Akai CD-ROM: £59.95

SMOKIN' BY TONY MASON

New from AMG:
seventy-three minutes of specially recorded grooves with a strong dance flavour. All samples have undergone analogue processing to give an authentic 'rare' valve sound. Smokin was recorded in Trinidad and the UK by much sought after session drummer, Tony Mason (Tony has taken care of drums for Al Green, Incognito, Fine Young Cannibals and George Michael). The ideal drum loop CD for anyone looking for great sounding beats with attitude. STRONG DANCE FLAVOUR WITH A LAID BACK RHYTHM AND BLUES ATTITUDE. Audio CD: £59.95

ZERO-G ETHNIC 1 & 2

Another exotic set of samples, by the Paradise Organisation who roamed Africa, India and the far east for 2 years in pursuit of material for these two discs. All samples are recorded "in the field", and it's a dynamite collection. An enormous collection of ethnic vocals, rhythms and instrument riffs. Well suited to dance music production.
Audio CDs (vols 1 & 2): £59.95 each. Akai CD-ROM (includes both volumes 1 & 2): £149. (Volume 1 is also available formatted specifically for Roland 700 Series: £99).

PETER SIEDLACZEK'S CLASSICAL CHOIRS

From Czechoslovakia comes an incredibly haunting and inspiring set of vocal sounds. Awesome vocal power. Truly an absolute masterpiece.
"☆☆☆☆☆ *Five Stars"*
(Sound on Sound magazine).
Audio CD: £59.95. CD-ROM: £149.00

OVERDUB SENSATION

House & Acid Jazz library, 1200 sounds from the private library of DJ and producer 'MOUSSE T' (remixer for such artists as Shabba Ranks and Inner Circle).
Several versions of each loop, etc. An extremely flexible tool for remix work.
Audio CD: £59.95

PETER ERSKINE'S LIVING DRUMS

One of the world's most famous drummers at your fingertips! Thousands of carefully recorded drum performances, played by Peter from his collection of world class drum sets. Immaculately recorded and beautifully organised. Great for jazz, and in fact all styles.
Audio CD £59.95. CD-ROM: £149.00

VINDALOOPS

By Hoggie & The Turbinator at Nu-Groove Productions. The definitive Bhangra Sample CD. A spicy concoction of Indian percussion loops, single shot hits and authentic Bhangra instrumentation/FX. Mostly in stereo. Loops grouped in "kits" of similar sounds and tempos.
"Never before have so many Bhangra ingredients been so accessible... Feel the feel!"
☆☆☆☆½ (Sound on Sound). Audio CD: £59.95

CLASSICAL WILD TAKES

In the same vein as "Orchestral Colours" but perhaps more FX orientated, this is another superb selection of orchestral stings, phrases and orchestral effects samples for use in film, broadcast and any music requiring that big, expensive and professional orchestral sound. From a different German developer, but, like "Orchestral Colours" this CD is also superbly recorded and presented.
Akai CD-ROM: £149.00

WRH

Call the Specialists: 01442 870681

TIME+SPACE - THE WORLD'S FINEST COLLECTION OF PROFESSIONAL SOUND LIBRARIES ON CD & CD-ROM

e-Mail: sales@timespace.com

SYNTH & FX | INSTRUMENTS | LISTEN BEFORE YOU BUY

AMBIENT VOLUMES 1 & 2

By IAN BODDY. This collection achieved a ☆☆☆☆☆ five-star review in both Sound on Sound (UK) & Keyboard (USA). Comes very highly recommended. A wealth of synth FX, atmospheres, instruments & textures from one of the UK's leading synthesists. Audio CDs: £59.95 each; PC WAV CD-ROMs: £29.95 each; Akai CD-ROM (Both vols. on one CD-ROM /500Mb): only £149.00

STEVE STEVENS GUITAR SAMPLES

Renowned for his guitar work with Billy Idol, Steve delivers here all his famous trademark sounds, plus awesome FX. The majority of sounds on the CD are multi-sampled and have been thoroughly tested for playability on a keyboard.

"Raw textures that cut, pummel and soar. Even the acoustic samples have attitude. The effects are killer" (Keyboard, USA). *"A beautifully recorded and very complete package"* (The Mix, UK). Audio CD: £59.95. CD-ROM: £149.00

VINCE CLARKE

'Lucky Bastard'

"One hell of a useful CD. 9 out of 10" (Future Music).

A huge set of sequences specially created by Vince Clarke using his massive collection of classic analogue synths. Fast creative sampling. Audio CD: £59.95

BASS LEGENDS

Earth-shaking bass grooves & samples from 3 of the world's greatest bassists: Marcus Miller, John Patitucci & Abe Laboriel. All grooves are given in every key & in multiple tempos. CD-ROM versions also include an extravagant variety of multisamples of instruments from the players' private collections.

Audio CD: £59.95. CD-ROM: £199.00

ANALOGUE DREAMS

There are over 3000 analogue synthesized samples on this 2-CD package. The list of rare synths & analog drum machines used looks like a museum inventory: Dreams, squelches, or mind-blowing effects, there's a synth sound here to fit the bill. Get the CD-ROM version and you'll have everything sampled, looped and laid out into superb performance patches.

Audio 2-CD set: £59.95. CD-ROM versions: £149.00

FUNK GUITAR

by VLAD NASLAS.

The Definitive Sample CD for Classic Dance Guitar Rhythms and FX.

☆☆☆☆☆ *"5 stars"* (Sound on Sound magazine).

• Styles from cool & slinky to hot & bothered • ALL ORIGINAL •1700 SAMPLES • Raw & authentic • Quite simply ESSENTIAL for anyone in a funk groove. Audio CD: £59.95. CD-ROMs: £149.00

DISTORTED REALITY

NEW RELEASE - but already getting 5-star reviews!!!...

Cutting Edge Textures, FX and Loops, exploring an experimental world of extraordinary colours. From 3-dimensional Harmonic Sound Morphing, to trance-inducing ambiences, enormous modular drones & astonishing timbral contortions. An essential resource for the producer, composer or sound designer in search of unique sound. You simply have to hear these sounds to believe them, and we can't praise this product highly enough. Audio CD: £59.95. CD-ROMs: £149

PHANTOM HORNS

☆☆☆☆☆ *"5 stars"* (Sound on Sound magazine).

The world's best and classiest horn sample library featuring the dynamic sounds of the UK's most in-demand horn section, John Thirkell & Gary Barnacle (whose album credits read like a who's who of megastars). Packed with riffs, hits, swells and all the other horn elements you'll need to add real brass impact to your tracks. Audio CD: £59.95

ANALOG TO DIGITAL AND A2D2

Unique sounds, layers, textures, FX, from the worlds classic vintage synths. Ambient, techno, film, rock, whatever - these 2 discs will inspire you with fresh sounds of immense power or subtlety. Raved about by Dance producers for their usability and versatility for everything from Ambient/Trance to the hardest of Hardcore Techno. Audio CDs: £59.95 each. PC WAV CD-ROMs: £29.95 each (Akai CD-ROM coming soon: £149.00, includes both volumes)

CATHEDRAL PIPE ORGAN

Brand new from Ilio in the USA (who brought you the Synclavier Library), this meticulously recorded GORGEOUS German organ features all manuals and bass pedals with numerous register combinations. It's all here from the full-throttle Great Organ to the sweet shimmering quality of the Wooden Pipes. Plus you will get Capital Reeds, Cornopean Flutes, Swells, and other registers. Fascinating binaural recordings of Church atmospheres add the finishing touch. The definitive Cathedral Pipe Organ (Cathedral not included!) CD-ROM: £149.00 ☆ Audio CD: £59.95

METHODS OF MAYHEM

Brutal & sweet sampling for Industrial/ Intelli-gent Techno, Goth Techno or anything in need of an Experimental Edge. Uniquely twisted, bizarre and savage stuff. Drum-, Bass-, Synth-, FX-, Vocoder-, Feedback- & Noise-loops. Grinding Guitar Riffs & Feedback. Synth FXs, Sweeps, Basses, etc. Creepy & Cheesy Sound FX. Music FX & Voices. Over 1000 Samples. A unique collection. Audio CD: £59.95

FUNK BASS

From the producer/ performer of 'Funk Guitar' comes a unique product. This is a 2-CD package of incredibly funky bass riffs & loops covering all styles. PLUS you get multisamples and FX. Highly rated by the press. Audio 2-CD set: £59.95 (CD-ROM coming soon: £149.00)

ROBOTS & COMPUTERS

The electronic invasion of machines & computer. Unique starting material for any fan of electronic and Kraftwerk. Fantastic studio production tool. Hundreds of electric Synthesizer & Drumsounds coming from collector's stock. Rhythm-sequences and Drumloops, extensive Vocoder section, language computer-rarities. A real treasure trove. 1500 analogue & digital specialities. From the past to the future. Audio CD: £59.95. CD-ROM: £149.00

DRUM TOOLS

LIVE Rock & Pop loops. Very flexible. Tempo Sets. Inspiration Grooves & Individual Hits to allow flow and natural feel. 4/4 Straight, 4/4 Shuffled, 6/8, Blues, Brush and a Big Section of Inspiration Grooves. Full Loops (BD, SD & Hat/ Ride), Fills, Separate Hat & Ride Loops, Perc Loops & Flams. Produced by the Roxette team. Audio CD: £59.95. Akai CD-ROM: £149.00

Global Trance Mission

Specially created dance samples with the emphasis firmly on analogue synthesis. Includes: Synth sequences, Ambient Pads, specially processed drumloops, Synths & synth FX, Atmospheric sounds, Basses, Sung vocals & dialogue, FX, and amazing ethnic sounds resulting in a unique and highly creative sample library. SPECIALLY CREATED BY GARRY HUGHES AND NICK FISHER - IDEAL FOR TRANCE, AMBIENT & RAVE. THESE ARE ARE INSPIRATIONAL. CUTTING EDGE ORGANIC SOUNDS.

☆ CD 1 Audio: £49.95 ☆ CD 2 Audio: £49.95 ☆ Both: £79.95

HANS ZIMMER GUITARS

Released by SPECTRASONICS in the USA. Internationally acclaimed film composer Hans Zimmer releases sounds from his private sample library. Powerful guitar textures, incredibly detailed and expressive, using up to 12-way velocity switching! Also includes massive rock guitar grooves each presented in Spectrasonics' new Chromazones™ concept, that works in every key and at various tempos. This library contributed to Hans' rich sonic approach in many films incl. The Lion King, Cool Runnings, True Romance, etc. A must-have for any serious sample collector. Audio CD: £59.95. CD-ROMs £149

Sample CD Jukeboxes! Listen to our CDs at Pro-Audio dealers nationwide...

The dealers listed below have demonstrated their commitment to keep your sampler fuelled with inspiring new sounds! Time+Space distribute only the highest quality products available, from the world's best developers, and we offer UN-BIASED and helpful advice to mail-order customers. However, you have the opportunity to visit one of the following locations and listen to the entire contents of the products that interest you most - there you'll find the world's top 100 audio sampling CDs in one of our Sony 100-CD Sample-CD Jukeboxes.

JUKEBOXES already installed at:

- Soho Soundhouse (2 jukeboxes), 114 Charing Cross Rd, **LONDON** W1, Tel: 0171-379 5148;
- Music Lab, 72-76 Evershott St, **LONDON**, Tel: 0171-388 5392;
- Project Music, 433 Gt West Rd, **HOUNSLOW**, Middx, Tel: 0181-570 4444;
- C.T.I., Fumbally Court, Fumbally Lane, **DUBLIN** 8, Ireland, Tel: Dublin 45 45 400;
- Music Village, 10 High Rd, Chadwell Heath, **ROMFORD**, Essex, Tel: 0181-598 9506;
- Sound Control, 61 Jamaica St, **GLASGOW**, Scotland, Tel: 0141-204 0322;
- Sound Control, 19-21 St. Marys Street, **EDINBURGH**, EH1 1TA, Scotland, Tel: 0131-557 3986;
- Sound Control, 10 Moseley St, **NEWCASTLE**, Tel: 0191-232 4175;
- Sound Control, Unit 5, The Red Rose Centre, Regent Rd, **SALFORD**, M5 3GR, Tel: 0161-877 6262;
- Carlsbro, 22 Humberstone Rd, **LEICESTER**, Tel. 0116-262 4183;
- Carlsbro, 11-13 Hockley, **NOTTINGHAM**, Tel: 0115-959 1888;
- Carlsbro, 720 City Road, **SHEFFIELD**, S2 1GJ, Tel: 0114-264 0000;
- Dawsons Music, 65 Sankey St, **WARRINGTON**, Cheshire, Tel: 01925-632591;
- X Music, 20 Cotham Hill, Cotham, **BRISTOL**, BS6 6LF, Tel: 01179-734734;
- Emis, The Old School House, Cossham St, Mangotsfield, **BRISTOL**, BS17 3EN, Tel: 0117-956 1855;
- Andertons, 58/59 Woodbridge Rd, **GUILDFORD**, Surrey, Tel: 01483-38212;
- A1 Music, 88 Oxford St, **MANCHESTER**, Tel: 0161-236 0340;
- Musical Exchanges, 89 Old Snow Hill, **BIRMINGHAM**, Tel: 0121-236 7544;
- Time+Space, 3, Churchgates, The Wilderness, **BERKHAMSTED**, Herts, HP4 2UB (appointment system operating for jukebox & CD-ROM demo suite: Tel: 01442-870681 to book some hours!)

FREE CATALOGUE

Call for your free copy - 72 colour pages featuring 100's of CDs & CD-ROMs! Or use the INTERNET to take a detailed look at what's available RIGHT NOW by logging on to our web site at:

http://www.timespace.com

FREE CD WITH EACH ORDER

Each time you order from Time+Space you'll receive one free showcase CD from one of the following sound developers: Time+Space, Sounds Good, Spectrasonics, Ilio Entertainments, Best Service or AMG. (*Offer limited to one of each per household).

FAST INTERNATIONAL MAIL ORDER

REMEMBER TO ASK FOR YOUR FREE COLOUR CATALOGUE!

ALL PRICES INCLUDE VAT & UK POSTAGE. We operate a FAST international mail-order service - delivery is usually within 48 hours when you pay by credit card (VISA/ MASTERCARD/ AMEX/ SWITCH), postal orders, bank draft, or building soc. cheque (PLEASE DO NOT SEND CASH BY POST). TO ORDER:

TEL 01442 870681 • FAX 01442 877266

INTERNET... http://www.timespace.com • e-Mail: sales@timespace.com

If paying by personal cheque please allow up to 7 working days (!) for clearance through the bank. Make cheques/POs payable to "TIME+SPACE" and post to:

TIME+SPACE • P.O. BOX 306 • BERKHAMSTED HERTS • HP4 3EP • ENGLAND

International orders: please add £5 airmail or £10 express airmail (plus 17.5% VAT if you live in the EC). EC countries: please give us your international VAT number if you have one.

Sales office open: 09.30-18.00, Mon-Fri. Prices are subject to change without notice. E&OE.

Terms & conditions of sale: All contracts in respect of goods between the Company and the Purchaser are subject to the Company's standard conditions of sale, a copy of which is available on request.

Dealer Enquiries Invited

VISA

TIME+SPACE

THE LEADING EDGE OF SAMPLING TECHNOLOGY

e-Mail: info@timespace.com

Internet: http://www.timespace.com

At home with...

Nigel Shaw

Nigel Shaw isn't signed to a record company, yet sales from the multiple albums he's produced in his home studio enable him to make a good living from his talents. PAUL TINGEN talks to him about the business of independent music.

In a stunningly beautiful, 13th century Grade 2 listed building right in the middle of Dartmoor lives a musician who has resisted the traditional record company route to making money from music, and shown a new way forward for like-minded others. Impressively, he appears to have it all: still only 34 years old, he makes a comfortable living from selling and performing his own music, lives in idyllic surroundings with his wife-cum-musical partner, plus two children, and enjoys the benefits of a modest home recording studio. No record or publishing company is involved — no distributors, no middle men, no managers. Everything is done by the couple in-house: his many solo albums and collaborations, and her albums and prints, are sold either by mail order, or via 'new age' shops, and in some cases via regular record shops. The dubious machinations of the music industry are nowhere in sight. As a result Nigel Shaw and partner Carolyn Hillyer retain complete control over their music, their careers, and their lives.

PHILOSOPHY

So how does he do it? And what, exactly, does he do? On a grey and misty day earlier this year, I made the long trek from London to Dartmoor to find out. I marvelled at the remote and pastoral location of Shaw's home, a beautiful Devonshire longhouse, the central part of which was built in 1235, and features walls almost four feet thick.

In the spacious former hayloft, above what once were the stables, we settle in Shaw's recording studio with some tea. A Crystal 16:4:2 desk, two Alesis ADATs, a Roland W30 and SH101, Korg DW8000 and 01R/W contrast quaintly with the age-old woodwork, as well as a collection of wooden flutes, and a little altar featuring rattles, shells, bird bones and all sorts of other natural artefacts. Shaw himself is an easy-going, affable person, who speaks with quiet confidence and appears to have a relaxed live-and-let-live attitude.

Occasionally, however, another side of his character shows — a determination which surely must have helped him get to where he is now. He's particularly outspoken about the dream of so many musicians — to be signed by a record company. "The biggest trap in the world," he fumes. "It's fatal, especially when you're young and just starting out. Looking for a company or person to rescue you eats up lots of time and energy that could be spent producing brilliant pieces of work. And I've met very few signed people who've had a really good time with record companies. For almost everyone it's a compromise, and it's the element of compromise that I find distasteful. How can you compromise with your own creativity? Musicians should empower themselves and do their own thing, and stop other people feeding off what they do. If *I* can get my stuff out and support myself financially from my music, everyone can do it. It's like the early punk attitude: anyone can do anything, regardless of what talent they have. It's not about having a specific skill or technique, it's just about belief: do you believe in yourself enough so that you know you can do it?"

For some, this may already be a challenging question too close for comfort. Yet Shaw isn't finished with his sermon: "There's a key issue at stake here. It's not even a matter of whether musicians are capable of doing it or whether they believe in themselves enough, it's often a matter of whether they're willing to do it. Many musicians think it's beneath them to sell their own stuff, that it somehow degrades what they're doing. To me, that's totally weird. How can it possibly be degrading to take your own stuff out to people? In fact, you're actually the best person to stand behind your work. To me, the act of selling your music is no different than producing the music in the first place. You're in a different place when you're doing it, but the energy is the ▶

MUSIC LAB

Massive Summer Clearout!

We're piled high with bargains but it's first come, first served

All prices include VAT

Item	Condition	Price	Item	Condition	Price	Item	Condition	Price
Lexicon 224	E/H	£1800	Topaz Meterbridge 24	New	£575	Yamaha MT8X 8ch Multitracker	E/D	£800
Joemeek Compressor	E/D	£900	HK LSO200 Speakers	New	£100	Signex Bantam Patch Bay	New	£150
LA Audio Classic	E/D	£625	Made To Fade GM25 DJ Mixer	New	£140	Denon DRM44HX 3Head Cassette	E/D	£100
BEL BC3 24ch Noise Reduction	E/H	£600	Soundcraft Live 24 Mixer	New	£1300	DBX 290 Digital Reverb	New	£200
BBE 822A Sonic Maximiser	E/D	£250	Spirit Lite Mixer	New	£220	Audio Tech Hand Held Radio Mic	New	£400
Quad 405II Amplifier	E/H	£230	JBL 4206 Monitors	New	£225	Sony DTC670 DAT	E/D	£400
QSC 1400 Amplifier	E/H	£300	Fostex 820 Mixer	New	£1500	Peavey Analogue Filter	New	£250
Alesis SR16 Drum Machine	E/H	£150	Kurzweil K2000R Sampler	E/D	£1800	Spirit Folio 12/2 Rack Mixer	E/D	£325
Roland TR707 Drum Machine	E/H	£350	H/W MX8 DJ Mixer	E/D	£100	Fostex D5 DAT	E/D	£749
Roland TR727 Drum Machine	E/H	£300	Fender Bassman 59 Combo	New	£325	Alesis Monitor 2	E/D	£575
Roland TR505 Drum Machine	E/H	£200	Yamaha QY8 Sequencer	New	£180	KRK 6000 Monitors	E/D	£550
Sennheiser Radio Mic (lapel)	E/H	£400	Yamaha GW10 Guitar FX	New	£200	KRK 7000 Monitors	E/D	£900
Sennheiser Radio Mic (handheld)	E/H	£400	Roland GI10 + MIDI Pickup	New	£425	Alesis RA100 Amp	E/D	£250
Urei 964 Digital Mteronome	E/H	XXX	Samson Servo 240 Amp	E/D	£225	EMU ESI32 SCSI Sampler	E/D	£1000
EMU Performance 1+	E/D	£150	Samson Servo 150 Amp	E/D	£150	Sony SVO9620 Pro SVHS	E/D	£2200
Mackie 1202 Mixer	E/D	£230	Samson E62 2x31 Band EQ	New	£230	Tascam M2600 16/8 Mixer	E/D	£1700
Acoustic Energy AE1 Monitors	E/H	£400	Samson E30 1x30 Band EQ	New	£230	Cubase Windows	E/D	£150
Sennheiser MKH20 Omni Condenser	E/H	£600	Roland MS1 Sampler	New	£290	MOTU Freestyle	New	£150
EMU Darwin + 1GB HD	New	£2400	Peavey DP8MC8 Mother Keyboard	New	£1200	Cubase Compact PC	E/D	£150
Voce Micro B2 Organ Module	New	£320	Steinberg Pro24 Atari	New	£25	Roland MSE1	New	£400
Alesis S4 Quadrasynth Module	New	£600	Tascam DX4D 4ch Noise Reduction	E/H	£100	Roland MDC1	New	£400
Roland MT32 Module	E/H	£150	Korg M1R M1 Module	E/H	£600	EMU Vintage Keys	New	£599
Yamaha QX5 Sequencer	E/H	£150	Roland D550 D50 Module	E/H	£400	Cubase Audio Version 2 MAC	New	£350
Behringer Edison Stereo Simulator	New	£150	Roland U220 Module	E/H	£300	Alesis Monitor 1	E/D	£250
EMU Proteus FX	New	£400	Denon DRM710 Cassette	E/H	£150	Sony DTC60ES DAT	E/D	£575
Aphex 104 C2 Big Bottom	New	£220	Peavey Autograph 2	New	£350	AKG C1000 Mic	E/D	£179
Aphex 107 Tubessence Mic Amp	New	£400	Symetrix 488 8 ch ADAT Comp	New	£400	AKAI 2Mb Board for S2800/3000	New	£150
Arcus Plus 24Bit Colour Scanner	S/H	£550	Fostex 350 Mixer	S/H	£100	Soundtracs Solo MIDI 24	E/D	£3600
Mackie CR1604 Mixer	E/H	£550	Deep Bass 9 Module	New	£340	Ensoniq DP4 4ch FX	E/D	£900
Tannoy PBM5 Monitors	E/D	£190	GEM Powercase 16 Powered mixer	New	£900	Yamaha REV7 FX	E/H	£600
Allen & Heath GS1 Mixer	New	£699	Samson MPL2242 Mixer	New	£549	Summit PEQ100 EQ	S/H	£900

E/H = Ex Hire - E/D = Ex Demonstration - S/H = Second Hand - New = New

Phone: 0171 388 5392 • Fax: 0171 388 1953

72-74 Eversholt Street, London NW1 1BY. Opposite Euston Station

All major credit cards accepted

At home with...

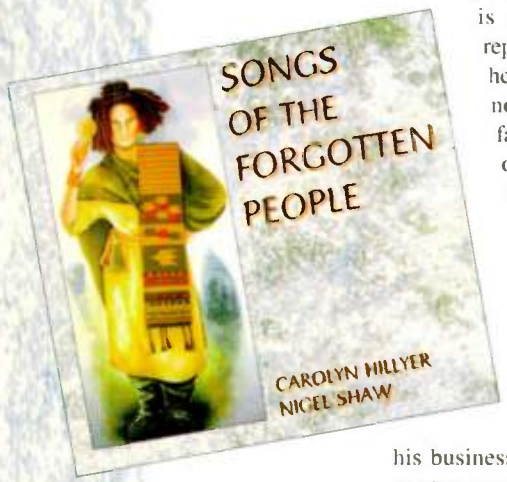
Nigel Shaw

The Seventh Wave studio gear, from left to right: (on stands) the Korg DW8000 and Roland W30; (in flight case) Alesis Quadraverb multi-effects, Korg O1R/W synth, JBL monitors, Alesis Microverb II (concealed behind Beyer MC834 mic), Yamaha GC2020 compressor, XRI Systems synchroniser, Ibanez SDR1000 delay, 3G Crystal mixer, Sennheiser HD480 headphones (hanging from beam), Denon tape deck, Sony DTC690 DAT. The Alesis ADAT and ADAT XT are out of sight.

same: you're putting out something of yourself. And it teaches you about personal responsibility. I think that taking more personal responsibility is the way the whole planet is going, and wouldn't it be amazing if everybody was responsible for their own creativity?"

TURNING POINT

Well, yes. But there will be many unconvinced sceptics asking how on earth Nigel Shaw from Dartmoor has actually managed to sell many tens of thousands of his CDs and cassettes, and has come to enjoy a healthy turnover of £50,000 during 1995. Given that there are few groups or artists who have so far managed to succeed where Shaw has (one extremely notable exception being the unsigned band Show Of Hands, who recently sold out the Royal Albert Hall purely on the strength of their mailing list), he must surely have a sneaky secret, some hidden advantage: a rich dad, a certain contact in a certain place? Well, no. Delving deeper into Shaw's story, it appears that if he did have an unfair advantage, it was of a very mundane kind. His unassuming, instantly likeable personality — people quickly feel at ease around him — is surely of great help when he's representing his music. And the fact that he's always seen himself as a bit of a non-musician, with no ambitions for fame or stardom, surely takes away a lot of ego and fear-of-failure pressure. But to this writer, the defining factor appears to be something that everyone can adopt: Shaw's eminently down-to-earth attitude. He has a vision, but he's allowed it to unfold slowly and organically, careful not to get ahead of himself. Instead, he took a small step forward every time, and then made sure that all parts of him and his business had time to catch up. As the Zen masters say: regard the journey as more important than the arriving.



Shaw's journey began when he started playing keyboards at the age of 19, in 1981, while studying Applied Biology in London. He spent his entire grant on a Roland Juno 6: "I figured that with a synth you can get some wonderful sounds just playing with one finger". An SH101, Fender Rhodes, and other keyboards followed. Though Shaw already realised that his future somehow lay with these machines, he nevertheless completed his degree, and also acquired a diploma in Pharmacology.

Finally released from the last remaining pressures of 'common sense' (get a degree, then a day job) in 1984, he made the "very conscious" decision to become a musician, and instantly went on the dole. He started recording on a Fostex X15 cassette 4-track, went on the Enterprise Allowance Scheme in 1985 as a composer, and produced his first "very basic" album, *Spirit Of The Elements*. He took it round to a few new age shops, some of whom bought it. An "amazing turning point" was some improvised performances he did at the Festival for Mind, Body and Spirit in London in 1985: "I sat up all night after I sold all my 10 copies of the album after the first performance, copying more tapes and drawing more covers. I thought: 'hey, something's happening here'." A second album followed, and Shaw gradually expanded his studio to 8-track. To support himself, he initially worked in a music shop, and later rented out his home studio. Meanwhile, he still felt like a stranger in a strange land: a chops-challenged non-musician and non-engineer entering an undiscovered country and learning about it as he went along.

FEEDBACK

"It was an organic process, each time doing a little bit more with my music, expanding a little bit more. I learnt gradually to deal with the business side as well. Apart from one point, when I couldn't see the next step, couldn't see how I could make it bigger, it never occurred to me to take the music to

SHAW'S SEVENTH WAVE STUDIO

SYNTHS/SAMPLING
- Korg DW8000 synth
- Korg 01R/W module
- Roland S50 sampler
- Roland SH101 analogue monosynth
- Roland W30 sampling keyboard

RECORDING
- 3G Crystal 16:4:2:1 mixer
- Alesis ADAT and ADAT XT digital recorders
- Alesis Microverb II reverb
- Alesis Quadraverb effects
- Beyer MC834 mic
- dbx compressor/limiter
- Denon cassette deck
- Ibanez SDR1000 digital delay
- JBL monitors
- Sony DTC690 DAT recorder
- Sennheiser 421 overhead mics
- Sennheiser 541 mics
- Sennheiser HD480 headphones
- XRI Systems synchroniser
- Yamaha GC2020 compressor/limiter

64 VOICE POLYPHONY • 8 MEG OF ROM • 640 PROGRAMS • 61 NOTE KEYBOARD • 500 MIXES

Creativity Is Priceless. Now, It's Also Affordable.

Introducing The Alesis QS6

How much is your creativity worth? You really can't put a price on something so valuable. The powerful new **QS6™ 64 Voice Expandable Synthesizer** gives you everything you need to push your creativity to new levels. It's the affordable solution for musical inspiration.

Studio Quality Sound

The QS6 has everything from realistic acoustic instruments to cutting-edge and vintage synth sounds, all accessible at the touch of a button. Its digital 16-bit linear non-compressed samples provide warm, clean, and incredibly accurate voicing for every performance. The onboard multieffects - reverb, chorus, flange, delay, rotating speaker effects and more - use the same advanced processor as our Q2™ Master Effects. Combine these effects with the massive sound library, and you'll create CD-quality mixes right from your synth. QS6's rhythmic/ sonic loops let your creativity groove just by holding down a single key. The semi-weighted keyboard offers velocity, release velocity and aftertouch for expressive playability. It's all packed into a tough all-metal chassis that will take the punishment when you take your show on the road.

Variety and Expandability

The QS6 offers a huge palette of internal sounds - 8 megabytes of sample waveforms, 640 Programs, and 500 Mixes - giving you thousands of timbral options to choose from. This sonic library can be expanded instantly by simply plugging in a 4MB or 8MB Alesis QuadraCard™, like our acclaimed Stereo Grand Piano card.

Also, the QS6 includes Alesis' exclusive Sound Bridge™ software (for Mac and PC) which allows you create custom cards with your own sound files from your computer. This innovative technology guarantees that you'll always have access to new sounds.

Powerful Synthesis Engine

The QS6 uses the same advanced synthesis architecture as its big brotner, the QuadraSynth Plus™. True 64-voice polyphony lets you assemble complex sequences and rich, stacked chords. Its 16 channel multitimbral Mixes and a built-in computer interface (also for Mac and PC) give you easy access to the world of MIDI sequencing, software and composition. In fact, we've included a free CD-ROM with the QS6 that's packed with extra sounds, killer sequences, and sequencing software to help get your creative juices flowing.

The QS6 is an instrument that was crafted to help you unlock your creative talents. Stop by an Alesis Dealer and start creating new music with the newest keyboard from Alesis.

Sound Technology plc
Letchworth Point, Letchworth, Hertfordshire, SG6 1ND
Tel: 01462 480000 Fax: 01462 480800

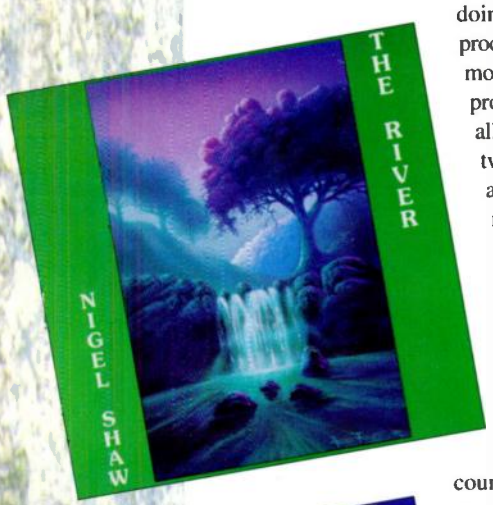
ALESIS

64 VOICE POLYPHONY • 8 MEG OF ROM • 640 PROGRAMS • 61 NOTE KEYBOARD • 500 MIXES

EXPANDABLE • SERIAL DATA PORT • GENERAL MIDI • ALESIS EFFECTS • SEQUENCING SOFTWARE • QUADRACARDS

Nigel Shaw

someone else to sell it for me. As I said before, to me the business is inseparable from the music: doing my accounts is as much a part of the process as recording a new album. One may be more enjoyable than the other, but it's about a process of growth, where you learn to handle all those things. By 1989, I was selling one or two thousand copies of four album titles, and was just starting to make a living, selling my tapes at new age festivals and via new age shops. The advantage of doing it all myself was that I had a much higher return on every cassette copy I sold, as much as £7. Had I been with a record company, I would only have made a fraction of that per copy."



Shaw was by now playing at every new age fair or festival around the country, and his contacts with new age shops were growing rapidly, helped by the fact that he had several album titles, "so they could order a selection and make the postage and investment in my name worthwhile." Personal contacts with audiences at the festivals or feedback from the shops also helped: "You really get a sense of how music affects people's lives, you see it working. It's amazing." In 1991 Shaw produced his first CD, *Brother Sun, Sister Moon*, a project for which he borrowed £2,000 from the bank. Two largely improvised ambient CDs followed: *The River*, which used a background of nature sounds recorded in Dartmoor, and which has become Shaw's best-selling work to date, with over 15,000 cassettes and 6,000 CDs sold; and *The Seventh Wave*, featuring a backdrop of ocean sounds, which sold about half that amount. *The River* was his first album recorded in Dartmoor, where he moved in early 1992.

"I've met very few signed people who've had a really good time with record companies. For almost everyone, it's a compromise."

It was around this time that two other events took place that were of pivotal importance: he met Carolyn Hillyer, a painter who wrote songs to accompany her paintings, and he began playing the flute, an instrument that soon became of central importance to his music. Shaw and Hillyer became both personally and musically involved, and "things took off. There was now this joint vision; two sets of energies going out in the same direction." The two combined forces under the umbrella of Shaw's Seventh Wave Music, the name tag that he had used for his ventures since 1987. Today Seventh Wave Music produces a beautifully laid-out mail order brochure that features six of Shaw's eight solo albums to date, three of Hillyer's albums — *House of Weavers* (1992), *Heron Valley* (1993) and *Grandmother Turtle* (1994) — and a series of her cards and prints. There are also several collaborations with other musicians, amongst them two albums by the band Global — *Willywoman* (1994) and *Shamanka* (1995) — both featuring wild "ambient trance-dance music". And this May two collaborations between the couple were added: *Songs From The Forgotten People* and *Echoes of the Ancient Forest*.

INSPIRATION

So what, then, of the music with which Shaw has achieved such remarkable success? Given that he has spent the last 10 years selling most of his music to new age audiences, one would be forgiven for assuming that his music falls firmly into that category. Shaw himself begs to differ, stressing that he does "ambient music. New age doesn't mean anything to me." New age music has acquired quite a bad name for itself, courtesy of a flood of tedious, repetitive, unimaginative albums that appeared to be an excuse for the creatively-challenged to make a quick buck. And a market for purely functional, impersonal new age music — like 'music for meditation', or 'music for massage' has also done little to earn the genre artistic respect. Shaw's music is a world away from the latter type: it's personalised music with a theme and a message — and, apart from the two ambient CDs, *The River* and *The Seventh Wave*, it demands attention. Yet it has many of the characteristics we commonly associate with the new age tag: slow-moving, synth-string washes, nature noises, lots of space in the sparse arrangements, much rhythmless hanging on one chord, and so on. It is generally very slow, calming music, and it is easy to see why it would appeal to a new age market.

At the same time, there's a haunting, melodic quality to Shaw's music, and this, combined with the extensive usage of American Indian flutes on later albums, and other acoustic sounds, whether sampled or 'real', gives his music a timeless, other-wordly quality, rather than a synthetic feel, and is thus far removed from new age clichés. Hillyer's albums, filled with intense, shamanistic-ritualistic songs, and the up-tempo dance rhythms of their band Global, also bear little resemblance to new age's stock-in-trade. Shaw agrees, though, that most of his music is undramatic and slow-moving, and explains: "It definitely is a reflection of my temperament. I love slowly-changing textures, and I love strings and polyphony. Classical music, for that reason, has always been a big influence on me, especially composers like Mahler, Fauré or Vaughan-Williams, who also have that brooding, slow-moving quality in their music. I don't like

MidiVerb® 4

Clean, Quiet, Rich

Forget what you know about digital multieffects processors, the new Alesis MidiVerb 4 has rewritten the book. While the competition has been chasing the standards set by three generations of MidiVerbs, our engineers were researching ways to integrate the form and function of digital reverb way beyond anybody else's imagination...or capabilities. It makes the MidiVerb 4 the cleanest, quietest, richest sounding and, yes, the smartest machine of its kind. Here's how...

Advanced Fully Integrated 18 Bit Architecture

Alesis is the world leader in full custom VLSI design for audio applications, so MidiVerb 4's 20 Bit DSP engine is so advanced it eliminates massive quantities of discrete circuitry, making it a revolutionary blend of electronic design and functionality. And to insure state of the art performance, the input is sampled at the professional standard 48kHz sampling rate via 18 Bit, 128 times oversampling A/D converters.

The Power of Great Sound

MidiVerb 4's superb reverb and effects algorithms are the direct result of our ten year mastery of the art and technology of sound. Dense, natural reverberation, and rich chorus, delay and pitch effects deliver unbeatable sonic performance. 20kHz bandwidth, 90dB signal to noise ratio, 18 Bit and 8 times oversampling D/A converters combine to make MidiVerb 4 perfect for even the most pristine digital recording.

Fast, Fun, Flexible

But great sound is only the beginning. You get 32 full Stereo configurations, as well as powerful independent Dual Channel Parallel Processing. Plus, a special Cascade mode allows the output of channel 1 to feed the input of channel 2 in any of 7 dual channel configurations. A large custom backlit LCD, data entry wheel and clearly labeled buttons comprise the front end of MidiVerb 4's fast, intuitive user interface. Four parameters are shown simultaneously and there's even screen help prompts to put you at ease if there's ever a programming question. You can tweak one of the superb 128 preset or 128 user programs, or start from scratch and get the sound you need in no time.

Auto Level Sensing™

No, this won't tell you if your car's on a hill. But, if you want to start mixing in a flash, or the drummer's starting the count and you just plugged in, our exclusive Auto Level Sensing feature automatically sets the input level for optimum use of MidiVerb 4's wide dynamic range, so you'll never have to trade off patience for excellent sound.

It's a MidiVerb

Of course, because it's a MidiVerb, you can modulate effect parameters in real time via MIDI, select programs, and automate your effects during mixdown with a MIDI sequencer.

MidiVerb 4 is based on a classic theme, but it's new in every way. And as always with MidiVerb, the best part is the price. See your Alesis Dealer.

and Smart

® MidiVerb is a registered trademark, Auto Level Sensing is a trademark of Alesis Corporation.

Sound Technology plc
Letchworth Point, Letchworth, Hertfordshire, SG6 1ND
Tel: 01462 480000 Fax: 01462 480800

ALESIS
STUDIO ELECTRONICS

Nigel Shaw

that Mozartian thing: here's a theme in your face and let's play it at 90 miles an hour and repeat it over and over again. And other than in the dance music, for which I use the W30 sequencer, I don't sequence my music. Horrible, rigid, sequenced predictability is one of new age music's greatest failings."

Shaw stresses that it is the quest to create a "sense of beauty" in his music that drives him, and adds that his biggest inspiration is Dartmoor: "That's a direct resource that I use in my music; to get that feeling of space and emptiness, to capture the energy of the land. We don't make folk music, but there's an ancientness of feeling to our music that is intentional and linked to Dartmoor."

This 'ancientness of feeling' has been particularly enhanced in recent years through the use of the aforementioned American Indian flute, especially on albums like *Seven Stones* (1993) and *The Lone Tree* (1994). Flutes, like synth strings, have played an important part in Shaw's music for many years. In the past they were samples, initially played on an S50, and later on his Roland W30. His Korg 01R/W, he says, "has the best string sound I've ever heard. It's not a brilliant machine — a lot of sounds are based around the effects that are in it — but the string sounds have a very rich quality to them, and the touch response is fantastic: the string sounds are beautifully playable."

ATTITUDE

Holding one of his American Indian flutes in his hand, Shaw dryly observes that "this technology has lasted longer than the music technology that is around at the moment. But brilliant results come from the combination of ancient things and electric stuff. There's something that really works about that." The only other keyboards Shaw owns are a Roland SH101 and a Korg DW8000. Combined with his 3G Crystal desk (a PA desk that he has slightly modified, and praises for its superior EQ and transparent sound quality), two ADAT machines ("dead easy to use, and brilliant for recording flutes") and some minimal outboard gear, Shaw's studio is positively spartan. He explains that equipment, for him, is just "work tools to get a result, I don't get attached to any particular box. I don't need anything more. You can always feel that you need a new piece of gear, but it quickly makes you a victim, rather than a user, of technology when every time the next thing rolls off the production line, or is reviewed in *SOS*, you think: 'I really need to buy this.' You're forever learning about new equipment, rather than actually making music. It's for a similar reason that I don't use a computer sequencer: you can get so easily lost in the technical side of it, and get distracted from making music."

"If I can get my stuff out and support myself financially from my music, everyone can do it."

Towards the end of our conversation, we return to the subject of Shaw's DIY approach to selling his music, and talk about the nuts and bolts of his business — like how he never makes sale-or-return agreements with shops, "because it is a nightmare. Shops often don't keep records of what they sell, and the extra admin just takes time and energy. When I ring a new age shop, or an independent record shop, I make sure I make personal contact with someone, send him or her some material and agree to ring them back a couple of weeks later. If they like it, I suggest that they order five or something, with a 30-day invoice. I only charge £3.50 per cassette and £5.50 per CD, so that's not a big risk for them. My prices are very cheap — distributors sell CDs to shops for £7.50. If my production costs were higher, I would charge more too, but one of the main things that makes this whole DIY venture possible is the low production costs of CDs and cassettes. You can have 500 CDs made for £1000. If you sell them at concerts for £10 each, you only need to sell 100 to break even."

Shaw stresses the importance of having more than one album, and of taking things step by step. "The mistake would be to press up 1000 CDs, 500 cassettes, and then contact the shops. You should initially just have a few, and talk to people, make friends with them — there are many really nice people working in shops. It's a long, slow process, but it works." Shaw warns that the American market is virtually a no-go area, because new age shops won't buy other than from official distributors, no matter how much they like an album.

Finally, he denies that he's been successful purely because he has found a hole in a niche market: "I've carried on with exactly the same attitude with which I approach new age shops when I deal with record shops, and/or sell my dance music. Of course, you can forget about Our Price, but there are many independent record shops, including HMV and Andy's, with buyers who are always keen on new and adventurous material. They often can't stand the stuff that is dumped on them by record companies. It's your attitude that is the most important thing. Becoming independent and self-sufficient as a musician is a path, a spiritual path, that involves not just music and business, but your whole personality. I don't tend to define things in terms of spirituality particularly, but to me it's totally that." SOS

Nigel Shaw and Carolyn Hillyer can be contacted at: Seventh Wave Music, PO Box 1, Totnes, Devon TQ9 6UQ.

GROOVE TUBES

Valve Microphones Glow With The Flow!

"The most fantastic sounding microphones - ever!"

Sweetness and warmth are two elusive qualities that engineers the world over strive to capture in their vocal recordings. Now you can have it with Groove Tubes valve microphones.

Arguably, the best sounding microphones in the whole universe!

Available from selected pro-audio dealers throughout the UK.

Distributed Exclusively in the UK by Axis Audio Systems Ltd
Tel: ++44 (0)161 474 7626 Fax: ++44 (0)161 474 7619
Email: sales@axisasl.demon.co.uk

AXIS

Worldwide: Groove Tubes • GT Audio 12866 Foothill Blvd. Sylmar, CA 91342 USA Tel: (818) 361-4500 Fax 365 9884

gateway

in partnership with Kingston University

Call for our latest brochure or Visit us on the WWW

New Modular 2 year Higher Diploma Courses

Options include
Service and Maintenance
Broadcast and Live Sound
Post Production and Multimedia.

Gateway, The School of Music, Kingston University,
Kingston Hill Centre, Surrey, KT2 7LB Tel 0181 549 0014
http://www.king.ac.uk/~xe_s516/gateway.html

GET IT RIGHT FIRST TIME!

THINK YOU DON'T NEED THE EXTENSIVE FEATURES OUR PRODUCTS OFFER?
CALL US ON 0181 337 0333 AND FIND OUT WHY YOU DO (OR SOON WILL!)

The New PRO SOLO Single Channel Converter. *Features:* V/oct,, & Hz/V (for Korg). 5 gate options (including S-Trig), Programmable LFO (9 waveforms), Pitch Bend, Portamento, Transpose, Single/Multiple Trigger, Auxiliary CV, MIDI Monitor Mode, Thru Socket, Rugged Steel Case, 3 Digit Display - Easy To Use. Now with sync 24/ clockpulse mode
IN STOCK NOW £159.85 Inc VAT

The PRO-2 Dual Channel Convertor can run two mono synths. Each channel has: CV, Gate, S-trig (for Moogs), 2 auxiliary CV's (to control filter cut-off, etc.). It also has SYNC24 (for TB303s), clock pulse output, optional Hz/V (for Korg & Yamaha synths), & can run a Wasp & TR606/808 on optional 3rd & 4th channels.
IN STOCK NOW £189.99 Inc VAT

The PRO 4 Multi-channel MIDI to CV converter can run up to 10 pre-MIDI instruments, including 4 mono-synths. It also has many other features, such as 4 MIDI syncable LFOs, 8 auxiliary CV's to control filter cut-off etc, portamento, polyphonic mode, non-volatile set-up memories, extensive control via MIDI SYSEX, WASP, DCB & KADI ports as standard, optional Hz/V board, the ability to run a TR606/808 sync 24 & clock pulse, and much more.....
IN STOCK NOW £499.96 Inc VAT

Sequential Circuits Inc
EMS
moog
KORG

Oberheim
Roland
ARP
YAMAHA

We can fit MIDI to most pre-MIDI synths and drum machines with an internal MIDI Retro-fit. We can also supply, or fit socket kits to instruments such as the TB303, MC202, Odyssey, Prodigy, Cat, 700s, and others, to enhance their control from the PRO-SOLO, PRO-2 and PRO-4. Please call for details.

For further details, sales & mail order
Call Our Sales Line Now On 0181 337 0333
Trade and export enquiries are also welcome
World leaders in MIDI for pre-MIDI instruments

Access KENTON electronics VISA

12 Tolworth Rise South, Surbiton, Surrey, KT5 9NN, UK
Tel: 0181 337 0333 Fax: 0181 330 1060
http://www.kenton.co.uk E-mail: sales@kenton.co.uk

KENTON electronics

PLUG-IN POWER!

LEXICON PCM80 PLUG-IN EXPANSION CARDS

It's not often that plug-in cards merit the same attention as the equipment they plug into, but these add-ons are capable of transforming Lexicon's PCM80 effects processor into a completely different beast, as PAUL WHITE discovers.

pros & cons

LEXICON PCM80 PLUG-INS £249/£199

pros

- The two cards with extra algorithms significantly enhance the capabilities of the PCM80.
- Each card has a good range of presets, which you can either use on their own or as a basis for your own adaptations.

cons

- If you add up what you need to buy all three cards, you could afford a budget effects unit in its own right!
- The preset-only card is not as good value as the two with new algorithms on board.

summary

The Pitch card and Dual FX cards are 'must-have's for anyone who could own a PCM80 now or in the future, but the preset-only card, though good, is probably only an essential if you do a lot of post-production work.

SOUND ON SOUND

Lexicon's PCM80 multi-effects unit is not yet two years old — we reviewed it back in *SOS* December '94 — but it has already made its name as a worthy '90s successor to Lexicon's classic PCM70. In its basic form, the PCM80 includes some fairly serious reverb algorithms, and although the number of simultaneous effects may seem limited on paper, the aural experience is never disappointing — and frequently stunning. If you own a PCM80, you can now expand its capabilites considerably, courtesy of the three new plug-in cards under review here, two of which (the Dual FX and Pitch cards) offer new processing algorithms and presets, while the third just offers new presets.

DUAL FX ALGORITHM CARD

The Dual FX algorithm card (the blue card on the right of the main picture) extends the PCM80's flexibility by offering 25 brand-new effect algorithms, which combine five completely new effects blocks with the five original reverb types. The algorithms must be loaded from the read-only card whenever the machine is used — the easiest way to work is simply to switch on the machine with the card plugged in. Alternatively, you can plug the card in with the PCM80 already running, and instigate load proceedings. Once loaded, the card can be removed from the machine and the algorithms will remain available until the machine is next switched off, which means that a studio running more than one PCM80 could load them all up from a single card at the start of each day. Using the card doesn't increase the number of user presets, but it does provide five new banks of presets prefixed X.

The five available reverb blocks are exactly the same as in the basic PCM80: Concert Hall, Plate, Chamber, Inverse and Infinite. The first of the new effects blocks is Glide, comprising a stereo pair of 2-tap gliding delays routed into four adjustable delay 'voices', each of which has its own feedback and pan parameters. The maximum delay time using a PCM80 with fully expanded RAM is a massive 42 seconds, and the pitch-changing character of the gliding delays makes it possible to create dynamic flanging-type effects or dramatic pitch-shifting treatments, many of which defy simple description.

The Chorus block might seem mundane from its name, but this one sounds wonderful, and sports four separately adjustable voices, making it sound like four chorus units working at the same time. The chorus effect is crystal-clear, with none of the noise or mushiness that afflicts many cheaper units.

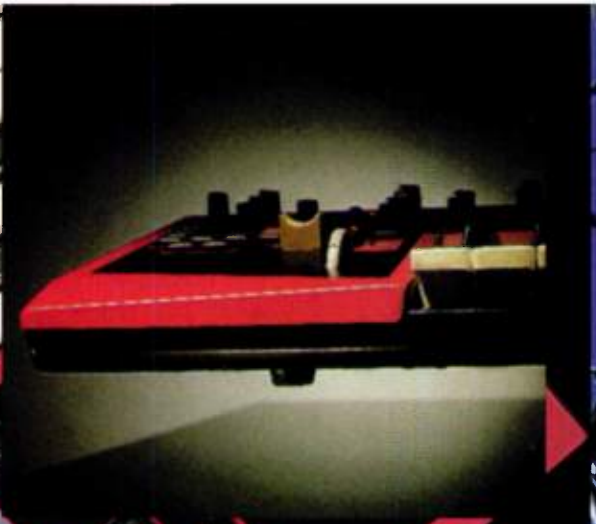
Next up is M-Band, another 4-voice delay effect, but this time incorporating high- and low-cut filters, enabling it to create repeat echoes that change in timbre as they decay. Though this isn't a new idea, it sounds exactly right, and you can get very close to setting up tape-echo sounds or echoes that appear to fade into the far distance.

Resonant Chord Res 1 and Res 2 are derived from the classic PCM70 and PCM80 resonant effects, where precisely controlled short delays are combined with large amounts of feedback to create resonators that 'ring' at a specific musical pitch. Percussive sounds produce metallic, tuned percussion effects, whereas harmonically rich pad sounds can become quite eerie. It is possible to control the resonator pitches via MIDI, allowing percussive sounds to be processed via chordal filtering, and there are two different systems for pitch allocation, which create two distinctive effects. Res 1 assigns pitches to the four resonators chromatically — the resonators retain the pitch of the last four MIDI notes played. The result is a sustain-like effect, as the resonators stay in their current state until a new note is played. Res 2 allocates the pitches diatonically harmonised with the scale, key and root note entered by the user. This allows a MIDI-controlled sound to be processed in a way that creates a resonator harmony. Both versions include conventional delay, which can be up to 38 seconds for a fully-expanded PCM80.

These five effects blocks are combined in all possible combinations with the five reverb types, hence the total of 25 different algorithms. The best way to describe the result is to pick out some of the more memorable preset types. As you'd expect, the chorus, modulation and delay effects are very clean, but what amazes me is just how ▶

nord lead V2.0

Nord Lead is the first digital synthesizer to use "Virtual Analog Synthesis". Clavia has analysed analog synthesizer design in detail and implemented the research in a digital model. Nord Lead employs mathematical simulations of the electronic signal generated by analog oscillators, instead of using waveform tables. This makes it possible, for example, to sweep the pitch smoothly over a very wide range and allowing for true pulse-width modulation. In other words it sounds amazing!



New Version 2.0 features:

Analog Drumsounds !

Looking for that good old analog drumsound?
Look no further.
Go down to your music store and check out the new Nord 2.0.
It's loaded with exciting percussion sounds, the sounds you have been looking for.
The Nord Lead/Rack 4- voice version comes with 10 analog percussion kits in ROM right from the start. The Percussion kits are editable, you save them via SYS EX Dump.
An expanded Nord can hold an additional 30 programmable percussion kits on a PCMCIA S-RAM card.

It's a breeze to work with percussion sounds in the Nord. You can use up to 4 different percussion kits of totally 32 sounds simultaneously on 4 MIDI channels. The percussion sounds are configurated in 8 different zones on the keyboard. The 8 different sounds can easily be edited in real time. When you use the Nord in a multi-timbral set up, you can assign a percussion kit to one MIDI channel and use the other three channels for basses, leads or pads sounds.

A lot of sounds to start with!

The Nord 2.0 comes with several great analog single sounds and exciting "Layers" saved in 100 new Performance factory programs. You'll find great sounds from the past, today and for the future programmed by international sound designers. By using the unique features of the Nord, the 4 slot configuration and the "Morph" function, they have created exciting pads sounds, awesome leads and monster basses.

Try the Echo!

A new feature in the Nord is the Echo effect. The Echo will be influenced by the unique "velocity programming" (morphing) feature of the Nord.

More arpeggiator effects!

It's now possible to run the arpeggiator notes randomly.

New filter option!

A new filter is implemented into the Filter section. A Notch filter in serie with a Lowpass filter.

Additional MIDI features!

The Octave Shift button is now being transmitted and received making it possible to play other octaves on sound modules from the Nord keyboard.
"After Touch" is now being received. It can be assigned to LFO 1, LFO 2, OSC 2, FM or Filter.
Arpeggiator notes can now be transmitted via MIDI.

Additional Pedal functions!

An expression pedal can now be assigned to LFO 1, LFO 2, OSC 2, FM or Filter working independently of the modulation wheel.

Expand your Nord to 12 voice with the Expansion kit. Also make sure you get hold of a S-RAM card and you'll be able to download thousands of sounds free of charge from our WEB site!

Several sound cards are now available for the Nord!

Buy a Nord PCMCIA S-RAM card and you'll get 297 single sounds and 100 Performances!

Attention Existing Owners!

Upgrade your Nord today to V2.0 - available from your dealer only £95 !

Coming soon !

New 12 Voice 'Extender' Rack mount unit for your Nord - double your Nord power !

World Wide Web Site!

World Wide Web!
On our homepage, http://www.clavia.se/ you'll find thousands of sounds, both Single sounds and performances.
Expand your Nord to 12 voice, get hold of a S-RAM card and you'll be able to download thousands of sounds free of charge from our WEB site!

For your nearest dealer contact:
Key Audio Systems Ltd.
Unit D, Chelford Court,
Robjohns Road, Chelmsford,
Essex. CM1 3AG.
Tel: 01245 344001
Fax: 01245 344002

WRH

SCOTT MARTIN GERSHIN CARD

Scott Martin Gershin of Soundelux Media Labs is a sound designer for film and TV, and he's put two banks of his own presets onto a card (the green one shown in the picture at the start of this review). All his presets make use of existing algorithms, so they can be used with a standard PCM80, and the majority of the presets are aimed at audio post-production. For example, there's a whole section on telephones, answering machines, TV and live PA simulations, rooms, and even patches for enhancing explosions! The next section of this bank moves the weirdness quotient up a notch, giving us effects suitable for flashback sequences, computer voices, so-called 'fantasy' sounds and sci-fi treatments, before getting back to earth with static, a car boom box, and a neat DJ effect where the resonators skip a perfect fifth every measure.

The second bank kicks off with patches such as 'Dreamscape', 'CyberFdbak' and 'Cybermare' before launching into a raft of rotating pans, multi-tap treatments and surround effects. Again, life returns to near normal towards the end of the bank, where there are simulations of auditoria, various rooms, and a very practical set of reverb patches optimised for various instruments or room characters.

Considering that Scott Martin Gershin was involved in the soundtrack for Disney's *Pocahontas*, most of these presets are anything but cute and cuddly. What you get is a concise sound designer's toolkit that meets the needs of the video post operator, but also has enough musical effects to make it worth adding to the studio repertoire. There's a generous helping of weirdness without making the overall collection too gimmicky, and on the whole, these presets really show off Lexicon's uncanny ability to create the illusion of space and distance.

▶ much effect you can pile onto a sound without smothering it. There are rotary speaker simulations, lots of nice variations on standard treatments, and some wonderful emulations of tape flanging and tape ADT. As the basic PCM80 has a lot of nice reverbs built in, the card tends towards the less obvious, and there are many acoustic spaces well suited to post-production work as well as to music. For example, there's a fabulous underpass/subway tunnel just crying out for a busking solo sax, and there are some frighteningly realistic rooms, which include simulations of combined close and distant miking. You also get a car park, various chambers and a symphonic string hall, which combines phasing with reverb in a very creative way.

There are numerous drum reverbs which make use of filtering combined with reverberation, a few really good plate simulations with tape pre-delay, and various bouncing echoes. To me, the simulation of space is the most impressive factor — there are patches that create an absolutely convincing sense of distance. With some, you can even move the sound source away from you in real time! You get TV sound, telephone sound, ducking delays, composite modulation effects and a useful range of dual effects, which allow the unit to produce two quite different mono or stereo effects fed from two different aux sends. In all cases, the extensive real-time parameter control of the PCM80 can be exploited to create patches which either respond to the sound being processed or changes sent over MIDI.

For anyone who already has a PCM80, or who is thinking of buying one, the modest cost of this card is a small price to pay when you consider the number of brand-new, truly useful effects to which it gives you access. Not buying this card verges on the tragic!

PITCH FX CARD

As it stands, the PCM80 has no conventional pitch-shifting capability, but the Pitch card (not shown in the picture, but identical to the others in all but colour — it's mauve) changes all that, providing access to five very advanced pitch manipulation algorithms. What's most impressive is the amount of shift that can be used before the side effects of the process become significant — there's a bare minimum of that irritating modulation that makes lesser units sound permanently 'out of tune'.

First off the card is the 'Quad Hall' algorithm, which combines Hall reverb with a powerful 4-voice pitch-shifter. Delay times of up to 1.25 seconds per voice may be included, and each voice has variable feedback. For more shifting flexibility, the 'Dual-Chmb' algorithm brings together the chamber reverb and a dual shifter with a vast +/- 3-octave range and a precision of 1 cent. Again up to 1.25 seconds of delay may be added per voice.

As an alternative, there's 'Dual-Plt', which substitutes a plate reverb, or 'Dual-Inv', which uses a reverse reverb algorithm. The 'Stereo-Chmb' option is optimised for processing stereo material, and again, the range is +/- 3 octaves. Finally, 'VS-Chmb' provides on-the-fly, high-quality pitch-shifting for real-time pitch correction or varispeed compensation. The range is limited to +55% down to -35.48%, with a resolution of 0.01%. MIDI control over shift is applied to some programs, and each effects block incorporates a sophisticated submixer which lets you decide how to combine the reverb and effects blocks. Facilities include stereo width, output level and filtering, as well as dry/effect balance.

Lexicon's remarkable PCM80.

The card comes with 100 factory presets organised into two banks, and within the banks, the effects are arranged into logical groups. For example, Bank X0 starts out with vocal and vocal harmony patches, before moving into guitar and instrument territory. Bank X1 strays further into *X Files* territory, but includes some fantastic pads and drones, pitch sequences and combination effects, as well as a set of 'clean slate' algorithms for the creation of new patches. All the patches are impressive, but some are simply stunning. I was particularly impressed by the clarity of some of the vocal thickening treatments, while other patches created spatial effects as powerful as anything I've heard from dedicated 3D sound systems. In all, you get a wide selection of presets ranging from patches that let you hand-tune a dodgy vocal line to completely outrageous sci-fi effects that challenge one's powers of description, and though the pitch-shifting starts to show up side effects when you dial in huge shifts, you can move a vocal a few semitones either way without it warbling unduly. However, there is no attempt at formant correction, so the 'chipmunk on helium/Darth Vader with bronchitis' effect still rears its head if the degree of shift is excessive.

Again, this is a must-have card for anyone into anything vaguely ambient; it's also great for everyday vocal thickening and fixing. If you have a PCM80, you just have to have it. SOS

info

E Dual FX Card/ Pitch Card £249.10; Scott Martin Gershin Card £199. Prices include VAT.
A Stirling Audio Systems, Kimberley Road, London NW6 7SF.
T 0171 624 6000.
F 0171 372 6370.
E sales@stirlingaudio.com
W http://www.stirlingaudio.com

CALL NOW FOR BETTER THAN A PRICE MATCH

01473 287872 or 01473 254150

9 Months 0%, 1,2,3 years credit available (New low 23.9 APR). Written quote upon request.
Credit details taken in 2 minutes, Approval within the hour. Subject to status

KORG

Korg Trinity - The Flagship. 24 Mb, 48K PCM samples hard disk recording	£CALL
Korg Prophecy ~~£999~~	£CALL
And now the New Trinity Plus	Also In Stock
IH VOCAL HARMONY	£379
X5D KEYBOARD	£879
KORG X5 DR MODULE	£599
KORG X3 WORKSTATION	New Low....£849
KORG X5 SYNTH	£679
KORG X2 WORKSTATION	£CALL
KORG 05R MODULE	£399
KORG X5D Keyboard	£829

ALESIS

ALESIS QS6 SYNTH
SOUNDS SUPERB £849

QUADARVERB II Multi / FX	£599
MICROVERB 4 Multi / FX	£279
DM5 DRUM MODULE	£479
QUADRASYNTH + PIANO Keyboard	£999
MIDI VERB 4 Multi / FX	£349
3630 compressor	£269
MEQ230 EQ	£225
MONITOR ONE	£299
SR 16 DRUM MACHINE	£219
R100 POWER Ref Amp	£299
SAMSON MPL 1602	£259
SAMSON MIXPAD 9 COMPACT MIXER	£199

Studiomaster

STUDIOMASTER DIAMOND CLUB 8-2	£249
STUDIOMASTER DIAMOND CLUB 12-2	£299
STUDIOMASTER DIAMOND CLUB 16-2	£349
STUDIOMASTER DIAMOND PRO 8-3	£375
STUDIOMASTER DIAMOND PRO 12-3	£499
STUDIOMASTER DIAMOND PRO 16-4-3	£755
STUDIOMASTER DIAMONS PRO 24-4-3	£999
STUDIOMASTER SESSION MIX 16-2	£699
STUDIOMASTER P7 16/8/16	£1799
VISION 8-2 POWERHOUSE	£899
VISION 12-2 POWERHOUSE	£999

MICROPHONES

AKG beyerdynamic audio technica SHURE

Call us for low low prices

novation

NEW DRUM STATION *IN STOCK*	£479
BASS STATION RACK	£379
BASS STATION KEYBOARD	£325

TASCAM

TASCAM DA/P1 Portable DAT	£1299
NEW MO8 Mixer	£299
TASCAM 07 PORTASTUDIO	£339
TASCAM 424 MKII PORTASTUDIO	£525
TASCAM 464 PORTASTUDIO	£599
TASCAM DA30 MKII DAT Machine	£1199
TASCAM DA20 DAT Machine	£779
TASCAM 488 MKII 8 Track Portastudio	£999

Roland

Roland MC303
~~£CALL~~ £550

Roland VS880 Digital Studio Workstation
~~£1499~~ £CALL
64 Virtual track digital recorder

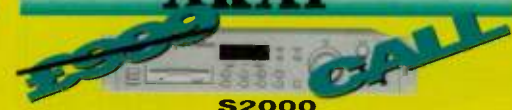
ROLAND PMA5 PIANO MODULE	£425
ROLAND A90 KEYBOARD	£1600
ROLAND XP10 KEYBOARD	£579
ROLAND XP50 WORKSTATION	£1279
ROLAND JV1080 MODULE	£979
ROLAND XP80 WORKSTATION	£CALL
ROLAND SC88 VLCANVAS	£639
A33 MOTHER KEYBOARD	£355
MVSI VINTAGE MODULE	£425
M-GS 64 GS MODULE	£625
M-SE1 STRINGS MODULE	£425
M-OC1 ORCHESTRA MODULE	£425
M-DC1 DANCE MODULE	£425
DANCE, 60's & 70's, World, Vintage Boards	£215

YAMAHA NOW AT MARKS

NEW SU10 Micro Sampler	£299
NEW QS300	£1199
MU5	£239
MU50	£429
MU80	£739
RY8	£239
MDF II	£319
New CS1X Synth	£599

CALL FOR OPENING OFFERS

AKAI



S2000
16 bit, 2 meg, highly expandable using simms. Output expansion boards, F/X boards + free mac editing software.

AKAI S3000 XL Sampler ~~£1799~~	CALL
AKAI S3200 XL Sampler ~~£3499~~	CALL
AKAI DR8 HARD DISK RECORDER + 1Gig HD	£2899

For hard drive & memory expansions, chat to our hard disk recording expert Matthew

AKAI U40 Rif-O-Matic	£139
AKAI Remix 16	£749
AKAI SG01V 256 Vintage Sounds Module	£299
AKAI SG01P Piano Sounds Module	£299
AKAI SG01K GM Sound Module	£299
AKAI DR4 HARD DISK RECORDER	Special £949

CALL FOR NEW DR16 PRICE

New at Marks: a Hi-Tech studio. Come and hear the equipment demonstrated the way it should be, in the studio environment. For expert guidance on Hi-Tech and Pro Audio ask for Matt

SECONDS OUT

ROLAND JUNO 2	£249
ROLAND MT32	£79
TASCAM 464 as new	£450
ALESIS 3630	£175
ALESIS RA100 power amp	£199
MESABOOGIE studio pre amp	£289
ROLAND TD7 Drum Machine	£399
ROLAND Juno 6 Synth	£279
CELESTION SRI Ref Monitor	£115
JL COOPER PPS 100	£225
BOSS BL1 Bulk Librarian	£125
ROLAND MKS 100 Sampler	£199
AHB 8/2 Keys rack mixer	£249
Roland U20 Keyboard	£499
Pioneer CDJ 500 CD Turntable	£499
Yamaha CX5M Music Computer	£50
Fostex 812 Mixer	£899

MARKS

WITH THREE STORES ACROSS EAST ANGLIA
NEXT DAY DELIVERY
WE BUY FOR CASH

City Link

CARD **CREDIT CARDS**
We accept all major credit cards.
INSTANT DESPATCH

BANKERS DRAFTS – INSTANT DESPATCH
PERSONAL CHEQUES – 5 DAY CLEARANCE
CHEQUES

6-8 ST NICHOLAS STREET • IPSWICH • SUFFOLK • IP1 1TJ
27 KING STREET • CAMBRIDGE • CAMBRIDGESHIRE • CB1 1LH

ZOOM BOSS BEHRINGER AKG Steinberg FATAR CARLSBRO E-MU
SHURE ART lexicon Marshall novation beyerdynamic DigiTech SENNHEISER

X MUSIC

X-TRA TE

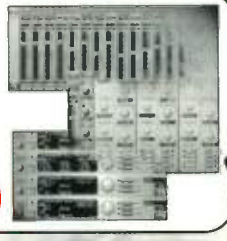
OUT OF THIS WORLD

CAPTAIN SLOG REPORTS - STAR DATE JULY 1996 X-MUSIC, HI-TECH IN ALLEGIANCE WITH THEIR MOTHER SHIP RICHER SOUNDS

PHASERS ON STUNN

And you will be stunned by the new range software from Steinberg.

VST VIRTUAL STUDIO IF YOU HAVE A MAC YOU WILL BE AMAZED AT WHAT STEINBERG HAVE CREATED **£329**



EVENING SUPPLIER ROADSHOWS PHONE FOR DETAILS

STRANGE ALIEN CREATURE WEARING A VEST.

GALACTIC DEALS £209

ALESIS 3630

Tapes

That's VX90 RRP £2.29 **79p**

TDK AR90 **89p**

TDK SA90 **£1.19**

KORG PROPHECY

RRP £999

X-PRICE

£ COSMIC

•ONE LISTEN AND YOUR HOOKED! •ANALOGUE, UHM, PHYSICAL MODELLING MONOPHONIC SYNTH

X-demo

ALL WITH FULL WARRANTY BOXED AND MANUALS

EMU MORPHEUS

EMU CLASSIC KEYS, EMU VINTAGE KEYS PLUS

ROLAND MODULES

ALESIS ADAT XT

LIMITED NUMBER DON'T MISS OUT

KORG TRINITY

RRP £999

X-PRICE

£ JUPITER

•24 MEG OF HUGE SOUNDS •MUTIMODE RESONANT FILTERS •TOUCH SCREEN FOR EASE OF PROGRAMMING

won a sampler

well done to everybody who took part!

1st prize - Roland MS-1 Jason Pegg from Brighton

2nd prize - £10 credit Nathan Huges from Bristol

3rd prize - A wet paddle on the back Stephen Withrington

See X-FILES or S.O.S for new competition to win the new Soundcraft Absolute Zeros

a pair for a pair

YAMAHA QS-300

RRP £1199

X-PRICE

£ MOON

•16 TRACK SEQUENCER • SMOOTH FILTERS •PROGRAMMABLE PATTERNS •INCREDIBLY VERSATILE

ONE OF THE BEST DANCE MUSIC WORKSTATIONS ON THE PLANET!

ALESIS QS6

X-PRICE

£ ORION

RRP £849 •64 NOTE POLYPHONY •INCREDIBLE VOICES •MUST BE PLAYED! •UPGRADABLE

SECONDHAND SPOCK

JUNO 2	£399	EMAX	£499
DYNAMIX 8:2	£199	EMAX K/BOARD	£329
CASIO C2-1	£220	EPS16 + 100 DISKS	£729
BREAKTHROUGH SOFTWARE	£99	KORG GR-1 REVERB	£89
NADY 101 VHF WITH SM58 HEAD	£199	TASCAM PORTA 01	£199
TASCAM PORTA 05	£199	ART FXR	£129
ROLAND R8	£349	ROLAND JUPITER 4	£239
FOSTEX R8	£649	EMU PROCUSION	£279
		SYSTEM 12 DMP II MONITORS	£949

E-MU ESI-32

RRP £1199

•32 NOTE POLYPHONY •TIME STRETCH /COMPRESS •VERY EASY TO USE

X-PRICE **£ COMET**

FULL RANGE OF FOSTEX, TASCAM, BEHRINGER IN STOCK
FULL RANGE OF MONITORS-ALESIS, TANNOY, AND SPIRIT

IN THE SMOKE

OUR LONDON BRANCH,
258A FULHAM RD, CHELSEA,
LONDON, SW10 9EL.
TEL: 0171 349 9444
FAX: 0171 352 4002

WE BUY AND SELL

2ND

PART EXCHANGE DEALS ORGANISED, PHONE FOR DETAILS

NEW ENSONIQ ASR-10 £909 ONE ONLY

X-FILES

RING FOR ONE

MAGAZINE - FREE: PRODUCT INFO, TECHNO TIPS, BASS STATION TRICKS, CYCLIST OF THE MONTH, POETS CORNER, COMPETITIONS & MORE.

RRESTRIAL PRODUCTS AND PRICES

SPECIALISTS X-PANDING QUICKER THAN A SHOOTING STAR - BRITAIN'S MOST POWERFUL RACE OF HI-FI RETAILERS

X MUSIC

THESE STAR DANCE PRODUCTS WILL DEFINITELY MAKE YOU GET OFF URANUS

Roland groovebox MC303

NEW

THIS PRODUCT BLEW US AWAY IN FRANKFURT - MOVE SOME MOUNTAINS AND ORDER ONE NOW. THE ULTIMATE DANCE TOOL!

- 909, 808, AND 303 IN ONE BOX!
- FULLY MIDI, REALTIME CONTROL
- 24 VOICE, EFFECTS, 8 TRACK SEQUENCER

X DANCE

X-PRICE **£559**

YAMAHA CS-1 NEW

NOW IN SPOCK

X-PRICE **£599**

X DANCE

- REAL TIME CONTROL SYNTH
- 480 NORMAL VOICES
- 32 NOTE
- 16 PART
- ARPEGGIATOR

novation DRUM STATION

NOW IN SPOCK

NEW

DRUM STATION • 808/909 KITS • FULLY EDITABLE

X-PRICE **£449**

X DANCE

E-MU ORBIT

NOW IN SPOCK NEW

X DANCE

X-PRICE **£STAR**

RRP £869

The ORBIT HAS LANDED, BLASTING it's way to the forefront of Dance Music with over 600 cutting edge samples and EMU's unique programmable 'beats'. Drum Loops that can be manipulated and tempo changed, 32 voice polyphony, 16 part with 32 6-pole, resonant filters and more - come in and be Orbited!

X-PANSION PLANS

A SMALL STEP FOR X-MUSIC, A HUGE STEP FOR MANKIND

Due to incredible response X-Music will soon be in a town/city near you. If you live in or around the following areas, have good knowledge of midi and recording, and have a high warp-factor humour - send your C.V. to our personnel department at our Bristol branch.

- NEWCASTLE
- BELFAST
- BIRMINGHAM
- BRIGHTON
- MANCHESTER
- DUBLIN
- LIVERPOOL
- LEEDS
- SATURN

COSMIC DEAL X-CLUSIVE

X DANCE

WAS £429 EXCLUSIVE **£279**

Roland MS-1

•digital stereo sampler •up to 4 note polyphony •upgradeable to 20 Mb •free sample cd •onboard sequencer •cheapest sampler ever

NEW

Roland THE EARTH SHATTERING

RRP £1799

76 NOTE XP-80 WILL MAKE YOUR SAUCERS FLY YOU MUST HEAR IT - POP IN OR ASK FOR A FREE TAPE

RECORDING BUT NOT AS WE KNOW IT JIM

Roland VS-880

- 8 TRACK DIGITAL DESK/RECORDER
- 64 VIRTUAL TRACKS
- FX CARD (V.POWERFUL)
- INTERNAL HD OPTION

£RED DWARF

RRP £1499 RING FOR PACKAGE

TASCAM TASCAM TASCAM

DA-20 £SATURN

PORTA 03 PORTA 07 £STAR £PLUTO

NEWCASTLE BRANCH OPENING IN JULY
RING BRISTOL STORE FOR DETAILS

THE AIR WAS STILL, THE BIRDS WERE SILENT AND THEN THE CREATURE APPEARED - YES IT WAS OUR YAMAHA RER

MAIL ORDER - JUST CALL EITHER OF OUR BRANCHES FOR WHATEVER YOU REQUIRE, MAILED OVERNIGHT. QUICKER THAN A PORSCHE ON A GLACIER.

X DANCE. AS MARKED ABOVE, WE CAN RECOMMEND THE EQUIPMENT YOU NEED FOR THE DANCE MUSIC INDUSTRY. PHONE, OR COME IN FOR A COFFEE AND A CHAT.

OUR BRISTOL BRANCH,
20 COTHAM HILL,
COTHAM, BRISTOL, BS6 6LF.
TEL: 01179 734 734
FAX: 01179 734 800

IN THE STICKS

Sample shop

Our regular look at the hottest new sample CDs and CD-ROMs.

X-STATIC GOLDMINE 3

(AUDIO CD & AKAI-FORMAT CD-ROM)

The loops that open this collection of 1500 house and techno samples are ex-vinyl, mono, 2-bar and absolutely filthy. However, as we know, grunge can be a positive production element, particularly when overlaid with pristine 16-bit samples.

First, a word about the format on the Audio CD reviewed here: the 24 loops on each track from 2-16 are tempo-matched within each track, and tracks are presented in semitone intervals. What does this mean? Any loop can quickly be made to fit tempo-wise with any other simply by using coarse tune on your sampler. A neat trick, and not the first time I've seen it in a *Goldmine* product.

This is meant to be a potted past and present history of house and techno, so some retro (ie. tired old favourite) loops are bound to appear. Trouble is they *keep on* appearing in various guises and tempos — a percussion overlay here, programmed drums there, foreground or background, each source loop gets a multitude of airings. No wonder they found it easy to tempo- and fee'-match 24 loops per track!

The tempo rises as you continue through the CD, and as the loops get faster, so the fidelity gradually seems to improve (maybe we're just hearing sample playback at a higher tempo), and the patterns become more interesting and more current, though still workhorse rather than thoroughbred. Nice Roland rimwork on track 9, by the way.

Onwards and upwards, the loops get ever more frenetic. By track 13 we're into 'Put the needle on the record' territory. Then come three tracks of 24 jungle loops, each at 150-168 bpm. These are not the fast-but-cool, immaculately-produced patterns recently in vogue, but once again grungy, high-NRG types.

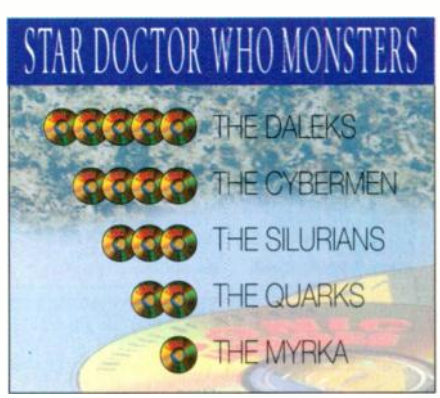
All 48 synthesizer "vintage sequences" and "hooks" on the CD are either at 126 or 141.5bpm, and are key-matched to A or E, like just about all the melodic samples on this CD. I reckon these are originals; they're certainly not lifted off vinyl, anyway — too clean. They're cheeky without being too cheesy, and curiously, they all sound as if they came from two or three compositions. If you were writing sequences specially for a sample CD, wouldn't you want them all to be completely different? I'm beginning to get the idea that much *X-Static Goldmine 3* loop material has been edited and mixed from in-house multitrack recording sessions...

A goodish selection of bass tones leads into a rewarding bright piano chord set. I mapped some of these onto a keyboard and had some fun. Some organ chords follow, then it's onto the big ones — stereo and mono chord pads and hits. The lush stereo is obviously simulated, via a chorus program. (I'd rather sample in mono and apply my own effects.) Still, the sources are very tasty, very chilly, and very classic. In fact the chord tones and hits section covers hundreds of samples, and is by far the richest vein in *Goldmine 3*. Sounds are strong in character, with fidelity pitched about right for the genre. There are warm pads, lush eerie drones, metallic and brassy hits, organ stabs — you name it, it's here. All samples seem to have been tweaked with EQ and compression to maximise impact. (The majority are probably from vinyl anyway, which usually adds a little something in addition to groove noise.) The runs and sustained tones that follow are classics too, including the great muted trumpet.

The special effects are appropriately chosen and edited, being short and rude, rather than filmic. Drums, which are chunky rather than clean, are offered as kit sets of 12 mono samples, then tracks containing "favourite 12 kicks" or "24 deep and phat bass drums", for example, complete the CD. The exception is track 99 — "Test Tone 1kHz". For once, I decided to check out the usefulness of this feature: I sampled the tone at 0dB digitally into my S770. The sample sounded and looked absolutely clean. Nonetheless, some samples I'd already taken from the CD showed clipping on transients when taken at unity gain. I had to resort to the digital attenuation option on my sampler (-3dB seemed to fix it in most cases). So much for relying on the test tone to set sampling level!

X-Static Goldmine products never stint on quantity, and this CD is no exception. It contains much well chosen, in-your-face dance material, especially the tones, chords and runs, which you would be well advised not to be without. Where I feel the CD is lacking is with the loops — these seem to have been duplicated many times with various programmed overlays. Some of the engineering is also perhaps a little too rough and ready. Still, loops apart, this is a collection with plenty of attitude which should not disappoint house and techno enthusiasts. Incidentally, this disc is now also available as a CD-ROM, and the whole *X-Static* range on CD-ROM is currently going for £99 per CD-ROM, so it might be worth considering the ROM if you're interested. *Wilf Smarties*

£ CD £59.95; CD-ROM £99 inc VAT and UK p&p.



DIGITAL KITCHEN'S MIND CONTROL

AUDIO 3-CD SET

The skulls on these CDs give you some idea of what to expect from this bunch of Euro-weirdos: those seeking the dance sample equivalent of the Hieronymous Bosch painting entitled 'Garden of Earthly Delights' need look no further.

This set of three CDs is devoted entirely to industrial rhythmic grooves and sound effects. The first two discs are based around hard-edged and aggressive grooves. All bpms are dutifully recorded in the sleeve notes, and some of the rhythm sections are usefully long, containing evolving or changing patterns. Extensive use has been made of distortion and resonators to twist the original drum and percussion sounds to the edge of recognition, and the outcome is a surreal metallic landscape of sound. Many of the heavily featured drones sound like the beating of bomber engines, or Darth Vader slicing up Luke Skywalker in a striplight fight, but they're very ▶

FOLIO Notepad

IT'S NOT THE SIZE
IT'S WHAT YOU CAN DO WITH IT

Folio Notepad is small but surprisingly versatile. Musicians, sound engineers, multimedia users, DJs and many others will find plenty of uses for Notepad at live venues, in studios, bars, schools, places of worship and even "on location". Notepad's use of high quality components and short signal path mean it sounds cleaner than many large "professional" consoles.

Here are some of the uses you could put Notepad to.

£199 UK RRP

THE FACTS

Folio Notepad is a compact DAT-quality 10 input stereo mixer that is flexible enough to be used in a wide variety of applications, either as the main mixer in small configurations or as a submixer in larger setups.

Unlike many small mixers, Notepad is no toy. It incorporates tried and trusted circuit designs and components used on our flagship mixing desks.

Notepad packs many of the features normally reserved for larger consoles: 4 mono mic/line inputs with high quality preamps, 48V phantom power and 2-band EQ: 2 stereo inputs with switchable RIAA allowing direct connection of turntables; post-fade effects send and stereo return; separate Mix and Monitor outputs...and much more.

At Spirit, sound quality is paramount and Notepad is no exception. But don't just listen to us – visit your Spirit dealer, listen to Notepad and judge for yourself.

SPIRIT
By Soundcraft
H A Harman International Company

http://www.spirit-by-soundcraft.co.uk

Please send me more information on Folio Notepad

Name: .....

Address: .....

.....

.....

What will you use Notepad for?

.....

.....

What magazines do you read? .....

.....

.....

Please send me a FREE copy of the Folio Applications Guide written by pro-audio journalist Paul White on how to get the best from your mixer ☐

Spirit by Soundcraft™,
Harman International Industries Ltd.,
Cranborne House, Cranborne Industrial Estate,
Cranborne Rd. Potters Bar, Herts EN6 3JN, England.
Tel: +44 (0)1707 665000. Fax: +44 (0)1707 665461.

powerful and fit in perfectly.

Disc three is where you find the sound effects, and again, distortion and filtering are applied by the bucketload. The disc ends with a long selection of individual percussion samples in the same general style as the preceding material. Most of the effects are best suited to industrial dance and soundtrack work, and the majority are about as restful as a trip to the dentist. There's filtered feedback, flanged synth 'thwips', security alarms, mechanoid pulsating drones, flanged circular saws, tortured ring-modulated noises, and a selection of nasty atmospheres which should delight any sci-fi producer. All this adds up to a bleak, dark, other-wordly collection which bears about as much resemblance to your average dance groove CD as the creatures from *Aliens* do to the Andrex puppy. You may love it, you may hate it, but you can't remain indifferent. I feel I have to give it four out of five for its persistent nastiness, which doesn't let up through all three discs. Cyber-hell on a stick! *Paul White*

£ Audio 3 CD set £99 inc VAT and UK p&p.

SYNCLAVIER SAMPLER LIBRARY

AKAI-FORMAT CD-ROM

The name of Synclavier is synonymous with serious sampling. Over the years, the company built up an enormous library of samples, some of which have found their way into major film soundtracks and record releases. Now the US sample company ILIO is marketing a five-disc CD-ROM library based on this collection and known as the *Synclavier Sampler Library*.

Available individually, the discs are categorised as *Keys and Guitars*, *Brass and Winds*, *Strings*, and two percussion discs: *Essential Percussion* and *World and Orchestral Percussion*. The samples themselves range from massive piano sets that require a fully stuffed sampler to use, right down to floppy-sized samples of 1Mb or less. The quality of the sounds is, on the whole, consistently good, with some of the solo instruments really shining.

Keys and Guitars provides an eclectic set of pianos, guitars, harpsichords, and even a Chapman stick, alongside a number of analogue synth sounds. The pianos and guitars are nicely sampled and include some useful distorted guitar sounds, while the synth section is exceptionally well-stocked, if not exactly ground-breakingly original.

Brass and Winds concentrates mainly on orchestral wind, presented in a variety of playing styles. Though ethnic instruments make a token appearance, this section is very short, comprising only pan pipes, whistles, a wooden flute, and a didgeridoo. A huge range of orchestral playing styles is included, making it possible to programme very realistic orchestral arrangements.

Like the wind selection, the *Strings* disc is almost entirely comprised of orchestral samples, including both solo and ensemble instruments. There are some lovely harp arpeggios and numerous excellent solo instruments, including the notoriously difficult to capture violin. However, I felt some of the ensemble string sounds were below par, because of the amount of bow noise, which gave them a noisy, almost 'fluffy' character. While accepting that bow noise is an integral part of natural strings, I have heard much cleaner-sounding string samples that sacrifice nothing in the way of realism. The disc concludes with a few choral examples and string combinations.

Essential Percussion concerns itself with the traditional drum kit, along with a few bass sounds. The majority of the contents are broken down into separate drum types rather than complete kits. The drums are beautifully sampled, with plenty of dynamics, and keyboard mapping to provide access to alternate samples on a number of occasions. This enables you to create your own drum kits using any of the available sounds, though the non-GM mapping (GM mapping would be impossible because of the number of multi-key sample variations) means that you may have a little shuffling around to do in order to get things exactly where you'd like them. For those with less inclination to build their own kits, the disc rounds off with a handful of ready-constructed kits.

The final disc offers *World and Orchestral Percussion*, which is divided into Latin, Shakers and Rattles, South American, Far East, and Miscellaneous, plus Orchestral Percussion. Contents are of a very high standard, especially the vast array of orchestral percussion, but again I felt this was a very 'safe' collection of sounds, with no African or Indian drums.

To summarise, I love the drum samples, and some of the individual orchestral samples are stunning, but the collection isn't totally without flaws. While there are few samples that could be called technically bad (the looping is first-class throughout), there are one or two lacklustre examples, and those seeking world sounds will find only a limited selection here. Where the collection really scores is in its thorough treatment of orchestral sounds and styles. Most of the samples are also surprisingly memory-efficient, which means that you can make more use of the multitimbrality of your sampler when creating orchestral arrangements. *Paul White*

£ All CD-ROMs in series £169 except the two percussion ROMs, which are £129 each. Prices include VAT and UK p&p.

FLAMENCO SOUNDS

AUDIO CD

The title says it all, really. Time & Space have come up with a collection of samples that give you all the building blocks you need to add either a hint of Flamenco to an existing track, or construct your own Spanish-style dance-floor smash.

The main instrument in Flamenco music is, of course, the guitar, and the first 40 of the 99 tracks are given over entirely to the sounds of the nylon acoustic. Strums (complete with wonderful fretboard taps) are presented in a number of tempos and keys. There are also arpeggios, strums, runs, and chord hits, all of which ooze authenticity and feeling, and the intelligent mapping of key signatures and bpms mean that they lend themselves to sampling more easily than you might expect.

The next section takes male Cantaor and female Cantaora vocalists and fills 16 tracks with about 80 sung Spanish phrases. These range from simple phrases like 'Ay Ay Ay' to complex and unusual long melodic phrases that sample like a dream. The quality of the recording is excellent throughout, and gives you lots of room to add your own ambience or other effects, should you want to.

After the solo vocals, there's a small section of group shouts, speech and singing. This is not nearly as inspiring as the solo stuff (the group sound as though they may have had a little too much sangria whilst waiting to record), but they're good fun and useful all the same. The 'Cajon' drumming is, again, utterly traditional and authentic, but a little harder to pin down into any specific category of usefulness — unlike the foot tapping, stamping and castanets which makes up the last three sections of this CD. These worked brilliantly against a number of rhythm tracks I tried, and all are listed with their appropriate bpms.

Time & Space can congratulate themselves on a job well done. This CD brings the feel and spirit of true flamenco music into the realm of sampling. Many would argue that this type of music doesn't lend itself to such a hi-tech approach, but as the demo on track 1 shows, if you have an open mind to fusing these samples with other, more modern music forms, there are a number of exciting possibilities just waiting to be discovered. *Flamenco Sounds* is an unusual addition to the CD rack, but a well-constructed and inspiring addition all the same. *Paul Farrer*

£ Audio CD £59.95 inc VAT and UK p&p.

A All this month's sample CDs are available from:
Time & Space, PO Box 306,
Berkhamsted, Herts, HP4 3EP.
T 01442 870681.
F 01442 877266.
E sales@timespace.com

SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373

SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373 SOUND BUSINESS 0181 559 0373

EAST LONDON AND ESSEX'S TOP RECORDING EQUIPMENT CENTRE
NEW AND SECONDHAND
SOUND BUSINESS
Recording equipment sales. Your one stop studio centre

Soundscape

Powerful PC based hard disk recorder
- 8 Tracks upwards
- Real time digital EQ
- Digital Mixing
- Locks to any sequencer using the same PC

PC

PC Computer system for sequencing and hard disk recording + multitasking
The way of the future (NOW!)
Please call for prices & info

ALL THE LATEST KEYBOARDS AND SOUND MODULES FROM:

EMU
AKAI
ROLAND
YAMAHA
ENSONIQ
GENERAL MUSIC
KORG, FATAR

London / Essex
Top Analogue Multitrack Centre
New/Secondhand 8/32 Tracks

Give us a call to check your requirements.
Great Deals!

NEW & EX DEMO + SECONDHAND BARGAINS

Allen & Heath GS3V 24 with automation 56 inputs on mix (Very, Very Special) ....PHONE
Alesis Monitor Ones (Studio N/F Monitor).....Special PHONE
Alesis RA100 Monitor Amp .....Special PHONE
XRI Systems XR300 SYMPTE Synchroniser ...£225
Mackie 16:8 recording colsole (ex Demo) £2250
Soundtracks Topaz MkII(new) .....PHONE
Neuman U87 (R=1950.00). The Best £1595.00
Alesis ADAT XT (New).....PHONE
Alesis BRC Controller £1050.00
MIDIman MM401 MIDI interface for PC .£65
Denon full range of CD Players, Cassette Machines, Amplifiers etc.....PHONE
Tascam DA88.....£3200.00
Alesis ADAT 8 track (Digital) Mint Condition.....£1650
Fostex G24S 24 Track 1" £3950
Various Secondhand Mics.....PHONE
Fostex E16 - 16 track 1/2 Recorder.....£1600
Fostex B16 16 track 1/2" recorder.....£1400
Revox B77 High Speed 2 track master Recorder.....£650
Fostex R8 8 TRack as new (new head just fitted) Bargain.....£900
Tascam TSR8 8 Track 1/2" Mint Condition as new.....£1350
Plus - Much - Much - More. - Please Phone.

The fabulous Fostex D80 8 Track Hard Disk Recorder

NOW IN STOCK

Finally, someone has developed an expandable IDE based digital removable hard disk system which offers up to 30 minutes of true multitrack recording, non destructive 'cut, copy, move & paste' editing, instant locate and search, five 'virtual reels', digital and analogue inputs/outputs along with a full function auto locating remote control. And all in a package which is as easy to use as your tape machine and costs no more than £1499 inc VAT. Naturally, that someone is Fostex.

MACKIE.

Simply The Best
Call for prices and deals!

Rode NT2
Large Diaphragm Condenser Microphone
The Business
at a budget price of
£495.
Complete with carry case and suspension.

MIXING CONSOLES
MACKIE
SOUNDTRACKS
ALLEN & HEATH
SOUNDCRAFT
TASCAM
FOSTEX
SAMSON
STUDIOMASTER

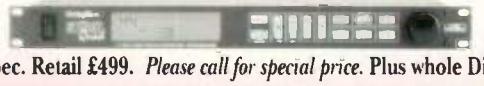
DAT RECORDERS
TASCAM DA20
Tascam DAP1 (Portable)
TASCAM DA30 MkII
TASCAM DA60
FOSTEX D10
FOSTEX D20 B
FOSTEX D5
PANASONIC SV3800

WE ARE MAIN SUPPLIERS FOR:
TASCAM ■ FOSTEX ■ SONY ■ YAMAHA ■ REVOX ■ DENON ■ AIWA ■ SOUNDCRAFT ■ OTARI ■ STUDER ■ SOUNDTRACS ■ ALLEN & HEATH ■ STUDIOMASTER ■ DRAWMER ■ ALESIS ■ LEXICON ■ XRI SYSTEMS ■ SYMETRIX ■ BEL ■ ART ■ ARX-SYSTEMS ■ APHEX ■ TANNOY ■ JBL ■ QUESTED ■ AKG ■ NEUMANN ■ AUDIO TECHNICA ■ SENNHEISER ■ ROLAND ■ KORG ■ AKAI ■ C-LAB ■ STEINBERG ■ OMNI PHONICS ■ AUDIO MANAGEMENT ■ ATARI ■ DIGIDESIGN ■ KLARK TEKNIK ■ STAND EASY ■ PANASONIC ■ SOUNDSCAPE ■ BBE-DIGITECH ■ BERHINGER ■ GENELEC ■ MANLEY MIKES ■ GENERAL MUSIC ■ MACKIE ■ MICROTECH ■ GEFFEL ■
PLUS MUCH MORE ..

AKG - STOP PRESS - AKG
Fantastic deals on
AKG C3000
large diaphragm
Top Quality Vocal Mic
Retail = £530
Our Price = £275

NEW RELEASE
TASCAM DA20
DAT RECORDER
Fantastic Spec. Records at 48 & 44.1 kHz
IN STOCK NOW
Retail = £799
Special Deal Price
£PHONE

Fantastic New Digitech Studio Quad
4 X Independent multi effect units in one.



Very high spec. Retail £499. Please call for special price. Plus whole Digitech range

NEW ALESIS ADAT XT
Even Higher Specification

STAR BUY
All prices available on application . Call Now!
Fantastic New Spec Sound Business Call Now !

STOP PRESS NEW RELEASE STOP PRESS
fostex DMT-8
A REMARKABLE SYSTEM NOW COMPLETED.
TOP CD QUALITY
fostex D-80

LINK

The Fabulous new fostex DMT-8
8 Track portable hard disk recorder, features to blow your mind.
Please call for details

True Multitrack Recording,
CD Quality Recording and Playback,
Removable front panel remote,
Unique virtual reels, Cut, Copy, Paste & Remove Editing,
8, 16 or 24 Tracks, Analogue & Digital I/O,
Flexable locate functions

WELCOME TO THE 21ST CENTURY. MAKE MUSIC AND BE HAPPY

SOUND BUSINESS STUDIO SALES
Sound Business House, (Near Woodford Central Line Station) Woodford Green
Telephone: 0181-559 0373
Fax: 0181-559 0444
Mobile: 0860-188388
United in and dedicated to the pursuit of musical excellence

OPEN SEVEN DAYS 9am to 9pm
MAIL ORDER SPECIALIST UK/EUROPE/THE WORLD

Starts Saturday 29th June 9.30am

Everything Must Go! Great Savings on all ex-showroom display and secondhand stocks!

Carlsbro Mail Order 0345 697037

LEEDS 0113 240 5077

- Casio CTK750 Keyboard ... £379
- Technics KN1000 Keyboard ... £959
- Ensoniq ASR10 Sampling Workstation ... £1899
- Akai S2800 Sampler ... £1099
- Yamaha SY35 Synthesizer ... £399
- Denon DRS640 Cassette Deck ... £169
- Roland SRJV8001 "Pop" Expansion ... £199
- Roland VE-JV1 Expansion Board ... £134
- Korg WPC12 Wavestation Card ... £29.99
- Roland SNV01 Rhodes Card ... £21.99
- Roland SVJV8004 "Vintage" Expansion ... £199
- Roland SRJV8008 "60's/70's" Expansion ... £199
- Akai EXM8002 Sample Expansion Card ... £99
- Yamaha PSR420 Keyboard ... £269
- Yamaha PSR6700 Keyboard (used) ... £989

LEICESTER 0116 262 4183

- Kawai R50 Drum Machine (used) ... £89
- Boss DR5 Drum / Guitar Machine (used) £199
- Yamaha YPS20 Keyboard (used) ... £199
- Technics KN800 Keyboard (used) ... £349
- Yamaha PSS795 Keyboard (used) ... £149
- Korg X5DR 64 note polyphonic Sound Module (used) ... £399
- Waldorf Microwave Module (awesome) ... £699
- Boss DS330 Dr. Synth Module (used) ... £249
- Boss DS330 Dr. Synth Module ... £299
- Roland S760 16 bit Sampler ... £1099
- Roland JS30 Sampler ... £399
- Roland E12 Synthesizer ... £299
- Fatar Studio 2001 Mother Keyboard ... £899
- Akai S01 16 bit Sampler ... £499
- Emu ESi32 Stereo Sampler (ex demo) ... £899
- Yamaha MU80 Synth Module ... 499

MANSFIELD 01623 651633

- Roland SC50 Sound Canvas ... £299
- Yamaha TX81Z Sound Module (used) ... £129
- Yamaha MT8X 8 trk Cassette Multitracker £799
- Emu ESi - 32 SamplerSCSi (one only) ... £1099
- Akai DR4d + Drive + Midi Interface ... £999
- DBX 266 Compressor ... £199
- Symetrix 488 Dynasqueeze ... £399
- Digidesign Audio Media 2 (Mac) ... £395
- Roland A30 Mother Keyboard ... £349
- Yamaha MU5 Sound Module ... £199
- Roland TR505 Drum Machine (used) ... £49
- Sony SE86 Monitors (pair) ... £79
- Digitech TSR24 S - Disc Processor ... £399
- Phonic Digital Delay (used) ... £69
- Yamaha NS10 Studio Monitors ... £279
- Casio VZ8M Sound Module (used) ... £79
- Alesis HR16B Drum Machine (used) ... £79
- Beyer Dynamic IRS790 Infra - red Headphones including base unit ... £49
- Behringer Autocom MDX1000 ... £159
- Digidesign Sample Cell 2 (Mac) ... £395
- Atari Falcon 030 inc 4 Track H/D Recording Software ... £349
- Peavey Analogue Filter ... £199

NORWICH ACADEMY OF SOUND 01603 666891

- Peavey Spectrum Bass Module (used) ... £249
- Roland MT32 L.A. Synth Module (used) ... £95
- Roland E86 Intelligent Synth (used) ... £749
- Roland E96 Intelligent Synth ... £1099
- Viscount RD800 Data Filer ... £349
- Yamaha QY8 Module / Sequencer ... £149
- Alesis Quadraverb 2 Multi Effects ... £499
- Aphex 104C2 Big Bottom™ ... £229
- Yamaha FX770 Multi Effects ... £249
- Studiomaster Mixdown Classic 24 ... £1699
- Roland RC3 Midi Remote Controller (used) £19
- Ultimate Support 2 Tier Stand ... £69
- Peavey Spectrum Analogue Filter ... £249
- Emu CLassic Keys Module ... £499
- Kurzweil KMP1 Piano Module (superb) ... £349
- Roland E12 Synthesizer ... £349
- C Lab Falcon 2 + Steinberg Cubase Audio Package ... £2299
- Octava MKO11 Condensor Mic ... £95
- Yamaha TG500 64 note Synth Module ... £399

NOTTINGHAM 0115 958 1888

- Korg 01/W Pro X (88 note weighted keys) Workstation ... £1599
- Roland D70 L.A. Synth (76 note) ... £799
- Roland W30 12bit Sampling Workstation (used) ... £599
- Casio FZ1 Sampling Keyboard (used) ... £599
- Akai S1100 Sampler (32Mb RAM + Digital I/O interface) ... £1699
- Yamaha DX7 "Classic" Keyboard ... £199
- Akai S01 Sampler (used) ... £449
- Kawai K4R 16 Voice Synth Module ... £249
- Emu Proteus Synth Module ... £249
- Emu Vintage Keys Plus ... £599
- Ensoniq EPS16+ Sampler (used) ... £899
- Kurzweil K2000R Synth Module ... £1599
- Yamaha EMQ1 Module ... £99
- Yamaha TQ5 Module / Sequencer ... £59
- Korg P3 Piano Module ... £79
- Roalnd TR505 Drum Machine (used) ... £99
- Digitech TSR24 Multi Effects ... £449
- Yamaha REV100 Reverb ... £199
- Yamaha TG55 Synth Module ... £275
- Evolution EVS1 Synth Module (used) ... £99

SHEFFIELD 0114 264 0000

- Roland JS30 Sampler ... £399
- Roland RA30 Realtime Arranger ... £329
- Roland G800 64 note Intelligent Keyboard ... £1399
- Roland FP1 Piano ... £1099
- Viscount D9E Drawbar Organ Module ... £275
- Kurzweil K2000 Synthesizer ... £1799
- Yamaha MDF2 Data Filer ... £299
- Yamaha SY35 Synthesizer ... £399
- Yamaha QX7 Sequencer (used) ... £45
- Fostex X15 4 trk Recorder (used) ... £99
- Akai DR4d Hard Disk recorder inc. Drive ... £999
- Allen and Heath Gs1 Desk inc. Meter Bridge ... £699
- Oberheim Matrix 6R Rack Synth (used) ... £449
- Lexicon Jamman ... £315
- Fostex 812 Mixing Desk (used) ... £549
- Roland U110 PCM Playback Module (used) ... £139

STOKE 01782 205100

- Casio FZ1 Sampling Keyboard (used) ... £599
- Yamaha SY35 Synthesizer ... £399
- Kawai K1 Synthesizer (used) ... £199
- Kawai K5M Synth Module (used) ... £149
- Yamaha TQ5 Module / Sequencer ... £59
- Gem WS1 Workstation (used) ... £349
- Alesis MMT8 8 Track Hardware Sequencer (used) ... £99
- Yamaha FB01 FM Module (used) ... £69
- Yamaha EMT1 Module ... £69
- Fostex 2016 16 Ch. Line Mixer (used) ... £199
- Yamaha PSRSQ16 Workstation (used) ... £599
- Yamaha MS20 Powered Monitors (pr) ... £59
- Spirit Folio Lyte Mixer (used) ... £199
- Seck 12.2 Mixer (used) ... £149
- Fostex 380s Dolby S 4 trk Multitrack Cassette Recorder (one only) ... £599

This is just a selection of our sale stock - please call us if you do not see the item you require!

Sale

Roland MDC1
Dance Board in a 1u Rack R.R.P. was £499 **£379**

Roland MVS1
Vintage Board in a 1u Rack R.R.P. was £499 **£349**

Roland MSE1
Orchestral Board in a 1u Rack R.R.P. was £499 **£379**

Sale

Roland MS1
Great user friendly expandable sampler which allows you to cost effectively sample drum loops, vocal fly-ins, guitar licks, sound effects and more!
R.R.P. was £449 • Last Ever..
£229.00

Sale

Lexicon Alex
Digital Multi Effects
R.R.P. Was £389
£299.00

Lexicon Reflex
Digital Multi Effects with advanced midi control
R.R.P. Was £469
£329.00

Sale

Yamaha QS300
32 voice Dance / Techno Workstation featuring Dance Groove patterns, 16 track sequencer, great sounds..
R.R.P. was £1199
£999.00

Yamaha MU5 Sound Modules R.R.P. £239 **£199**

Sale

Tascam 488mk2
Possibly the best specification and highest quality analogue 8 track cassette recorder available, the 488Mk2 portastudio combines good looks with great reliable performance.
R.R.P. was £1299
£899.00

Sale

Akai CD3000i+ Sampler
• 8Mb Sample RAM • Resonant Filters • 32 Note Polyphony • 8 Individual Outputs • CD ROM and Floppy Drives • 8 Sample CD ROMs inc. the official Akai S1000 / S1100 / S3000 sound libraries • Digital Effects • R.R.P. Was £2599

Exclusive Last Ever Batch!
£1799
SAVE £800 OFF R.R.P!

Sale

Roland MGS64
Very versatile General Midi Module featuring 32 part multi-timrality, 64 voice polyphony, multiple outputs
R.R.P. was £599
£479.00

Sale

Spirit Studio 16.8.2 Desk
Exceptional quality and outstanding value 4 bus recording desk. R.R.P. £1492
£1099

Sale

Roland SRJV8008
60's and 70's JV / XP Series Sound Expansion Board
R.R.P. was £255
£199

Sale

Technics WSAX1
64 VOICE VIRTUAL MODELLING WORKSTATION
• Huge Polyphony • Multiple Outputs • Twin Midi In/Out/Thru • Great Sounds...
R.R.P. was £2499
£1599.00

Sale

Steinberg Cubasis Audio
PC Sequencing / Digital recording Software
R.R.P. was £249
£179.00

Sale Ends Saturday August 3rd

Voted Best Music Shops Making Music Reader's Poll 1995

Carlsbro
WHAT MUSICIANS NEED

Why buy from us?

Confidence! BEST PRICE!
We will match any genuine written quotation for items held in stock.

Confidence! FAIL SAFE!
Loan of suitable gear in the event of your purchase from us requiring an under guarantee repair.

Confidence! EXCHANGE!
If you are not completely satisfied with your choice of item, we allow upto 14 days for you to exchange your goods (subject to condition of the item/s.)

Confidence! SECURITY!
We have been established for over 28 years in the music business!

3-4 York Towers. 383 York Road,
Leeds ✆ 0113 240 5077
22 Humberstone Road.
Leicester ✆ 0116 262 4183
182-184 Chesterfield Rd Nth.
Mansfield ✆ 01623 651633

ACADEMY OF SOUND

Carlsbro's Academy Of Sound
2 Sovereign Way. Anglia Square.
Norwich ✆ 01603 666891
11-13 Hockley.
Nottingham ✆ 0115 958 1888
720 - 724 City Road.
Sheffield ✆ 0114 264 0000
35-39 New Hall Street, Hanley.
Stoke on Trent ✆ 01782 205100

Finance Available - subject to status
Written quotations on request

We Accept: Cash

DIRECT MAIL ORDER SALES LINE
0345 697037
7 DAYS A WEEK
24 HOUR RESPONSE
All calls charged

PLEASE NOTE MAIL ORDER SWITCH TRANSACTIONS ACCEPTED BY MAIL ORDER SERVICE ONLY

Gary Numan

A NEW FLAME

Gary Numan's music epitomises the electro-pop era and undoubtedly helped boost synth sales in the early '80s. With the chart re-entry of his classic hit single 'Cars', Numan is approaching his third decade in pop. JONATHAN MILLER receives a lesson in the art of survival...

I'll never forget that fateful evening in May 1979 when I tuned into BBC1's *Top Of The Pops* and witnessed a strange, bleached blond, young man in unusual black attire performing an equally strange song. Tubeway Army's soon-to-be number one hit single 'Are 'Friends' Electric?' was quite unlike anything I'd ever heard before and arguably opened the floodgates for the early '80s wave of synthesizer-based acts to follow. Its sneering creator, Gary Numan, briefly became an icon for a generation of synthesizer fans.

The song in question's chart-topping parent album, *Replicas*, recently made it onto CD for the first time in its own right with fully restored artwork — prompting *Q* magazine to observe, "Songs like 'Me! I Disconnect From You', 'Down In The Park' and the vanguard monster hit 'Are 'Friends' Electric?' not only helped the ungrateful Human League and Depeche Mode into the charts, but also established Numan as a highly-skilled and intuitive pop musician." And deservedly so. In our age of commonplace six-figure production budgets and their attendant lengthy block-booking of state-of-the-art recording studios, it's hard to believe that *Replicas* was recorded on 16-track in just three days flat at Gooseberry Studios, in London's Chinatown, for a total cost of almost £500.

Despite now enjoying a hitherto unknown degree of rock acclaim amongst current chart bands — many of whom have covered his songs on record or stage, including Pulp, Beck, Hole, The Foo Fighters and Shampoo — it was a different story in 1979. Back then, Gary Numan was continually ridiculed by the press for no apparent reason other than being successful. Numan's record sales exceed a healthy 15 million units, whilst 1979's *The Touring Principle* — filmed during his first sell-out UK tour — was the first commercially available full-length music video, pipping Blondie to the post by a matter of weeks. Put simply, Gary was almost alone in seeing the opportunity for a 'star' of synthesizer-based music — a smart move, as evidenced by the string of hits to follow, with over 35 chart singles and more than 20 chart albums to date. By chalking up two number one albums and two number one singles in a three month period of 1979, Numan became the UK's fastest-rising star since The Beatles. So what went wrong?

FALLING STAR

In a nutshell, when Gary opted to 'retire' from the rigmarole of touring in 1981 with a series of visually spectacular, yet financially crippling, sell-out shows at London's Wembley Arena, he immediately alienated his substantial overseas following in the process. BBC Radio One subsequently refused to playlist his music from 1983 to the present day, corresponding with his departure from Beggars Banquet to set up his own independent label, Numa Records. To all intents and purposes, Gary's rapid decline from millionaire 'superstar' status began here. However, contrary to popular belief, with a fanatically loyal following and buoyant fan club boasting 3,500 members, Numan is still making records, touring, and rapidly approaching his 20th professional year in the pop industry.

At his home-based 24-track recording studio, Outland, I finally met Gary — a quiet-spoken, rather shy and reserved 38-year-old, quite unlike his flamboyant and occasionally menacing stage persona. Outland may seem a small studio for an artist of Gary Numan's stature, yet its ergonomic layout and use of natural daylight makes for a pleasant working environment, and perhaps goes some way towards explaining Gary's increased recorded output of late (more of which anon).

Setting up his own record label might be viewed as a way for Gary to attain greater control of his musical destiny, yet this was not the driving force behind the move: "At Beggars Banquet I just felt I was forever being promised things and not getting them. At one point a representative even said, 'We know we're guaranteed to sell 50,000 or 60,000 albums with you in this country and we're happy with that.' It wasn't a case of trying to make it bigger and build on it around the world. So when faced with that situation, you've got to move on, because it kind of indicates your relationship is pretty much finished.

"So that was the reason for setting up Numa — it wasn't so much for control. I thought, 'Hang on, if I'm selling that amount of albums, I'm going to be quids in if I have my own label.' But that soon turned to worms, because I didn't bank on getting no airplay."

STATE OF INDEPENDENCE

Back in 1986 Gary was still based in the infamous Shepperton film studio complex, at Rock City Studios, and in the process of expanding Numa Records as an independent concern with a roster of new artists, casting himself as producer. Unfortunately, things did not quite map out as ▶

ARE 'FRIENDS' ELECTRIC

Musical success generally involves a winning combination of talent, luck and, in the case of Gary Numan, fate. His entire career essentially rests on one pivotal song — 'Are 'Friends' Electric?' — yet his modest conclusion that "it's nothing clever" took me by surprise.

It's actually composed of two entirely separate songs — the spoken sections were initially part of an uncompleted ballad and later added to the basis of 'Friends' simply because Gary was stuck for ideas to finish the song. This — coupled with an amorous chance encounter with a Minimoog, left over from a previous session at Cambridge's Spaceward Studios whilst demoing guitar-based Tubeway Army songs — led to a million-selling synthesizer classic.

That said, had it not been for renowned Radio One DJ John Peel's fortuitous suggestion of Tubeway Army filling a vacant *Top Of The Pops* slot on that fateful evening in May 1979, it may well have been a different story...

planned. As Gary recalled with a hint of bitterness: "What I tried to find were artists that I thought were good, who had been turned down by everyone else, because that was exactly what happened to me. It's soul destroying when even the tiniest independents tell you to piss off. The intention with Numa was always to give someone a stepping stone. If they went on to do great things with a bigger label, then I would have their first album and get my money back. But it never worked out that way and overall it was a very unhappy experience.

"I now have a lot of sympathy for record labels who've had to work with people like me, who moaned about every little thing that went wrong! All of a sudden you realise that you're moaning at the small group of people who are actually trying to help you. Numa really did make me change my opinion and regret an awful lot of things that I'd said in the past about Beggars Banquet and WEA."

POLITICS OF DANCING

A brief flirtation with Miles Copeland's IRS label in the late '80s spawned a 100,000-selling album in the United States — Gary's first foreign release in several years — before becoming yet another problematic period in his turbulent career. This came to a head over the continuously segued, crossfaded *Outland* album in 1990.

Faced with such lunacy, Numa Records was re-activated in time for Gary's 15th studio album, *Machine & Soul*, in 1992. A solution appeared to be found with 1994's studio album, *Sacrifice*. This was a case of going back to basics and doing it all himself, as on *Replicas* where he played everything bar uncle Jess Lidyard's drums and bass.

Gary Numan

Not only is Gary credited with all writing, performance and production duties on *Sacrifice* — the tiresome role of drumming currently being handled by an Akai S1000 sampler/Apple Macintosh Quadra 650 computer/Emagic *Notator Logic* sequencer combination — he's also formed the NuFederation artwork company to create his own record sleeves on the Mac, without the involvement of outside graphic artists. A true one-man-band effort, "*Sacrifice* was the best album I've done for a long time — perhaps the best ever. To write something like that after so many disappointments and setbacks was a great relief to me."

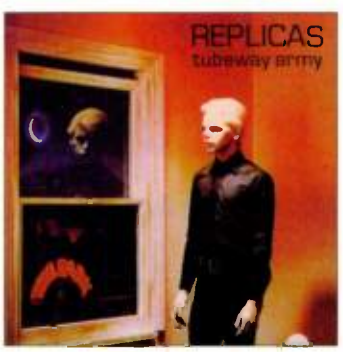
LEARNING CURVE

Company conundrums aside, I asked Gary how developments in the field of music technology had enabled a progression from the appealing quirkiness of *Replicas* to the slick overtones of *Sacrifice* — albeit with a welcome return to his characteristically 'punky' guitar on tracks like 'Love And Napalm': "Because so much stuff is now electronic and in-line, a great deal of the engineering skill is null and void. You don't need it to make a modern record, which must be a horrible position to be in for highly-qualified and skilled engineers who aren't required anything like as much as they used to be. I give myself an engineering credit purely for egotistical reasons, but I'd never get a job as an engineer! If, like me, you predominantly use keyboards and samplers, you don't need to be one."

There is, of course, usually a downside to technology and I wondered if, in his current state of seclusion, Gary misses the spontaneous recording sessions as in days of yore: "If you look at the relative quality between *Replicas* and *Sacrifice*, then I couldn't honestly say I miss it. One of them sounds like a piece of shite made in the '70s and the other sounds like an album made with a lot of time and care spent on it.

"But the technology is getting in the way a little bit, for me. Not only is the technology itself complex and takes time to master, it now gets updated at such a ridiculous speed — you're constantly in a state of learning and I'm growing tired of that. I've left school and don't want to spend the rest of my life studying. When recording *Outland*, at one point I was reading 17 equipment manuals, just to make an album!

"I do understand that new technology is moving very quickly, but I think we should all be aware that



THE NORTHERN DISCOUNT WAREHOUSE

2 MINS FROM JUNCTION 28 - M6

LARGE FREE CARPARK

WE'RE SO CHEAP . IT'S UNBELIEVABLE!!

ROLAND

XP50 ..... We daren't print our price!
XP10 ..... Really! Really! Cheap!
MKB 300 Mother Keyboard
ex-demo - 1 Only £299
A-33 New mother keyboard ....Now In Stock
XP-80 ..... Now in - Best Deal!!
VS880 The ultimate digital home recording unit Now In Stock ..... £PHONE

YOU WONT BELIEVE OUR PRICES!!!

GW33 MULTI FX UNIT ONLY £249 SAVE £150

TASCAM PORTA 03 ONLY £199

S/H AND SHOP SOILED BARGAINS

Roland 760 Pre set synth	Only £399
Rhodes MK-60	Only £399
Technics WSA Synth	Only £1799
Yamaha V50 Workstation	Only £399
Keyboard Stands	£19.99
AKG D190 Two Only	£99
Elka EM22	Only £59.99
Aces 10.2 Desk	Only £199
Cheetah MK5	Only £99
Korg 03RW	Only £399
Yamaha TX1P	Only £79

YAMAHA

W7 Workstation .....
QS300 ..... £899
MU80 ..... Rave On Best Price
MU50 ..... Best Discount Price
MT8X ..... Best Discount Price
NS10 ..... Two Only Ex- Demo £699
Best Discounted Price

QY300 Only £499
Limited Stock

TASCAM PORTA 07 £339

SMS8 ONLY £99

FOSTEX DMT8 BEST PRICE

KORG

i4S £799
X5 & X5D ..... Now in Stock
Prophecy
Trinity
} BEST UK PRICE!!

FOSTEX XR3, XR5 XR7 IN STOCK GREAT PRICES

DYNAMIX

8.2 Mixer	Only £299
12.2 Mixer	Only £349
16.2 Mixer	Only £399
24.2 Mixer	Only £499
8.2 Powermix 300W x2	Only £5499
140 PA + Cabs	Only £399
Very Limited Stocks	

KEYBOARDS

Technics KN3000	Best UK Deal
Roland E12	~~£349~~ Now £199
Roland E16	~~£449~~ Now £299
Roland G800 (ex demo)	Best Price
Yamaha PSR 620	Best Price

1 ONLY EMU PROTEUS EX DEMO £249

RING RIMMERS MUSIC TEL: 01772 433281

NUMAN ON TECHNO ARMY

"As a songwriter to have other musicians cover your songs is something of an honour. To have almost an entire album devoted to your work is extremely flattering. My original versions of these songs, recorded over the last 16 years or so, are somewhat different and so it has been fascinating to watch other musicians' interpretations of them come to life.

"Particularly over the last two years, my own music has taken a much darker, heavier direction and so it is highly unlikely that I personally would have reworked these songs in this style. For that reason alone, this album is somewhat disconnected from me but is, nonetheless, something that makes me enormously proud and I am grateful to Nick (Smith) and Miles (Seabrook) for putting it together."

we don't have to buy everything when it comes out. In the end, you're constantly torn between not being left behind and simply not having the time to learn it all. Bearing in mind that I now do everything myself, it's a problem because there's only so many hours in the working day."

HOW DO THEY DO THAT?

Whilst having always been credited as a producer on his records, it wasn't until he set up Outland in 1990 that Gary began to take a hands-on approach to the recording process: "At Rock City I was involved in the mixes, but only by sitting there interfering with the engineer and irritating him by asking, 'Can I have a bit more reverb?'. Although I moved volume faders up and down, I didn't actually know what was going on.

"When Rock City's lease expired in 1987, my intention was to never have another recording studio for as long as I lived! It was a horrible experience that cost a lot of money.

"Owning my own studio, but never being that interested or involved in the actual running of it, I was very unaware of what had been going on technology-wise in home recording and music in general. I didn't really get into sequencing until about two or three years after everybody else. One of the bands I signed to Numa were heavily into sequencing and I was thinking, 'That's good. How do you do that, then?'

"Eventually I decided I was badly out of touch and bought a Roland S10 sampler, a sequencer, and a little portastudio and started teaching myself how it all worked — even though I'd owned two professional studios at one point!"

THE PROFESSIONAL TOUCH

A makeshift 24-track system comprised of two Akai MG1214 "glorified portastudios" saw Gary over the interim period, following Rock City's demise. One B-side was recorded on this setup with Shakatak's Bill Sharpe — with whom Gary had a couple of collaborative hit singles — before synchronisation problems sent him running into a commercial studio for the first time since 1979's *The Pleasure Principle*.

"In 1988 I went to a place called Black Barn to record the *Metal Rhythm* album and really enjoyed working in a proper studio environment again with proper machines. By now I was starting to take a lot of notice of what was going on — watching what the engineer was doing, looking at the gear and finding out what things cost. I was shocked at the cost of making an album in a commercial studio. It wasn't a problem, but I felt it was wasted to a degree and it started me thinking, 'I could do all this myself.'

"It's the same with EQ mastering at cutting rooms nowadays. They reckon it's a highly-skilled thing that they're doing. It's a very expensive thing and some of the people doing it are highly-skilled, but some of them are monkeys and they charge the same money. I might as well pay nobody and be a monkey myself, so that's what I'm doing.

"Now I finish an album, put it into Sound Tools, and compress it or whatever. By comparing it to other CDs by Nine Inch Nails or Depeche Mode — something that has the same kind of sound to what I'm doing — I can listen to what my EQ is doing. If it sounds as bright and hard, and it's not waffling down the bottom end, then I'll go with it.

"Now I know this may not seem absolutely professional, but it works. The last album I put out that I EQ mastered myself was a live recording, called *Dark Light*, and I got an email message from an American bloke who thinks it sounds much brighter and clearer than the previous live album, which was done by so-called professionals."

GAZZA'S GEAR

RECORDING:
- Aiwa Excella DAT
- Aiwa WX220 cassette deck x 2
- Atari ST Mega 4 computer (with DAC 700Mb hard disk)
- Digidesign Sound Tools
- Otari MX80 multitrack
- Quad 405 amplifier
- Soundtracs Quartz desk
- Tannoy Little Gold speakers

OUTBOARD:
- AMS DMX-1580S digital delay
- AMS RMX-16 digital reverb
- BBE Sonic Maximizer enhancer
- Bel BD80S digital delay
- BSS DPR402
- Digitech Valve FX guitar preamp
- Drawmer DS201 dual noise gate
- Drawmer DL221 dual compressor/limiter
- Lexicon PCM70 digital reverb
- Nomad Axxeman guitar processor
- Valley Micro FX noise reduction x 6

INSTRUMENTS:
- Akai S1000 sampler (with DAC R5000 hard drive)
- Alesis Quadrasynth
- GEM S2 synthesizer
- Gibson Les Paul guitar
- Korg M1REX module
- Korg Wavestation SR module
- Roland D550 module

SEQUENCING:
- Emagic *Logic*/Apple Macintosh Quadra 650
- Opcode Studio 4 MIDI interface

"I've also got some bits and bobs in the shed, although I don't use any of it at the moment: a Minimoog; Oberheim OBXa; Yamaha baby grand; a couple of Roland Jazz Chorus guitar amps; and a few other things I can't remember. Most of it has been toured into a state of disrepair."

DRIVING LESSONS

Gary Numan's name is inextricably linked to analogue synthesizers, thanks in part to the success of 'Cars', his second UK number one single, and its accompanying promotional video featuring Gary 'driving' over an endless landscape of Polymoogs! Never one to ride with fashion, however, Gary is somewhat scathing of the distinctive sounds which assisted his meteoric rise to fame — even in today's prevailing retro climate: "I remember people wanting to be punk rockers

TOPAZ!

I HEARD THAT THE BEST SOUNDING 8 BUS CONSOLE HAS JUST GOT EVEN BETTER.

BUT IN DIRECT A-B COMPARISONS IT'S ALWAYS BEEN A WINNER.

SO I CAN'T BELIEVE THEY HAVE MANAGED TO IMPROVE IT EVEN FURTHER.

WE NEED TO CHECK THIS OUT...

LATER THAT DAY AT THE LOCAL MUSIC STORE...

THE CHANGES WE'VE MADE GO MORE THAN SKIN DEEP!

IT JUST FEELS SO SMOOTH!

THIS NEW CONSOLE LOOKS AS GOOD AS IT SOUNDS!

NEW ANTI-GLARE SUEDE EFFECT FINISH TO ALL TRIM INCLUDING THE OPTIONAL METERBRIDGE.

NEW FRONT PANEL COLOUR SCHEME DESIGNED TO REDUCE VISUAL FATIGUE.

RE-STYLED, AND COLOUR COORDINATED STUDIO-PRECISE KNOBS FOR INSTANT RECOGNITION AND ACCURATE POSITIONING.

NEW ULTRA-GLIDE ROTARY POTS FEATURING PATENTED DOUBLE BUSHING FOR PRECISE CONTROL AND EXTENDED DURABILITY.

SSM2017 INPUT IC BY ANALOG DEVICES, (NOT USUALLY SEEN ON CONSOLES IN THIS CLASS), PROVIDES ULTRA-LOW THD AND HIGH SLEW RATES WITH A SUB AUDIO 1/F NOISE CORNER.

TRUE DUAL-INPUT CAPABILITY WITH MAIN AND SECONDARY INPUTS HAVING INDIVIDUAL HIGH-TOLERANCE EQ SECTIONS, SOLO AND MUTE SWITCHES.

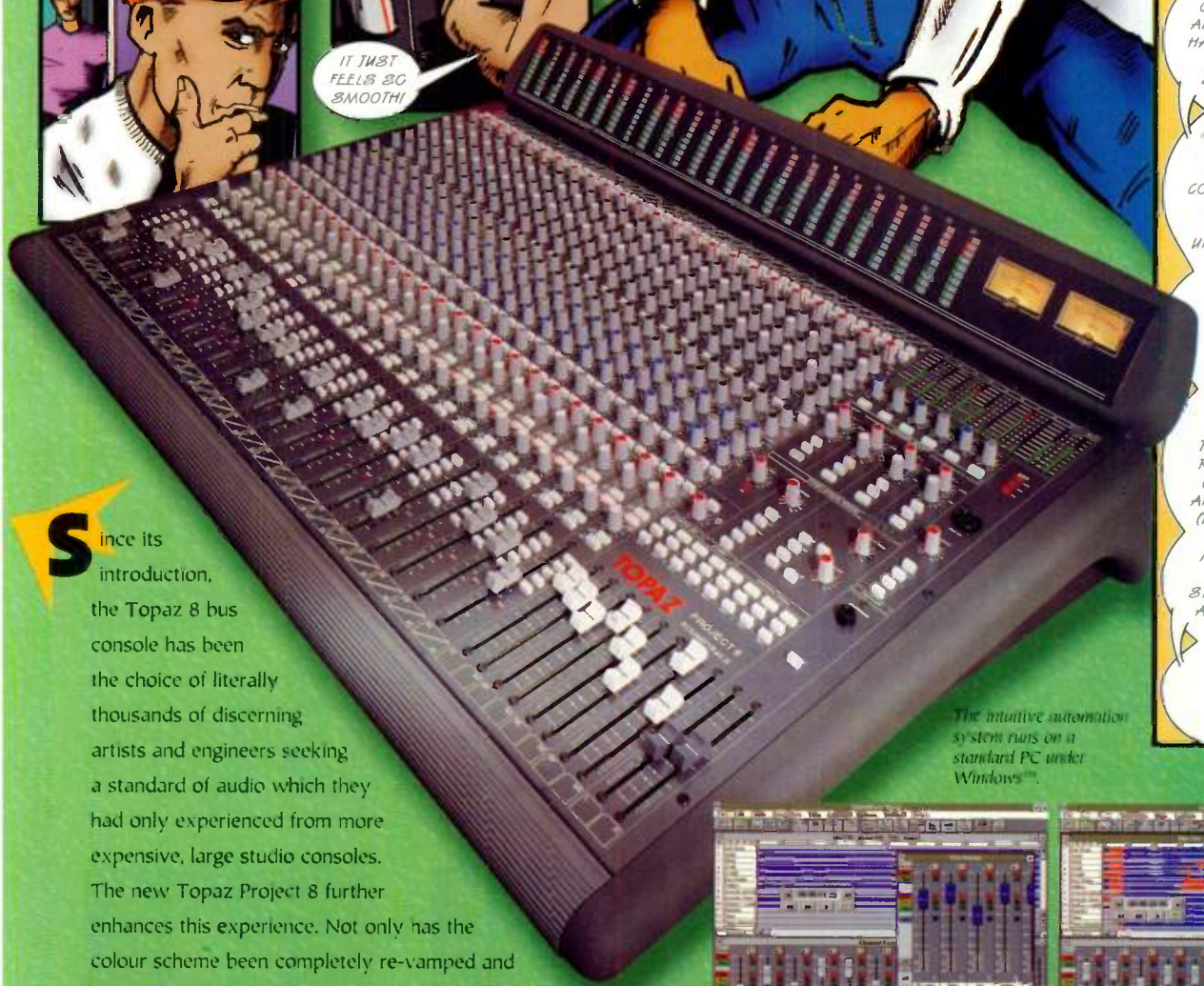
HIGH-STABILITY, TIGHT TOLERANCE FILM CAPACITORS PROVIDE CONSISTENT CHANNEL TO CHANNEL EQUALISER PERFORMANCE AND UNIFORM SPECIFICATION.

1% METAL OXIDE RESISTORS THROUGHOUT PROVIDE FOR SIGNAL LEVEL INTEGRITY AND LOW NOISE.

MAXIMUM GROUND PLANE CIRCUITRY TECHNIQUES (MGP) TO REDUCE NOISE, INTER-CHANNEL CROSSTALK AND HIGH INTENSITY EM (RADIO) INTERFERENCE.

MEETS AND EXCEEDS STRINGENT EC STANDARDS FOR SAFETY AND ELECTROMAGNETIC CONTROL.

GOLD PLATED CONNECTORS ENSURE EXTENDED RELIABILITY.



The intuitive automation system runs on a standard PC under Windows™.

Since its introduction, the Topaz 8 bus console has been the choice of literally thousands of discerning artists and engineers seeking a standard of audio which they had only experienced from more expensive, large studio consoles. The new Topaz Project 8 further enhances this experience. Not only has the colour scheme been completely re-vamped and the automation made even easier and more flexible to use, we've also incorporated over 404 other improvements - most initiated by our users - to make the Project 8 the ultimate no-compromise solution to track laying and automated mixing.

by SOUNDTRACS

TOPAZ

PROJECT 8 CONSOLE

For further information call freephone 0800 374994.

Distributed in the UK by beyerdynamic Unit 14 Cliffe Industrial Est., Lewes, Sussex BN8 6JL.

long after it was over — people who were too young to be one at the time — and there seems to be an element of this when looking back at old synthesizers. People want to use Moogs because they missed them first time around, but I was there and don't have any nostalgia for them whatsoever.

"The Polymoog had one good preset in it called 'Vox Humana', which is the high string sound heard on 'Cars', and with the Minimoog I was just trying to make it sound as powerful as two chugging guitars, since I wrote most of the early stuff on the guitar anyway. I think there have been much more creative things done with synthesizers since then, because nowadays they can do so much more.

"Having said that, in my opinion, the Oberheim OBXa was the best analogue synth of them all, but that was from later years. I'm probably going to get mine up-and-running again, but it's so huge and I don't know where I'm going to put it!"

MODERNISATION

Although Gary once cited the saxophone and guitar as his all-time favourite instruments and not the synthesizer, a quick glance around his home studio revealed a more modern selection of digital instrumentation, including an Alesis Quadrasynth, GEM S2 and Korg Wavestation SR. His ageing collection of notoriously unreliable, yet currently in vogue, analogues now lie in cold storage, flightcased and forlorn in an outbuilding — not that the latest acquisitions have been entirely trouble-free, a dire scenario with which no doubt many recording musicians can identify.

"I really do have a thing about manufacturers releasing gear before it's truly ready. It goes on a great deal and I think it's disgraceful! For example, Alesis recently brought out an update for the Quadrasynth and they're not supplying it free to people who supported them by buying the original instrument. We're like unpaid testers and they're updating it because there are faults that we owners have been complaining about.

"I understand that development cost sometimes comes into it, but often it's not even development — it's repairs! If you buy a new car which has to be recalled because the steering wheel keeps falling off, you wouldn't expect to pay for it to be fixed because it's a design flaw!

"I don't mind if it's adding functionality to what is essentially a very good machine that does all the things it was supposed to do when I bought it. If the manufacturer then says, 'We've done some work and we can now make it do XYZ as well' that would be like buying a turbocharger for your car — you bolt on another bit to make it go faster."

By now Gary was on a roll and next in the line of fire were Emagic: "I've got *Logic 2.1* and it doesn't send out MIDI song position pointers. That's like a car that doesn't have a motor in it! At first I could only assume that there was a fault with mine, but I rang up a mate who's got it and his doesn't do it either. I can't believe this isn't a fault, and it's not like we're talking about version 1.0 here!

> "In my opinion, the Oberheim OBXa was the best analogue synth of them all."

"I've learnt my lesson and now I'm going to wait until something's been out for at least a year before considering whether to buy it. I don't care whether the studio goes out of date or not, because it means that when I finally buy something it should work properly."

PREMIER HITS

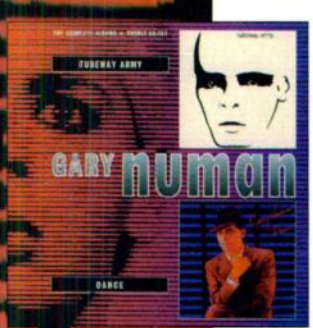
My visit ended on a musical high with Gary playing some unfinished backing tracks from his forthcoming studio album, provisionally entitled *Exile*. Abetted by the multi-layered sampled percussion loops that have become his latter day trademark, these were already sounding incredibly powerful in their infant state and a clear indication that Gary has indeed become a master of both his craft and tools with a unique brand of sinister and heavy music.

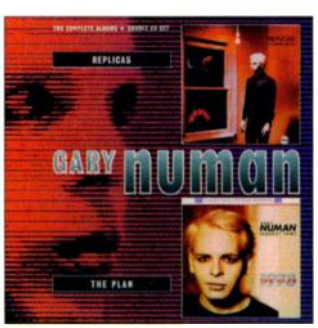
"I used a changeable mixture of drum loops taken from sample CDs, although they were all retuned from the original. For example, I would not use a loop for a 90 beats per minute song that was recorded at 90bpm, but rather one that was recorded at 120bpm and then slow it down. This changes the

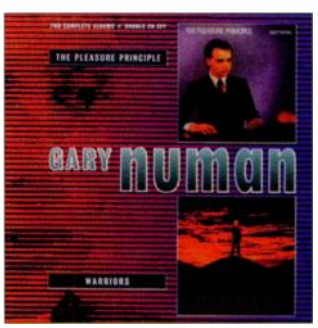
BRAVE NUWORLD

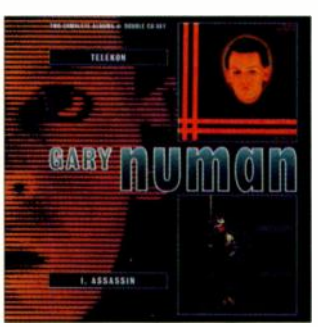
In joining the so-called 'information superhighway' at the tail end of 1995, it would appear that Gary Numan has become something of a jack of all trades. NuWORLD: The Official Gary Numan Internet Connection is entirely his own creation and incorporates aspects of the NuMIND database, Fan Club newsletters and his information telephone lines. Its nomination for a 'YELL! For The UK Best!' award is both a testament to Gary's natural artistic talent combined with the Apple Macintosh's ease of use and versatility — not bad going for a self-confessed computer novice.

Gary is hopeful that this newfound technology will help alleviate his prevailing state of isolation and expand his present fan base beyond the boundaries of the UK. Regardless of your intentions, it's well worth a browse as an excellent example of a well executed World Wide Web site. Check it out on: http://www.numan.co.uk









Studiospares
THE BEST RED CATALOGUE IS OUT NOW
120 pages, 2500 items
tel 0171 485 4908
fax 0171 485 4168
AKG
1996/97

sound of the loop, making it the right tempo, but heavier in texture than the original 90bpm loop. I'm sure others would disagree with that, but it seems to work for me. I also added individual samples that I 'played' from the keyboard in real time, to put in fills and basic timing the way a real drummer would. Cymbals and hi-hats were also 'played' individual samples in most cases. All of the drum sounds were heavily EQ'd in one way or another and everything went through my trusty AMS and Lexicon reverbs, usually on gated or non-linear settings, but occasionally an artificial reverse reverb was used. That's all there was to it actually, but you must be careful when building up drum layers that you don't lose clarity in that never-ending search for power."

> "I was very unaware of what had been going on technology-wise in home recording..."

With possible major recording and US licensing deals looming on the horizon, perhaps a Numan renaissance *à la* Human League is just around pop's fickle corner? The fact that 'Cars ('93 Sprint)' already features on the soundtrack album to 1994's box office movie *Speed*, whilst 'Cars ('Premier Mix)' is currently being used to front a UK nationwide Carling Premier television and cinema commercial on an eight month run, is undoubtedly serving to heighten his profile — as has the TV-advertised follow-up Gary Numan/Tubeway Army compilation album, *The Premier Hits*.

The irony of this classic song's fourth chart placement (respectably re-entering at number 17, almost 17 years after the original) is not lost on Gary, who joked, "It's quite possible that my career is going to be saved by a lager commercial, and I don't even drink!"

On a more positive note, rumours are abounding in the music press over a planned Gary Numan tribute album featuring a diversity of 'fashionable' artists. Likewise, Dave Grohl's Foo Fighters cover of 'Down In The Park' on the *X-Files* album should further assist in the kudos stakes. It would appear that Gary Numan's influence on the popular music scene is at last being recognised. SOS

FORTHCOMING ATTRACTIONS

Aside from Gary's forthcoming studio album, *Exile*, other projects in the offing from the Numan camp include *Human*, an instrumental album of short pieces dating from Gary's score for a low-budget horror film called *The Unborn*; a dance album of remixed/reworked Numan tracks by a team called Techno Army, featuring Gary himself on vocals; an "unplugged-style" acoustic album; an album of ballads culled from his lengthy recording career; plus his eighth live album and accompanying video recorded during the 1996 *Premier* tour.

A second recording company, Salvation Records, has additionally been set up for "other bits and pieces that I want to do, like future collaborations." Releases thus far include the Radial Pair video soundtrack and the fan club-only Babylon CD series — essentially all of Gary's Numa B-sides and remixes, previously only available on vinyl.

Gary will be playing at two UK festivals in August 1996, namely Chelmsford and Warrington on the 17th and 18th respectively. Pulp are the headline act with Numan fourth on the bill, behind Cast and Supergrass. The fact that Gary has never even been to a festival before, let alone performed at one, makes these events a particularly interesting proposition.

A GNFC (NuMInD), PO Box 14, Staines, Middlesex TW19 5AA.
E tonywebb@numan.co.uk

SOUND CONTROL
Professional Audio

GLASGOW...
• 61 JAMAICA STREET
• GLASGOW. G1 4NN
• PHONE- 0141-204-2774
• FAX- 0141-204-0614

MANCHESTER...
• UNIT-5...
• RED ROSE CENTRE
• REGENT ROAD
• SALFORD. M5 3GR
• PHONE- 0161-877-6464
• FAX- 0161-877-6363

NEWCASTLE...
• 10 MOSLEY STREET
• NEWCASTLE. NE1 1DF
• PHONE- 0191-232-4175
• FAX- 0191-222-1837

SOUND CONTROL
MAIL ORDER
• THE ELGIN WORKS
• DUNFERMLINE
• FIFE. KY12 7SD
• FREEFONE 'SALES ONLY'-
0800-52-52-60
• FAX- 01383-725733

EMAIL...
jmt@soundcontrol.co.uk

AKAI DIGITAL...
S2000
S3000XL
S3200XL
FULL RANGE OF AKAI SAMPLERS AND DIRECT DIGITAL HARD DISK RECORDING SOLUTIONS FROM THE WORLD'S VERY BEST IN THIS FIELD!

SOUND CONTROL

Professional Audio

QUITE SIMPLY, THE ONLY CHOICE FOR PROFESSIONAL AUDIO...

YAMAHA DIGITAL MIXERS...

PRE-PRODUCTION OR RECORDING.
FRONT-OF-HOUSE OR POST-PRODUCTION YOU CHOOSE...
THESE MIXERS ARE SO FLEXIBLE - GIVEN THEIR ON-BOARD
EQ, MIDI CONTROL AND FX AND FADER AUTOMATION ETC...
WITH PRICES THATWON'T BREAK THE BANK, YOU CAN CALL US NOW
WITH TOTAL CONFIDENCE OF A SERVICE THAT IS SECOND TO NONE

PROMIX-02R

PROMIX-01

FOSTEX DMT-8 DIGITAL MULTITRACK...

A DIGITAL EIGHT TRACK WITH CONVENTIONAL TAPE TRANSPORT CONTROL AND PRECISE PUNCH-IN/OUT!

- 12 MINUTES OF CD AUDIO ON ALL 8 TRACKS • FULL EDITING WITH UNDO FACILITY
- 4 TRACK SIMULTANEOUS RECORDING • MIDI TIMECODE WITH NO TRACK LOSS!
- ON-BOARD METRONOME • PROGRAMMABLE TEMPO MAPS • PRECISION JOG SHUTTLE • OPTICAL S/PDIF OUTPUT

ROLAND VS-880 DIGITAL MULTITRACK...

A DIGITAL EIGHT x EIGHT VIRTUAL TRACK RECORDER WITH DIGITAL MIXER, OPTIONAL DIGITAL EFFEX AND SCSI!

- 8 X 8 VIRTUAL TRACKS • VARIABLE SAMPLE RATES • INTERNAL IDE DRIVE OPTION
- EXTERNAL SCSI AS STANDARD! • 14 CHANNEL DIGITAL MIXER
- AUTOMATED MIX/PAN BY MIDI • OPTIONAL MEGA EFFEX BOARD
- INTUITIVE 'TAPE-TYPE' TRANSPORT • ANALOGUE IN. DIGITAL IN/OUT
- CAN RECORD DIRECTLY TO IOMEGA ZIP/JAZZ DRIVES- NO BACKUP NEEDED!

OVER 35 MINS TOTAL RECORDING (ALL 8 TRACKS) FROM A TYPICAL 540MEG HARD DRIVE OPTION!

DIGIDESIGN PRO-TOOLS...

WE ARE NOW DIGIDESIGN PRO-TOOLS DEALERS
IN BOTH OUR GLASGOW AND MANCHESTER
PRO AUDIO CENTRES. PLEASE CALL US NOW
TO ARRANGE A DEMONSTRATION OR TO DISCUSS A COMPLETE SOLUTION
TO ALL YOUR HARD DISK RECORDING REQUIREMENTS.

DIGIDESIGN SESSION-8...

ALL OUR PROFESSIONAL AUDIO CENTRES
STOCK & SUPPLY THE DIGIDESIGN
SESSION-8 SYTEMS FOR BOTH THE MACINTOSH AND THE P.C PLATFORMS.
CALL US NOW TO TAKE ADVANTAGE OF OUR VERY LATEST PRICES...

DIGIDESIGN AUDIOMEDIA-2/3...

WITH BOTH PLATFORMS NOW SUPPORTED,
THIS IS PROBABLY THE BEST TIME TO BUY THIS C.D
QUALITY DIRECT-TO-DISK, 2 TO 4 TRACK
RECORDING AND EDITING PACKAGE.
DON'T FORGET TO ASK US ABOUT THE SPECIAL DEALS
ON OFFER ON OUR RANGE OF HIGH CAPACITY AUDIO-VISUAL HARD DRIVES.

WRH

Sweet Harmony

DIGITECH MV5 VOCAL HARMONY PROCESSOR

Offering 5-part harmony at a budget price, the MV5 is Digitech's easiest to use pitch-shifter yet. The DAVID MELLOR Singers provide the tune...

pros & cons

DIGITECH MIDI VOCALIST £450

pros
- Simple-to-use and effective.
- No LCD display (you don't need one!).
- No nudge buttons (you don't need them).
- Good quality pitch-shift.

cons
- 'Wall-wart' external power supply.
- No phantom power for microphone.

summary
Probably the simplest intelligent pitch-shifter available, and one of the most effective. Doesn't offer every function of the more expensive Digitech Studio Vocalist, but it is a lot easier to use to the full.

SOUND ON SOUND

Compared to many effects units, the Digitech MV5 MIDI Vocalist is extraordinary on two counts: it has no LCD display and it features large, illuminated, user-friendly buttons. These features alone tell me that the MV5 is going to be friendly to use, not fiddly, that I am likely to get quick results from it, and that I shall be able to exploit its full potential.

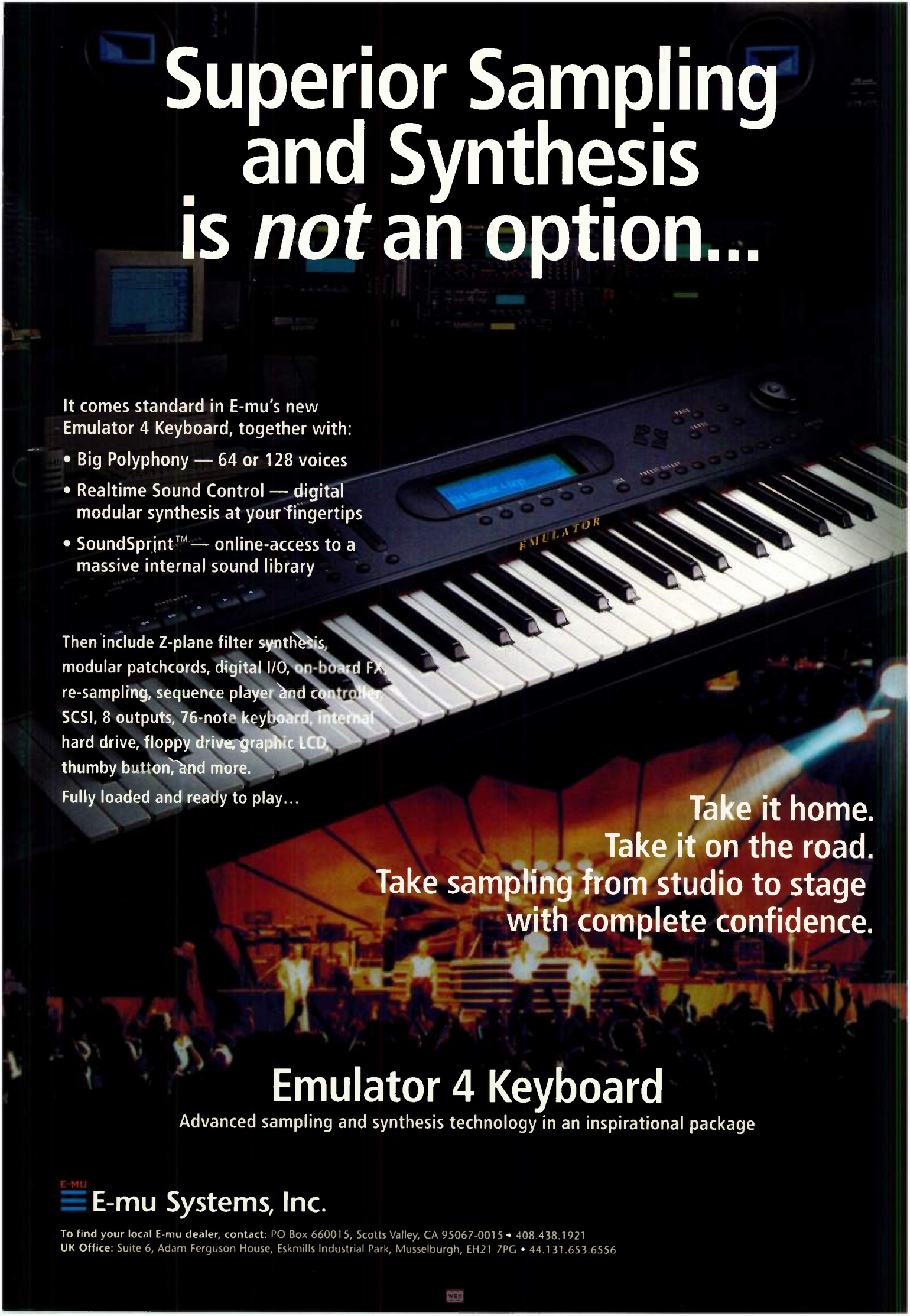
Perhaps it's a phase I'm going through since I threw out my studio computer (shock! horror!) and started *listening* to the music I was trying to create, but I really do feel the time has come for manufacturers to concentrate on giving us the features we *need* in a particular unit, rather than simply making the feature list as long as possible, with the result that many devices are so complex that 95% of their features never get used. The MV5 is a step in the right direction — it does what it does cleanly and simply. You will need the manual to get started, because this device performs tricks other effects units cannot, but with only 10 minutes experience under your belt you can let your creativity take over and *have fun*!

INTELLIGENCE COUNTS

The Digitech MIDI Vocalist is an intelligent pitch-shifter. This means that it 'understands' the rules of harmony and can add harmonies to a lead vocal that are appropriate to the key of the song. (Brian May soundalikes may substitute 'guitar' for 'vocal' in the previous sentence, because the unit is not restricted to vocal processing.) Being intelligent and bestowed with a certain amount of good taste, this is not a unit for creating weird, delayed feedback pitch-shift effects, although you *can* certainly construct such sounds with the aid of a delay unit and a little bit of mixing console know-how.

Up to four harmonies are allowed in four distinct and useful modes of operation. Taking a look at the front panel first, the most obvious feature is the group of six buttons set into a musical staff with a treble clef. If you were thinking that the positions of the buttons on the staff meant something, then you had been fooled too. It's simply a design feature, but the fact that they slope at an angle does represent the *relative* pitches of the harmonies, if not the actual notes. These six buttons allow the user to select four harmonies spaced above or below, or in unison, with the input note. It's a quick and easy way to create the harmony voicing you are looking for and the MV5 will select the actual pitches for you.

Bypassing for the moment a group of six buttons which select the mode of operation and the key of the song — more on these later — we come to three rotary controls which set the input ▶


Superior Sampling and Synthesis is *not* an option...
It comes standard in E-mu's new Emulator 4 Keyboard, together with:
• Big Polyphony — 64 or 128 voices
• Realtime Sound Control — digital modular synthesis at your fingertips
• SoundSprint™ — online-access to a massive internal sound library
Then include Z-plane filter synthesis, modular patchcords, digital I/O, on-board FX, re-sampling, sequence player and controller, SCSI, 8 outputs, 76-note keyboard, internal hard drive, floppy drive, graphic LCD, thumby button, and more.
Fully loaded and ready to play...
Take it home.
Take it on the road.
Take sampling from studio to stage with complete confidence.
Emulator 4 Keyboard
Advanced sampling and synthesis technology in an inspirational package
E-mu Systems, Inc.
To find your local E-mu dealer, contact: PO Box 660015, Scotts Valley, CA 95067-0015 • 408.438.1921
UK Office: Suite 6, Adam Ferguson House, Eskmills Industrial Park, Musselburgh, EH21 7PG • 44.131.653.6556

DIGITECH MIDI VOCALIST

CHORD TYPES

In Chordal Mode, the Digitech MIDI Vocalist will recognise any of the following chord types, in any key:

- **Major**
- **Major 7**
- **Minor**
- **Minor 7**
- **Dominant 7**
- **Major 6**
- **Augmented 7**
- **Minor 7 flat 5**
- **Diminished**
- **Suspended**
- **Suspended 7**
- **Minor-major 7.**

SCALE TYPES

In Scalic Mode, the Digitech MIDI Vocalist can be set to any of the following scale types, in any key:

- **Major**
- **Major raised 7**
- **Major lowered 5**
- **Major 6**
- **Dorian**
- **Minor**
- **Harmonic Minor**
- **Diminished**
- **Whole Tone**

▶ level, the output level of the lead vocal (the source signal) and the level of the harmonies. It couldn't be simpler. A front panel XLR is provided (sadly, without phantom power) for a microphone input.

For those of you who are as interested in the back of equipment as in the front panel, the principal features are a line input, stereo outputs, and the normal trio of MIDI sockets. Another socket is provided for the Digitech FS300 footswitch, which can be used to control the Set Key, Harmony Mode, and Bypass functions. A single momentary action footswitch may be used to control the Bypass function. Also on the back is the input for the 'wall-wart' power supply. I'll continue to complain about these devices as long as manufacturers use them because, as well as being inconvenient, I know that the easiest way to destroy equipment is to get your warts mixed up. This is easily done, since they seem to come in an endless variety of different voltages and polarities. There is a fortune awaiting the inventor who can design a powering system that is as convenient for the manufacturer (allowing them to sell identical units worldwide) as a wall-wart and works for the user, too.

MODUS OPERANDI

Having dealt with the hardware, let's look individually at the MV5's four modes of operation.

Chordal Harmonies

To produce chordal harmonies, the MV5 needs two inputs. One is your voice (or lead instrument) and the other is MIDI information from your keyboard. In this instance the keyboard isn't used to generate sounds, just to tell the MV5 which harmonies to create. In a studio situation you would probably record the lead vocal onto tape and spend as much time perfecting it as you need, whilst the MV5 quietly bides its time in the rack. Then you could record basic chords into your synchronised sequencer, which you would then play back via MIDI into the MV5. The MV5 will analyse the chords you play, and automatically select suitable harmonies based on these chords and the settings of the Harmony Voicing buttons on the front panel. As you record the harmonies to tape you will probably drop in and out of record mode, so that harmonies only go where you want them, since the MV5 in this mode will always create harmonies according to the last MIDI data it received.

As well as being useful in the studio, the MIDI Vocalist could be exploited in a live situation by a singer/keyboard player performing solo in a bar, for instance. In this situation, the keyboard is being used for accompaniment, as well as transmitting MIDI data to the MV5 telling it about the chords being played. Here we have potential for confusion, since any fancy arpeggios, grace notes or glissandi could fool the MV5 into creating the wrong harmonies.

Obviously a little bit of extra care is necessary in playing, along with tasteful use of the Bypass footswitch. To help matters though, the MV5 can be instructed to respond over a set range of MIDI notes only and ignore all others. This is easy to achieve, and it would only take a moment to reset the zone between songs.

If you are wondering whether the MV5 has a full understanding of harmony, or whether it can only handle Status Quo songs, then take a look at the list of chord types (see box). The great thing is that even if you don't know a flattened fifth from a sharpened Chinagraph, the MV5 does and the harmonies will always fit in with the chords you are playing.

Scalic Harmony

While Chordal mode will nearly always work for most types of music, it tends to produce harmonies that are a bit static. In fact, they are only as static as the MIDI notes you send to the MV5, but one's fingers always seem tempted to the same intervals as long as they seem to be working. Scalic mode, on the other hand, doesn't always work for every style of music, but it will produce much more activity in the harmony lines. If you think of Chordal mode as a choir backing a solo voice, and Scalic mode as a more interactive style of harmony, then you won't go far wrong. Alternatively you can think of Chordal as 'Amazing Grace' mode, and Scalic as 'Eagles' mode. (It's OK — they're trendy again!).

In Scalic mode, you don't need to play chords all the way through a song. A single chord, containing the important notes of the scale, played at the beginning will be enough to tell the MV5 which key you are in and which scale type you require. If you change key or scale type during ▶

MIDI: THE OUTER LIMITS

Although the Digitech MIDI Vocalist is admirably easy to use, those who like to push their equipment to its limits will find that that there are extra functions accessible only via MIDI. You may have noticed that the MV5 doesn't offer factory or user preset programs. It doesn't need to, since you can set the unit from scratch almost as quickly as you could recall a preset. You might think that this means you can't automate the MV5 as you can with other effects units, but you would be wrong. Each time you press a button on the MV5, a MIDI message is output which you can record into a sequencer. This could include Harmony Mode, Voicing, Key/Scale, Chord Root/Type and Setup changes. When you replay the sequence, the MV5 will respond as though you were pressing the buttons yourself. This includes the Bypass control, which receives more use than the bypass function on any other type of effects unit, since the MV5 creates harmonies in response to the input signal all the time, and you almost certainly wouldn't want those harmonies to appear all the way through the song. You can also send a MIDI Control Change message to set the vibrato depth, which cannot be set from the front panel. Extra voicings are available via MIDI messages, just in case you can't find what you are looking for from the six front panel Harmony Voicing buttons.

BABEL SYSTEMS

UK NEXT DAY DELIVERY · LOWEST PRICES · WORLDWIDE EXPORT · FINANCE AVAILABLE

SAMPLERS

Akai S2000
Akai S3000 XL
Akai S3200 XL
Kurzweil K2500
Emu ESi 32
Kurzweil K2000 V3

MIXERS

Behringer MX8000
Mackie
Tascam
Soundtracs
Soundcraft Spirit
Studiomaster
Yamaha Pro Mix 01

MULTITRACK

Alesis A-DAT
Akai DR4d
Akai DR8d
Digidesign
Soundscape
Tascam DA88
Yamaha CBX-D5

SYNTHS

Alesis Quadrasynth
Emu Morpheus
Emu Proteus
Emu Ultraproteus
Emu Classic Keys
Korg X3, X5, 05RW, X5DR, 14, 03RW, X3R
Fatar keyboards
Roland XP50
Yamaha SY35, SY85

COMPUTERS

Apple Macintosh, Authorised reseller for Performa and Powermac range. Please call for our bestprices.

OUTBOARD

Alesis
DigiTech
LA Audio
ART
Behringer
Lexicon
Drawmer

Phone 0181 749 8222 for the UKs best price quote

Hammersmith, Shepherds Bush, London W12 8PA

http://www.bogo.co.uk/babel/babelhomepage.html

Not a tape in sight !

AKAI DR-16

YAMAHA 02 R

Available from Europes leading Pro-Audio Dealer

SYSTEMS WORKSHOP

PROFESSIONAL AUDIO TECHNOLOGY

The Old Smithy, Church Street, Oswestry, Shropshire SY11 2SP
Tel 01691 658550 Fax 01691 658549
CIS Mail; 100330,3222

> "...even if you don't know a flattened fifth from a sharpened Chinagraph, the MV5 does, and the harmonies will always fit in with the chords you are playing."

▶ the song, then you will need to input another chord or the harmonies will be out of key. Notice that once you have specified a key, the MV5 handles all the chord changes that are customary in that key for the type of scale selected. (See box for a list of scale types.) Apart from the common-as-muck Major and Minor varieties, highlights of the scale type list are the Dorian scale, which adds the minor third and flattened seventh that are appropriate for blues style harmonies, and also the Whole Tone scale, which creates instant musical impressionism *à la* Debussy.

In Scalic mode, the Harmony Voicing buttons also define the spacing of the harmonies. I didn't mention it earlier, but normally the MV5 corrects the pitch of the harmonies. So if your singing is out of tune, at least the backing vocals will be OK (provided you sing within a quarter tone of the correct pitch). Sometimes, however, too much perfection can get a bit boring and you might wish for a little sliding (portamento) of the notes to give a more relaxed feel. If so, then all you have to do is send an upward MIDI pitch-bend command to the MV5 and it switches into a mode where the harmonies track the vocal precisely.

Vocoder Mode

Now don't go thinking that there is a full-blown vocoder built into the Digitech MV5 as well as a harmony processor. 'Vocoder' is about as descriptive in this respect as the word 'coffee' on a vending machine — it indicates the flavour of what you are about to receive without actually promising the real thing!

In Vocoder mode, all the intelligence of the MV5 is bypassed (as are the Harmony Voicing buttons) and harmonies are created which exactly correspond to the notes you play on your MIDI keyboard. Vocoder mode is actually *more* versatile than the other modes because you can create exactly the harmonies you want, whether or not they fit into 'proper' chords or scales. You could even take an out-of-tune vocal recording and feed it through the MV5 while playing the correct notes on the keyboard, and magically a perfectly in-tune vocal would result. In fact, the original vocal doesn't even have to be close to the right notes, because the MV5 will harmonise a dog's bark if necessary. Of course, there are limits to how well this process can work. Basically, the more work the MV5 has to do, and the more the vocal slides about, the less believable the end result becomes. Overall, I'd say this vocoder technique is best applied to backing vocals, where a little bit of 'flanginess' might go unnoticed in the mix.

Detune Mode

This is another mode where the intelligence of the Digitech MV5 is put on hold, yet it could easily become the mode in which the unit is most used. One of the most common requirements in recording is for some sort of 'thickening up' of the sound, especially on vocals. If you have ever sat in front of the mixing console wondering what you could do to turn that thin, weak vocal wafting out of your monitors into a fine, healthy specimen, bursting with life and vigour from the drive units, then this mode could represent one potential solution to your problem. You can achieve a similar effect with many other effects devices, but on the MV5 it's achieved with the push of a couple of buttons — and as we all know, the sounds which are easy to get at are the ones that are going to be used.

There are three possibilities: Light Detune adds harmonies at plus and minus seven cents to the original (one cent is one hundredth of a semitone), Heavy Detune adds harmonies at plus and minus 12 cents, and for the strongest effect you can combine the two. If you have used this trick before, you will understand its benefits and limitations, but I think that Digitech have provided three options which will cover most eventualities and can be accessed very easily.

MV5 SPECIFICATIONS

Microphone Input:	Balanced XLR, >2kohms
Line Input:	Unbalanced jack, >10kohms
Input Level (mic):	-31dBu to -3dBu
Outputs:	Two unbalanced jacks, 1.5kohm
Maximum output level:	+14dBu +/-2dB
Sampling:	16-bit linear at 31.25kHz
Frequency Response:	30Hz to 11.5kHz, +0.5/-3.0dB through DSP 30Hz to 30kHz, +/-1.5dB, analogue bypass
Signal-to-Noise Ratio:	>86dB A-weighted through DSP >92dB A-weighted, analogue bypass
THD:	<0.03% at 1kHz

A SOUND SENSATION?

Digitech have an immense amount of experience in designing pitch-shifters, so you would be entitled to expect pretty good sound quality from the MV5. If you bear in mind that real-time pitch-shifting is the most difficult effect to achieve, and that perfection will probably remain unattainable for many years yet, then I think most users will be very satisfied with the sound of the MV5. Even though the 31.25kHz sampling rate only results in an audio bandwidth of 11.5kHz, when used for backing vocals nobody is going to point at you and accuse you of cheating with a fancy effects unit. They'll believe you sang all the harmonies for real. I couldn't say that the pitch-shifted output sounds absolutely as clean as the original signal, but I couldn't say that about *any* pitch-shifter — even the most expensive models.

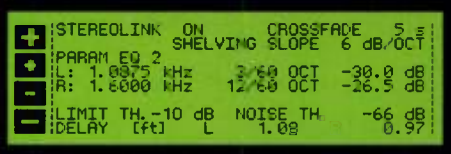
In conclusion, I'll repeat myself and say that I think you will be very satisfied with the Digitech MV5. It does a good, solid job of work and you don't need a brain expansion to use it. SOS

info

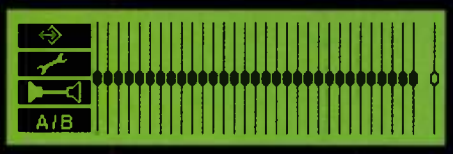
E £449.95 inc VAT.
A Arbiter Music Technology, Wilberforce Road, London NW9 6AX.
T 0181 202 1199.
F 0181 202 7076.

EVERY PICTURE TELLS A STORY.

ULTRA-CURVE A 64-Bit Dual-DSP Processor Mainframe With Auto Graphic EQ, Real Time Analyzer, Parametric EQ/Notch Filter, Feedback Eliminator, Limiter, Gate, Input/Output Level Meter, MIDI Implementation, Delay Option And More.

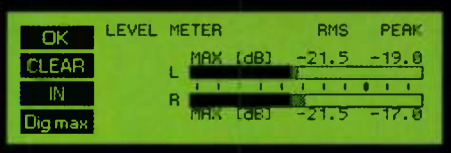


PARAMETRIC EQ/NOTCH FILTER
3 bands per side of parametric equalization with +16 to -48 dB of gain, fine-tunable down to 1/60th of an octave.

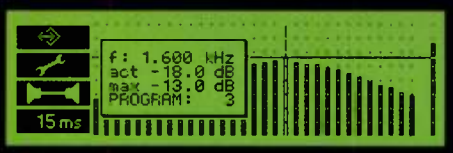


DIGITAL STEREO 31-BAND, TRUE RESPONSE AUTO-Q GRAPHIC EQUALIZER
Up to 100 EQ curves can be stored, copied, compared, added and subtracted.

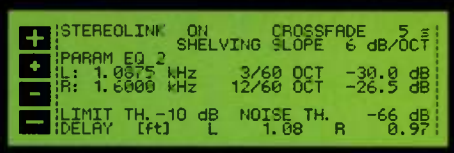
FEEDBACK ELIMINATOR
Any of 6 parametric EQ bands can "seek and destroy" unwanted feedback frequencies dynamically.



INPUT/OUTPUT METERING
The ULTRA-CURVE offers full input/output high precision metering capability.



REAL TIME ANALYZER
High-resolution RTA with Peak, Hold, Variable integration time and 10 user memories. A noise & sinewave generator enables for automatic room-equalization



MULTIBAND LIMITER, NOISE GATE
Multiband Limiter with variable threshold and IGC* protects against overload without distortion. Digital Noise Gate with IRC** provides a level-dependent expansion ratio for "jitter-free" performance.

These pictures only tell part of the story. If you're involved in sound installation, touring sound or simply looking for the ultimate digital signal processing "tool kit" for your musical suite, audition the ULTRA-CURVE.

MSRP for the ULTRA-CURVE DSP 8000 is £649.00

BEHRINGER

Your Ear Is Our Judge

*Interactive Gain Control • **Interactive Ratio Control • For more information about the new ULTRA-CURVE DSP 8000 and the Interactive World of Behringer, please ask your local dealer or contact:

BEHRINGER U.K., St.Vincent House, 59 Woodbridge Road, Guildford, Surrey GU1 4RF. Tel: +44 (0)1483 458877. Fax: +44 (0)1483 458822.

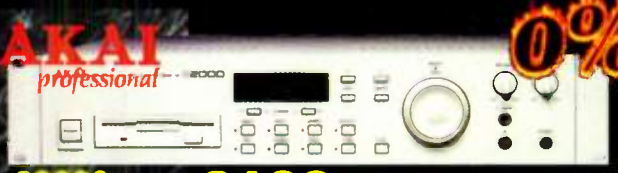
BEHRINGER Specialized Studioequipment GmbH, Otto-Brenner-Str.4, D-47877 Willich. Tel: +49 (0)2154-92060. Fax: +49 (0)2154-428523.

DAWSONS

Roland

VS880 Package
Roland Effects Board
Roland 850M Hard Drive
Headphones & Microphone
0%
£417 Deposit
plus 18 monthly payments of £89
Total 0% Credit Price £2199

AKAI professional



0%
S2000
10M Memory
Free Delivery
£199 Deposit
plus 18 monthly payments of £60
Total 0% Credit Price £1080

0%
S3000XL
10M Memory
Free Delivery
£499 Deposit
plus 10 monthly payments of £120
Total 0% Credit Price £1799

Roland

£165 Deposit
plus 10 monthly payments of £40
Total 0% Credit Price £565

ALESIS NEW

ADAT XT
GENUINE!!
£2585 inc. VAT!!!
Including free delivery to UK Mainland and Northern Ireland

TASCAM

DA20
£189 Deposit
plus 10 monthly payments of £20
Total 0% Credit Price £269

ALESIS

MIDIVERB IV
£325
Including free delivery to UK Mainland and Northern Ireland

MICROVERB IV
£245
Including free delivery to UK Mainland and Northern Ireland

Roland JV1080

£199 Deposit
plus 10 monthly payments of £30
Total 0% Credit Price £1199

GENELEC

Genelec speakers are now on permanent demonstration at our Warrington branch. Bring along your own source material Listen to the results

PACKAGE PRICES!!!

Dawsons specialises in Pro-Audio packges. We can supply desks, outboard, amplification and cabling (we even sell MACs and PCs). The more items you buy, the greater the discount. We believe our buying power allows you to get the best deal, all from one shop. Call us now on 01925 245422 and find out how you can benefit.

WRH

DAWSONS

Fostex SPIRIT

0% Finance

Deals of the Month

1. Folio SX & Fostex D80

- 20 inputs inc 4 stereo channels
- 4-bus mixing facilities
- 8 Direct Outs with pre-post fade
- 3 band EQ with mid sweep
- 3 auxillary sends
- 850 Meg Drive Supplied as standard
- 8 Track simultaneous recording
- units sync together for future expansion
- Uses inexpensive IDE Hard Drives
- 100% Compatible with DMT-8

£699 Deposit
plus 10 monthly payments of £130
Total 0% Credit Price £1999

2. Spirit Studio 16.8.2 & Fostex D80

Complete with.....
- Spirit Absolute 2 monitors
- Samson Servo 150 Amp
- Fostex Headphones
- Looms to connect and speakers cables

£769 Deposit
plus 18 monthly payments of £135
Total 0% Credit Price £3199

3. Spirit Studio 24.8.2 & Fostex D80

Complete with.....
- Spirit Absolute 2 monitors
- Samson Servo 150 Amp
- Octava MK219 Condensor Microphone
- Fostex Headphones
- Looms to connect and speakers cables

£999 Deposit
plus 18 monthly payments of £150
Total 0% Credit Price £3699

One of the main benefits of the Fostex D80 is its ability to allow **alternative hard drives** to be used for recording. These are connected to the D80 by using Fostex's own caddies (available at £35 inc VAT). Please call us for the latest up to date list of **compatible drives** alongwith prices that will work with the D80 and with the new **V2 Fostex DMT8**.
An **extension lead** is also available (at £35 inc VAT) that allows the D80's front panel to be removed and resited in a more **convenient** location.

Notepad

DAT Quality
10 Input
2 Band EQ
2 RIAA Inputs
Effects send
Effects return
48V Phantom Power
Complete with
Power Supply and
Free Delivery to UK
Mainland and
Northern Ireland

£199

Folio SX

DAT Quality
20 Inputs
4 Stereo Channels
100mm Faders
8 Direct Outs that
are switchable
pre/post fade
Dedicated Mono
Output socket
3 band EQ with
Sweep Midrange
48V Phantom Power
Ultramic™ Pre-Amps

£199deposit

Absolute 2s

Ideal for small, medium or large recording studios. Our best-selling set of speakers ever, we have teamed these up with a superb amplifier, the Samson Servo 150, free speakers leads and free delivery!

£469

Absolute Zeros

Compact nearfield monitor for accurate mixing on a budget. We have teamed these speakers up with the Pioneer A103 amp, free speaker leads and delivery to provide an ideal home studio monitoring set-up

£319

D80

850Meg Internal drive provides approx 20 minutes of CD quality recording alongwith 8 Track simultaneous recording. Additional units including DMT-8 can sync together for future expansion

£399deposit

DMT8

540Meg Internal drive provides approx 12.5 minutes of CD quality recording. A built-in mixer allows a CD quality mobile 8 track recording studio that is 100% compatible with the Fostex D80.

£399deposit

A Music Store for Life - not just for Christmas!

tel: 01925 245422

65 Sankey Street, Warrington, WA1 1SU
Fax 01925 417812
E-Mail: proaudio@dawsons.co.uk
Written quotations available upon request

Quiet Life

MINIMISING MIXER AND EFFECTS NOISE

When using effects, it's all too easy to add noise to your mix — and it's not always the fault of your effects units. PAUL WHITE offers a few practical tips for achieving quieter mixes.

People often complain that their effects units are noisy. Frequently, though, the entire blame for excess noise doesn't rest with the effects units themselves, but is a result of not enough attention being paid to proper gain structure within the mixer, and to ensuring that nothing reaches the effects unit that shouldn't. The input level gain on the effects unit itself is also vitally important, because too low a setting will result in excess noise, while too high a setting will cause distortion.

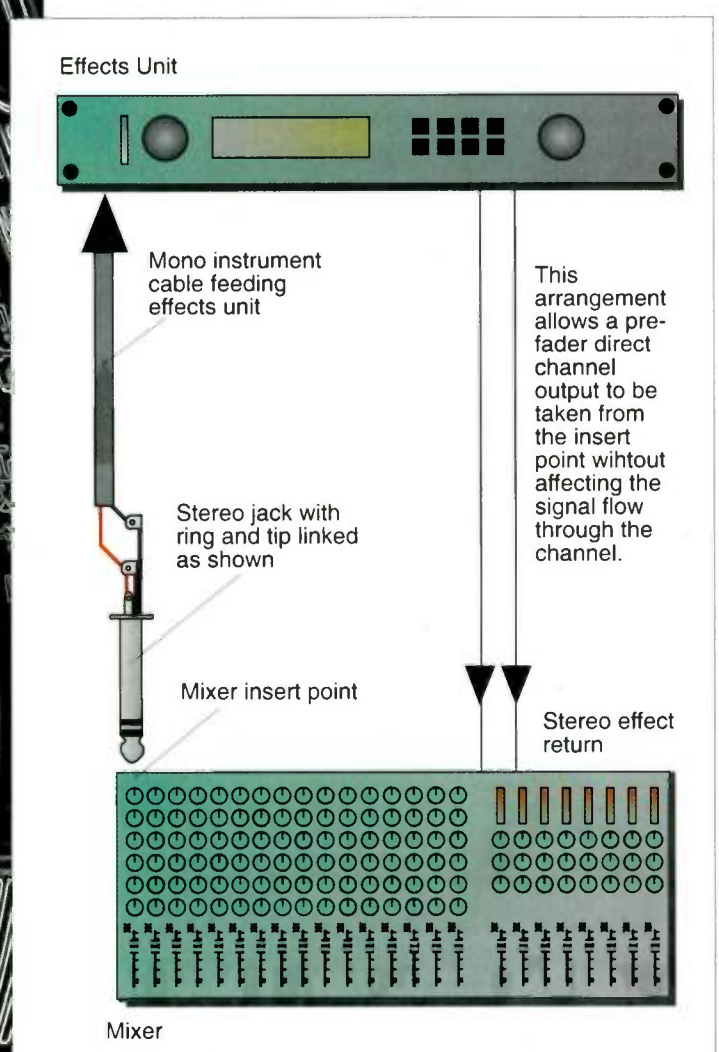


Figure 1: Construction of an insert direct out lead.

MINIMISING MIXER NOISE

Even though today's mixers are pretty quiet devices, a certain amount of noise is generated by the mixing circuitry itself, and though this can be minimised, the laws of physics conspire to ensure that some noise remains. One inescapable fact is that the more channels you mix together, the more noise (known as mix buss noise) you'll produce, even if some channels are muted. Optimising your input gains using the PFL (Pre-Fade Listen) buttons and meters will help achieve the best signal-to-noise ratio, but nothing you can do will eliminate all noise. Not only does mix buss noise occur when you mix your input channels down to stereo or to the desk's sub-groups, it also occurs in the aux send busses, so the more channels you have (all with aux sends), the more hiss you'll notice at the input of your effects unit.

Obviously it makes sense to turn the aux send controls right down on any channels not being used, but although this removes channel noise from the scene, it does nothing to help with mix buss noise — you could turn all your aux sends to zero and the noise would still be there. If more channels mean more noise, then fewer channels mean less noise, and if you have a mixer which will allow you to switch aux sends to different busses, you have a way to make unwanted channels effectively disappear. Let's say that two of your sends are switchable to aux busses 1,2 or 3,4. Providing you don't need all four effects busses, you could route channels which don't require effects to aux busses 3,4, leaving only those channels which need effects routed to 1,2. Now the mix buss noise at aux sends 1,2 will be reduced, because fewer channels are contributing. All unwanted channels are sending their mix buss noise contribution to the unused aux 3,4 outputs. You can do the same with your main stereo mix buss by ensuring that ▶

THE ONLY REAL SALE

THE TURNKEY MIDNIGHT SALE IS BACK

We're clearing the shelves in preparation for stock-taking and alterations to our Charing Cross Road premises. If you'll ever need one of the items listed here, you'll never find it this cheap again. Some items are new, most are ex-demo or second hand.

THIS IS NOT A WIND UP... THESE PRICES ARE REAL !!!!!!!!!!!!!!

Commences 7.00pm 'til Midnight Thursday 11th July

and then if there is anything left, through till the end of the month.

100's of items available, many are below half the original R.R.P.* For example :

	Original RRP (inc VAT)	Sale Price
Atari 520 + Monitor Computer (Needs Attention)	£ 699	£ 1
Fostex X26 Four Tracker (Needs Attention)	£ 349	£ 1
Roland R8 Sound Cards Selection	£ 79	£ 1
Emu Proteus 1 Orchestral Expansion Board	£ 269	£ 19
Niche Control Module 8 Channel MIDI VCA's	£ 599	£ 29
Digidesign Mac Proteus Emu Synth In Your Mac	£ 799	£ 29
Audix OM360XB Top Quality Dynamic Mic	£ 169	£ 49
360 Systems MIDI Bass First Sampled Bass Module	£ 499	£ 49
Yamaha Hello Music Computer Starter Pack	£ 349	£ 69
Fostex 6301B Professional Powered Monitors	£ 399	£ 89
Audio Technica TM1000 Quality Budget Condensor Mic	£ 199	£ 99
Viscount RD70 MIDI Data Filer	£ 299	£ 149
Yamaha KX5 Super Remote Keyboard	£ 499	£ 149
JBL Control 5 Monitor Speakers	£ 429	£ 169
Behringer Composer Automatic Compressor	£ 299	£ 189
Viscount EFX10 Best Value Multi Effects On The Market	£ 299	£ 199
Steinberg Cubase V3 Industry Standard Sequencer	£ 329	£ XXX
Digitech TSR12 SDisc Based Multi Effects	£ 429	£ 259
Novation Bass Station MIDI Controllable Analog	£ 349	£ XXX
Sony TCDD8 The Ultimate DAT Walkman	£ 599	£ 499
Tascam DA20 Project Studio DAT Machine	£ 799	£ 629
Emu Orbit Look No Further For Top Dance Sounds	£ 869	£XXX
Akai S2000 Expandable Sampler	£ 999	£ XXX
Korg Prophecy Unique Sounding Monosynth	£ 999	£ 849
Roland JV1080 Best Selling Synth Module	£ 1,199	£ XXX
Emu ESI32 + SCSI Ground Breaking Sampler	£ 1,199	£ 899
Roland VS880 All Digital Hard Disk 8 Track Portastudio	£ 1,499	£ 1,249
Akai S3000XL Industry Standard Sampler	£ 1,799	£ 1,549
Soundcraft Ghost LE 24 Channel Superb New Mixer	£ 3,899	£ XXXX

2 Tracks

Denon DCD1290	£ 99
Fostex MC102	£ 129
Marantz PMD302	£ 169
Phillips DCC170	£ 199
SONY 690	£ 399
JVC XDZ1010TN Dat machine	£ 469
SONY 1000ES	£ 499
Tascam DA30 II	£ 999

Computer Music

Band-in-a-Box for Mac V5 upgrade	£ 1
JLC Syncmaster	£ 1
Cadenza Dos-Windows upgrade	£ 5
Dr. T Singalong Software	£ 5
Roland SC7 software kit (without module)	£ 5
Sound Designer	£ 5
TRAX windows	£ 5
Cakewalk Express for Windows	£ 10
The Jammer	£ 10
Voyetra Sequencer Plus Junior	£ 10
Cadenza Windows	£ 25
MIDIMan MM401 interface	£ 30
Cubase Lite	£ 35
Max Pac	£ 35
Goldstar GSC-X21	£ 49
Sound FX3000 classic	£ 49
Voyetra V22	£ 69
Yamaha Sound Edge SW20	£ 69
Notator SL Atari	£ 89
Emg Atari Monitor	£ 99
JLC Mac Nexus	£ 99
Key Midiator MP128	£ 99
MAC 12" RGB Display	£ 99
Midiman Mac Sync Man	£ 99
Musicator Dos	£ 99
Opcode StudioVision A/V	£ 99
Steinberg Timelock	£ 99
Yamaha Hello Music	£ 99
Atari SM125 monitor	£ 129
Cubasis Audio	£ 149
Musicator Windows 2.1	£ 149
ATARI 520 STFM 1 meg	£ 169
Digidesign Audio Media LC	£ 199
Encore Education Pack	£ 199
Motu Performer 5	£ 199
MOTU Midi Express	£ 249
Musicator Audio	£ 249
Turtle Beach Tahiti	£ 249
Digidesign Masterlist CD	£ 299
Encore 3.0	£ 299
Opcode Studio Vision Pro	£ 399
Digidesign Bridge I/O	£ 499
Digidesign 882 I/O	£ 699
Digidesign Sessio 8 Mac Core	£ 799
Apple Powermac 7100 8/350	£ 899
Yamaha CBX D5	£ 999
Digidesign Protools III Core (NUBUS)	£ 2,999

D.J.

Citronic Battlemixer	£ 69
Gemini PMX7	£ 69
KAM GM40	£ 69
Gemini PMX12	£ 79
Dynamix Made 2 Fade	£ 99
Gemini PMX15	£ 99
Gemini PMX15A Dj Mixer	£ 99
Gemini PMX25	£ 119
Gemini PS626	£ 149
Gemini PMX2001	£ 229
Citronic Master Mix	£ 269
Vestax PDT 4000	£ 299
Citronic SM250GS	£ 349
Vestax PDT 5000	£ 399
Citronic SM450	£ 429
Vestax PMC 15SL	£ 449
VESTAX 20SL	£ 599
Vestax PMC 20SL	£ 699

Keyboards

Korg SPC06 Rom card	£ 10
Fatar Studio 49	£ 59
Fatar CMK49B	£ 69
Goldstar GMK49B	£ 99
FATAR Studio 61	£ 119
Fatar CMS61	£ 149
ROLAND EP-5	£ 149
Fatar Studio 610	£ 169
Yamaha KX5	£ 169
Yamaha CS5 Analog Synth	£ 199
Roland AX1	£ 299
Roland SK50	£ 299
Yamaha SY35	£ 299
KAWAI K11	£ 369
Roland EP7	£ 499
Ensoniq SQ1	£ 569
Viscount FX1000	£ 699
Roland FP1	£ 799
Viscount SV100 Piano	£ 999
Yamaha VL1	£ 1,199

Mics

Arbiters SD2500 mic	£ 5
Fostex M201	£ 10
AUDIX CD7H	£ 19
AUDIX C1	£ 29
AUDIX CD110	£ 29
AUDIX UD360	£ 39
DB technolgies VHF receiver	£ 49
AUDIX UEM-81	£ 89
SKB Mic Flight Case	£ 89
Audio Technica MB1000	£ 99
AUDIX OM2	£ 99
AKG C451	£ 129
AUDIX SCX-1	£ 129
AKG Sw200 Radio Mic	£ 169
Samson SR2 wireless system	£ 169
Nady 49 GT	£ 199
Nady 201 GT	£ 229
Shure ECL23/58	£ 249
Nady 650R	£ 299
Geffel UM70	£ 399
Manley Reference Cardioid Mic	£ 1,499

Miscellaneous

Microsoft Works	£ 1
Patton Strikes Back (Mac Game)	£ 1
Clarisworks for Windows	£ 5
Fostex 8200	£ 5
Fostex 8545	£ 5
MacDraw Mac	£ 5
Macwrite Pro for Mac	£ 5
PC keyboard	£ 5
PC Mouse	£ 5
Printer Dataswitch	£ 5
MacWrite II Mac	£ 10
Word Perfect for Mac	£ 15
Akai U1	£ 19
Epson Monitor	£ 20
Akai MZ1000 monitor	£ 25
PBM 48x patchbay	£ 35
Pearl 12" Tom Tom	£ 40
MX8 Midi patchbay	£ 49
VGA Monitor	£ 49
Phillip Rees Little M	£ 59
XRi XR25 MTC unit	£ 79
National 14" colour Television	£ 99
Viscount RD-70	£ 169
Yamaha WX11	£ 199
JLC Cuepoint	£ 299
VISCOUNT RD-800	£ 299
Akai DP88 Digital P/B	£ 599

Mixers

AUDIO LOGIC SC610 mic/line mixer	£ 49
Simmonds Trixer	£ 49
Soundcraft Saphyre Stereo module	£ 49
Studio Research 8:2	£ 79
Studio Research 12:2	£ 129
Studio Research NEM24	£ 129
Samson MixPad 9	£ 149
Studio Research 16:2 desk	£ 149
TASCAM MM20 mixer	£ 199
Mackie 1202VLZ	£ 299
Soundcraft Folio Lite Pack	£ 299
YAMAHA DMP-11	£ 329
YAMAHA DMP7	£ 399
Roland MGS64	£ 429
ROLAND M240R	£ 499
Samson MPL2242	£ 499
Soundcraft Spirit Monitor 16 ch	£ 599
Allen & Heath GL2	£ 699
Tascam M2600 24:8	£ 1,499
Yamaha ProMix01	£ 1,499
Allen & Heath GL3000 24ch & Meter Bridge	£ 2,999
Soundcraft 6000 32:16 with Flightcase	£ 3,499
Soundcraft DC2000 32	£ 9,999

Monitoring

4 way speaker switcher	£ 20
Fostex T10	£ 20
Fostex SP7	£ 39
Kawai PM102 Powered Monitors	£ 39
Fostex T20	£ 45
Goodmans Active 75 speakers	£ 49
Tannoy M20	£ 69
AKG LSM-50 monitors	£ 79
JBL control micro	£ 99
OTIS Power Station x 2	£ 99
Yamaha MS101	£ 149
Yamaha MS20 monitors	£ 149
Fostex 6301B	£ 150
Acoustic Research Red Box II's	£ 169
JBL Control 5's	£ 199
JBL GS115 (pair)	£ 199
Tannoy PBM6.5 Mk2	£ 199
Yamaha A100a	£ 199
Yamaha MS202	£ 199
Alesis Monitor 1's	£ 249
Waldorf Emes White Monitors	£ 299
Waldorf Emes Red Monitors	£ 499

Mulittracks

Tascam LMTC sync box	£ 49
Akai IB112T	£ 99
Akai IB802T	£ 99
Tascam MMC100	£ 99
Alesis Adat Mk1	£ 1,699
Fostex RD8	£ 1,999
Sony PCM800	£2,999

Outboard

QED RIAA Preamp	£ 15
Sideman Compressor	£ 15
Vestax EQ3	£ 15
Lexicon Dual FX Card	£ 49
NICHE audio control module	£ 49
TC 2290 Memory Expansion	£ 50
Art DXR	£ 69
DBX 150X noise reduction	£ 69
FRONTLINE DDS-20 Delay	£ 69
Art DXR Elite	£ 99
Art Graphic EQ	£ 99
Fostex Compressor Limiter 3070	£ 99
Waldorf Miniworks Eq	£ 99
ALESIS Microverb III	£ 129
Art FXR Elite	£ 129
BBE Sonic Maximizer	£ 129
FURMAN PL-8E	£ 129
Viscount EFX1	£ 149
ALESIS 3630	£ 169
Audio Logic 660	£ 169
Digitech Meq14	£ 199
Digitech RDS8000	£ 199
La4g	£ 229
La 4x4	£ 249
Digitech DHP33	£ 299
Boss SX700	£ 349
Boss GX700	£ 369
DigitechTSR24	£ 399
Digitech DHP55	£ 499
Langevin Pultec EQ	£ 599
Lexicon LXP15 II	£ 699
Manley Mid Frequency EQ	£ 699
Manley Pultec EQ	£ 899
Lexicon PCM80 + Dual FX Card	£ 1,899
Eventide H3000DSE	£ 1,999

P.A.

Dynamix MDP	£ 5
Arbiter Sp80 Karaoke speaker	£ 10
SP80 Bass Reflection	£ 10
PA Speaker Stands	£ 35
Feneder Sidekick	£ 69
Studio Research PA Speaker	£ 69
Soundtech 100w Speaker	£ 79
Big Echo CD player	£ 99
Big Echo DKK200	£ 99
Dynamix 12" Powered Speaker	£ 99
EV XP200 Controler	£ 99
Soundtech PL250M	£ 99
Bose 802C Mk1	£ 149
Dynamix DPA 600	£ 149
Amcron powerbase 1 amp	£ 199
Dynamix DPA1000	£ 199
H&H VX150	£ 199
JBL 8SRs	£ 369
JBL Control10 (pair)	£ 449
Peavey XRD680s	£ 469
JBL Control 12SR (pair)	£ 499
Peavey CS1000x	£ 699
JBL M355 Subbass Pair	£ 799

Portastudios

Fostex X26 (needs attention)	£ 1
Fostex X18H	£ 149
Tascam Porta 03	£ 149
Tascam Porta 07	£ 249
FOSTEX XR-7	£ 349

Sampling

Emax II memory expansion	£ 1
Akai DART software	£ 5
Akai Sampletools	£ 5
Akai IB-101A	£ 10
Akai IB103	£ 10
Akai EXM006	£ 49
Emu Emax 2MB Expansion	£ 50
S3000 SCSI Board	£ 59
Hitachi CD rom	£ 69
Akai IB208P	£ 99
Akai IB803M	£ 99
Sanyo Double Speed CD rom	£ 99
128MB Magneto Optical Drive	£ 199
Akai 302D	£ 199
Akai EXM008	£ 199
Emu EIII 8 MB Expansion	£ 199
Micronet Quad Speed CD rom	£ 199
Akai IB304F	£ 249
CASIO FZ-10M	£ 299
Akai EB16	£ 329
Akai EXM3008	£ 369
CASIO FZ-1	£ 399
EMAX SE	£ 399
Roland JS30	£ 399
Akai CD3000	£ 1,099
Emu EIIIXP	£ 1,399

Sound Modules

Emu Proteus 1 Orchestral Board	£ 45
KAWAI GB-1	£ 49
360 Systems MIDI Bass	£ 69
ROLAND TR-505	£ 69
Roland SC7	£ 89
Boss DR550	£ 99
Kawai G-Mega LX	£ 99
Roland VEJV1	£ 99
Yamaha FB01	£ 99
Emu Proformance	£ 149
KAWAI K4r	£ 169
YAMAHA TG55	£ 249
Bass station rack	£ 299
Viscount D9	£ 299
Yamaha MU50	£ 299
YAMAHA TX802	£ 349
Emu Procussion	£ 399
KORG M1R	£ 429
EMU Vintage Keys	£ 549
MARION Pro Synth	£ 599
ROLAND Super JX	£ 599
Emu Morpheus	£ 699
Emu Vintage Keys +	£ 699
Yamaha VL1m	£ 849
Kurzweil K2000R	£ 1,499

• • • PLEASE NOTE • • •

All prices include 17.5% VAT. Everybody is guaranteed at least one item at 1/2 price or less. XXX means price cannot be quoted before the sale has commenced.

Products are sold on a strictly first-come first-served basis. Personal callers on the evening of July 11th will take precedence. The first received telephone, fax or mail order (which must include full payment + £9.99 P&P) will be held until Monday 15th July and then only cashed if the item is still available. The item (or your cheque if your are unsuccessful) will be sent to you to arrive no later than the following Saturday (cheque clearance allowing).

The bigger the reduction, the more likely it is that the item will be sold on the night of the 11th. Please don't waste your time enquiring about the £1 items !

TURNKEY
114-116 CHARING CROSS RD
LONDON WC2H ODT
Tel. 0171 379 5148 Fax. 0171 379 0093
Opposite Foyles. Nearest tube, Tottenham Court Rd

WRH

Minimising Mixer and Effects Noise

▶ unused channels are not routed L-R. As mentioned earlier, mere muting isn't enough.

It's also important to ensure that you have sensible settings on the mixer aux send control being used:

- The channels with the highest effect levels should have their sends set at around three-quarters of maximum, and the master send control should be in a similar position.
- The input gain control on the effects unit itself should then be set while watching the unit's meters. If it has selectable +4dBu or -10dBV level switching, choose the correct setting to match your mixer. This will usually be the one that lets you work with the input gain control closest to the centre of its range.
- Finally, set the effect output level to three-quarters of maximum, and use the aux return gains on the mixer to set the amount of effect you hear. Once you've done this, you can go back to using the channel aux sends to make adjustments in the usual way.

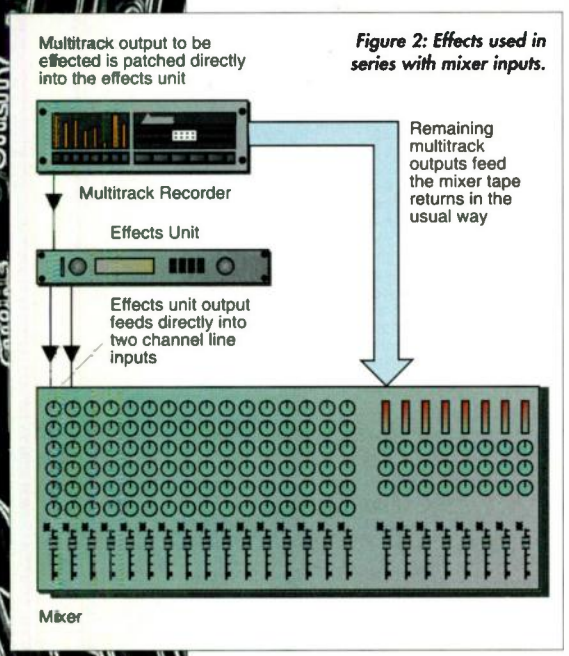
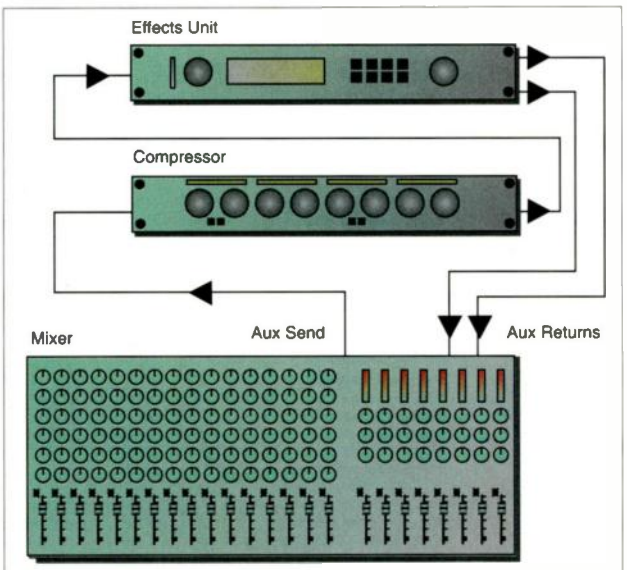


Figure 2: Effects used in series with mixer inputs.

GO DIRECT

If you have an effect that only needs to be applied to one mixer channel, it makes little sense to use the aux send system, because you'll accumulate a lot of noise for no purpose. A better option is to drive the effects unit from the channel direct output (which is generally post-fader), or, if you don't have a direct output jack, use the insert point. You can take a pre-fade feed from an insert point without breaking the signal path by using a special lead with a stereo jack at the mixer end, where the ring and tip connectors are linked together; instructions for making such a lead are shown in Figure 1. Using this method is less than ideal, because the effect level will be independent of the channel fader setting, but if the track will require little or no gain adjustment during the course of the mix, this limitation should be acceptable.

If you find yourself without insert points, there's still a way out, because you can take the appropriate multitrack output directly into the effects unit, and then feed the two outputs (presuming the effect is stereo) into two mixer channels, as shown in Figure 2. The dry/effects balance will now have to be set using the effects unit's own Mix control.



By setting the compressor to act as a limiter, protection against overload is provided for the effects unit. This removes the need to leave a generous amount of safetly headroom and consequently improves the signal-to-noise ratio.

Figure 3: Using a limiter before an effects unit.

GAIN WITHOUT PAIN

Applying the above techniques should make things a lot quieter, but there are still further gains to be made. For example, most digital effects units overload quite unpleasantly, which forces you to set a lower than ideal input level to leave an adequate safety margin. If you have a spare compressor/limiter lying around, you can patch this in before the effect and set it to act as a limiter, by dialling in the highest compression ratio possible. Set the threshold so that the compressor limits at a level just before that at which the effects unit overloads, and you should be able to increase the average signal being fed into the effects unit quite noticeably. In turn, this will improve the effect unit's signal-to-noise ratio. The actual setting of the limiter should be done by ear, as most effect unit meters are notoriously unreliable. Audible distortion may occur before the meter hits the red on some effect patches, especially those with lots of feedback, such as flanging. Figure 3 shows how a limiter may be used in conjunction with an effects unit.

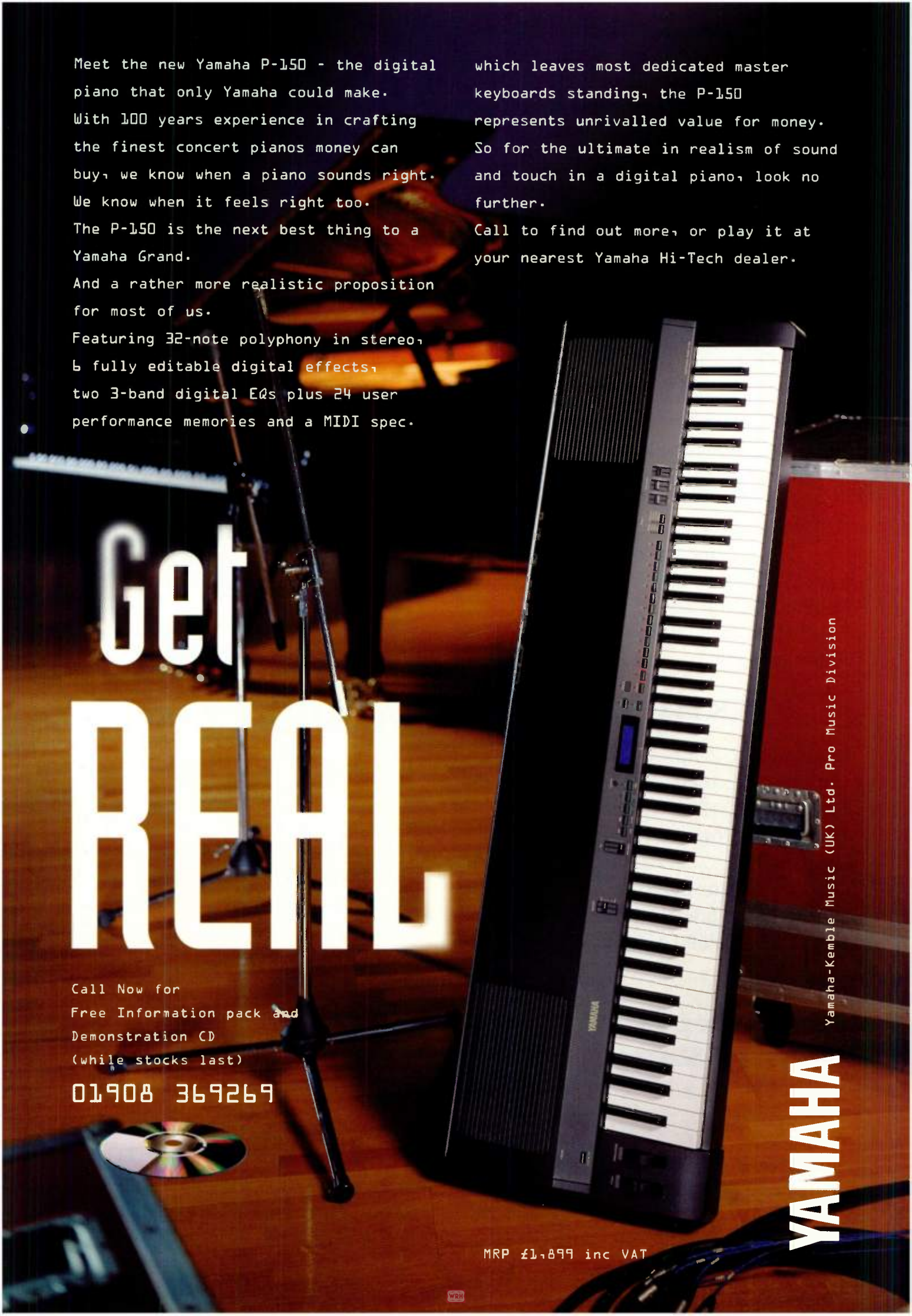
It is also possible to gate the input to your effects unit, or to patch in a single-ended noise reduction unit (SNR). A gate will ensure that the input to your effect unit stays firmly off unless some signal is being fed into it, and an SNR's dynamic filtering will bring about an improvement in noise performance even when signal is present. If you're using a compressor with a built-in expander/gate to limit the effects unit input, the internal gate may be used for this purpose. As a rule, it's a bad idea to process the output of an effects unit in any way, as this invariably compromises the quality of any reverb tails. However, MIDI muting systems may be used to mute the outputs from effects units until they are required.

Ultimately, the absolute signal quality available is governed by your equipment, but more often than not, equipment is used well below its maximum potential. Use the simple techniques discussed here, and you should find your mixes noticeably less noisy in the future. SOS

Meet the new Yamaha P-150 - the digital piano that only Yamaha could make.
With 100 years experience in crafting the finest concert pianos money can buy, we know when a piano sounds right.
We know when it feels right too.
The P-150 is the next best thing to a Yamaha Grand.
And a rather more realistic proposition for most of us.
Featuring 32-note polyphony in stereo, 6 fully editable digital effects, two 3-band digital EQs plus 24 user performance memories and a MIDI spec.

which leaves most dedicated master keyboards standing, the P-150 represents unrivalled value for money.
So for the ultimate in realism of sound and touch in a digital piano, look no further.
Call to find out more, or play it at your nearest Yamaha Hi-Tech dealer.

Get REAL



Call Now for
Free Information pack and
Demonstration CD
(while stocks last)

01908 369269

MRP £1,899 inc VAT

Yamaha-Kemble Music (UK) Ltd. Pro Music Division

YAMAHA

215 Harwich Rd
Colchester
Essex
CO4 3DF

tech-mate uk

Tel: 01206 793355
Fax: 01206 791371
E-Mail: sales@techmate.demon.co.uk

Monster Hi-Tech & Pro Audio Sale!!!
Very Limited stocks . . . . HURRY!!

Synths & Keyboards

Roland XP-10 ex-demo £449
Roland D550 s/h £349
Roland RD300S s/h £599
Yamaha QS300 ex-demo £799
Yamaha SY35 s/h £249
Roland JD800 s/h £1199
Alesis QS6 new £749
only 3 available
Yamaha MU50 ex-demo £299
Yamaha MU 80 new 1 only £469
Fatar 1176 ..... £699
Fatar Studio 900 ..... £529

Mixers / FX

Samson MPL 2242 - 1 Only £579
Samson MPL 1640 - 3 Only £399
Samson MPL 1502 - 2 Only £239
Samson S6 Powered Mixer £325
JBL Control 1 ..... £249 pair
JBL Control 1 ex-demo ..... £189 pair
Samson 2x31 graphic £249
Samson Servo 500 ex-demo £279

SY85 / TG500

Ethnic card set

2x cards Brilliant!!

Only £49

W7 Boards

Vintage, Piano or Rhythm

Only £49 each

W5/7 Disks

Large Choice

Only £15 each

PC/Mac Bargains

Musicator £169
V24S £179
V22 ..... £79
E-Magic Micrologic £75
Mac - Logic 2.5 ..... £299
Only a few of the above available
Samplitude Pro £175
Key MP128S interface SMPTE £229

Zip Drives Only £179

Only 5 left

Roland JV Boards Only £199 each!!

Akai S2000 ex-demo £789

ex-demo Akai Modules Only £265

Flash Cards 2.8 meg for MS-1 Only £149!!!

Only 2 Left

Tel: 01206 793355

SPECIALS!

Packages

DB50XG + Interface Card £179
Cakewalk Audio + Tahiti £565
Cubasis Audio + Tahiti.....£494
Yamaha YST10 +
Sub-Bass Speakers £149
Cubase 3 + Tahiti £565

Interfaces

Midiman Winman £49
MPC 401 + wave socket £69
MQX 32M smpte card £189
Midiman Parallel.....£79
Macman £39
CALL FOR FULL LIST

Midi Keyboards

Evolution MK10 .....£59
Studio 49 .....£99
Roland PC200GS £159
Roland A33 .....£349
Studio 900 .....£549
Yamaha CBXK1 .....£125
Yamaha CBXKIXG.....£339

Maui

by Turtle Beach
Sample store + GM sound card
playback your own samples in real time - Expandable to 8 Meg
was £189..... **now £99!**

Sequencers & Hard Disk

Cakewalk Pro Audio .....From £339
Cubase 3 PC or Mac Audio! £299
Cubasis Audio .....From £169
Cakewalk Pro 3 .....£199
Cakewalk Home Studio £99
Cakewalk Express £69
Cubasis -PC or Mac £129

Call for PC / Mac info pack
Call or Fax
01206 864994

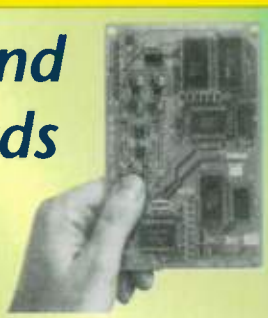
Steinberg XDMC

GM + 16 bit audio card,
Games Compatible,
+ software only £79

Notation

Music time, PC or Mac £99
Rhapsody £249
Encore.....£399
Encore Academic £279
Personal Composer £99
Cubase score PC or Mac £399

Sound Cards



Yamaha DB50XG.....£129
Incredible daughterboard, over 750 sounds
Yamaha SW60 .....£149
Turtle Beach Tropez +.....£269
Turtle Beach Pinnacle .....£CALL
Turtle Beach Tahiti.....£279
Digital Card D Plus.....£CALL

KORG
Prophecy, 05RW,
Trinity Plus
Trinity, i5S, Trinity Pro
X5D, X3,
X5DR, iH

Roland
MC303,
VS-880, XP-10,
XP-50, A-33,
PMA-5, JV1080

YAMAHA
CS1X, MU50,
MU80,
QY22,
QS300,
QY700,

AKAI
Samplers & Modules

CALL · CALL · CALL · CALL · CALL · CALL

SKB Cases Cheap

Soundtraks Topaz, Mini & Mocro Mixers

Digitech Studio Quad

Free Parking & Coffee

TeeBee Or Not TB?

SYNTECNO TEEBEE ANALOGUE SYNTH MODULE

pros & cons

SYNTECNO TEEBEE £529

pros

- Recreation of classic analogue bass monosynth sound.
- Authentic control of Slide and Accent.
- Lots of additional features.

cons

- Unusual user interface.
- Power-off thump.
- High price — though this reflects its versatility.

summary

For the person who needs the extra features, this could be a one-box solution. But there are lots of other ways to get similarly authentic sounds, so let your ears do the choosing.

SOUND ON SOUND

With prices for an original Roland TB303 as high as £1000 on the open market, it is unsurprising that the last two years have seen a number of manufacturers attempting to emulate the 303 in a cheaper, MIDI'd form. MARTIN RUSS checks out the latest pretender to the throne...

Back in the days when I didn't have a receding hairline, a mortgage, and kids, I borrowed a TEAC 3340 4-track tape machine from a friend, and also took up his offer of a couple of bits of silver Roland gear as well. Armed with a 2-track tape recorder and a primitive electronic piano, I was now ready to record my first serious cassette!

This equipment may seem outdated to the modern *SOS* reader, but at the time, the silvery Roland boxes — a TR606 Drumatix and TB303 Bassline — completely changed my opinion about sequencers, drum machines and expanders. With the aid of a DIN cable, you sync'd the two boxes together, and could programme in your own drum and bass patterns. Commonplace now, perhaps, but not 14 years ago!

Of course, many would expect the passing of time to have consigned both of these devices to the scrapheap long ago. But just as popular musical styles seem to cycle round, musical equipment also seems to have periodic returns to favour, and as everyone knows, the TB303 has become a sought-after collector's item, in common with many other analogue pre-MIDI instruments (although the 606 seems to have been eclipsed by the later TR808 and 909 drum machines). Prices of the TB303 — which you could hardly give away 10 years ago — have risen to dizzy heights, so that people unable to afford the real thing have had to resort to sample CDs. A ▶

FOLIO SX

SPIRIT

THEY'D SAY...

The last word in state-of-the-art, multi-environmental mixing consoles for front-of-house and studio multitracking. SX has a massive 35 inputs as standard (inc. DC input) and 30 outputs*.

Scud-proof sans pad Preamps that give an embarassing 1000-fold gain capability with 22dBu of head (and shoulder) room.

QuadraBus Routing Dynamics conquer the limitations of musically-challenged stereo mixers. Wallow in the sheer power of two extra outputs.

Bi-functional Direct Facility – an almost totally unique feature that lets you decide the orientation of your outputs: twice the track laying potential of conventional mixers.

King-size Infinity Faders. Every SX comes with 72" (1800mm) of low friction carbon track faders. [18 x 4 x 100mm faders donates 72"]

Herculean EQ: Boy, does this system sub-structure work hard, using our near unique super sweep function there are infinitessimal bands to choose from.

Archimedian Auxiliary Architecture – we've got it! 90 golden combinations of EQ and monitor sends. [Archimedes quotient = (15 x 3 Aux outs) x 2 combinations]

Homogenous Track Potentiometers permit undeviating rotational incrementation.

Micro-Monocoque Construction enables super-abundant component insertion. Geometric ergonomics facilitate a minimal rackmount footprint.

EN50081-1-1992 Emissions and EN50082-1 1992 Immunity Naturally, SX comfortably surpasses these standards.

* Including all inserts, direct outs, groups, mono bus and anything else we could think of.

Wow!

Rush me a 4-color process lithographic impression packed with enhanced data and superfluous technical rantings on the Folio SX mega live/studio gizmo.

Name: .....

Address: .....

.....

.....

.....

Planet: .....

Spirit by Soundcraft
Harman International Industries Ltd.
Cranborne House
Cranborne Industrial Estate
Cranborne Road, Potters Bar
Herts EN6 3JN England
Tel: +44 (0)1707 665000
Fax: +44 (0)1707 660401

http://www.spirit-by-soundcraft.co.uk

WE SAY...

IT'S SAD that some mixer-manufacturers resort to hype and long, technical sounding names to describe features that every self-respecting company has used for ages but doesn't shout about. This junk-food mentality only makes it harder for you to decide what's good and what isn't.

Judge Folio SX with your ears, not by words: visit your nearest Spirit dealer or send for the straight-talking brochure.

SX is a powerful, multipurpose mixer with DAT quality sound, housed in a freestanding frame with carry handle. It has 20 inputs (including 4 stereo channels) as standard – enough for most live and recording situations.

FACT: SX's 12 mono inputs have UltraMic™ preamps, 60dB of gain range and +22dBu of headroom, allows *any* mic or line device to be plugged in.

FACT: SX is a 4-bus mixer. In addition to the mix outs, two sub-buses allow you to record groups of instruments to multitrack, send them to additional speakers, or sub group to mix. SX also has a dedicated Mono Out.

FACT: SX's 8 Direct Outs are switchable pre/post fader so they are equally useful when recording in the studio or at a gig.

FACT: 100mm faders throughout give you more resolution and finer control over your mix than the 60mm faders found on many more expensive mixers.

FACT: SX's 3-band EQ with swept mid is a real "British EQ". Custom-designed controls at carefully chosen frequencies produce a warm, natural sound. A steep 18dB/Octave High Pass Filter effectively reduces low end muddiness.

FACT: Of the 3 Auxiliary Sends, 2 can be pre- or post-fader. This makes SX equally suited to "monitor heavy" live performances or "effects heavy" mixes.

FACT: Unlike many small-mixer rotary controls, SX's have been custom-designed to give an even spread and consistent control around their sweeps.

FACT: By using the latest surface-mount technology, SX fits all these features into a rugged, compact frame which can be optionally rack-mounted into a 10U space in a matter of minutes.

FACT: SX meets stringent EC RFI requirements so that RF emissions are minimal. CE

IGNORE THE HYPE - JUST LISTEN

SPIRIT
By Soundcraft

H A Harman International Company

Please send me further information and a free application book written by respected pro-audio journalist Paul White on how to get the best from a mixer. I am interested in Folio SX for:

Application: .....

Instrument played: .....

I read the following magazines regularly:

.....

Name: .....

Address: .....

.....

.....

SOS

Syntecno TeeBee

number of manufacturers have sought to plug this gap in the market over the past couple of years: Novation and Control Synthesis, for example, have had TB303-soundalike bass synths on the market for some time, and Roland are now even providing their own alternative in the form of the forthcoming MC303 Groove Box. The latest MIDI-equipped TB303 recreation is the unit I'm looking at here — the Syntecno TeeBee.

HIDDEN DEPTHS

The standard black, anodised aluminium front panel of the 1U-high, rackmounting TeeBee has little of the appeal of the '80s silvery original, and is confusingly labelled 'T303'. But appearances are often deceptive, and the TeeBee is no exception. Hidden behind that front panel are:

- A monophonic bass synthesizer.
- A 4-channel MIDI-to-CV converter.
- Five rotary controls which can act as MIDI Controllers.
- An MTC (MIDI Time Code) to Roland Sync24 converter.
- A simple real-time sequencer.
- An auto-wah filter effects processor.

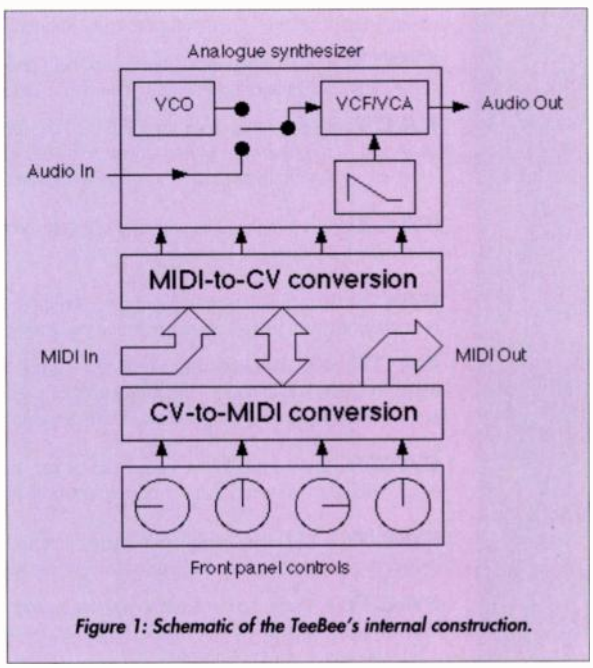


Figure 1: Schematic of the TeeBee's internal construction.

As you can see from the picture heading this review, the TeeBee's front panel features just a few controls, and at first it seemed a little hard to believe that all the TeeBee's functions were controlled by a push switch, a 'Sawtooth/Square' selector switch and five rotary controls. But the TeeBee manages to make the most of the meagre front panel furniture by using a very unusual audio feedback system instead of the more usual LED or LCD display — more on this shortly.

The rear panel holds 14 connectors, although eight of these are 3.5mm mini-jacks for the 4-channel MIDI-to-CV/Gate conversion. There are two MIDI Thrus, and the MIDI Out can be defined as an Out or a merged Out and Thru. The audio output is a standard mono jack, and the unit uses an external power supply. In addition, the front panel also features a jack socket marked 'Analogue In' — see 'External Processing' box for further details.

Unlike most other vintage monosynth reworkings, the TeeBee is not just an analogue synthesizer with a MIDI-to-CV converter attached. The positions of the front panel rotary controls are converted to MIDI Controller messages and made available at the rear panel MIDI Out sockets; they're also used to control the synthesizer parameters and even held inside the MIDI SysEx memory of the TeeBee. The result is that the rotary controls can not only be used to control the synthesizer sound as you would expect, but they can also be used as general-purpose MIDI Controllers, if 'Local Control' is turned off. And because the synthesizer settings are derived from the MIDI Controller settings and not just from the front panel controls, external MIDI Controllers or SysEx dumps can be used to change the synthesizer sound. If you're having trouble visualising this, take a look at Figure 1, which shows the internal layout of the TeeBee in diagrammatic form.

The TeeBee does not have any internal sound memories. Instead the entire setup and front panel control positions (with the exception of the

THREE'S COMPANY: TERNARY CODING

The rotary knobs of the TeeBee use ternary coding to control its internal parameters. Ternary is a close relative of the binary coding that is used in digital equipment, but instead of having two different values (on and off, or 1 and 0), it has three. Ternary coding is used in some telecommunications applications, where the three states mean no current, or current flowing in one direction, or current flowing in the opposite direction. The XMIDI proposal also used the same ternary coding of currents in order to extend the numbering system used in MIDI.

Syntecno provide a reference table, which means that you don't need to learn how to count in ternary, but here's a comparison chart showing the first 16 decimal, binary and ternary numbers so that you can get a feel for how they work:

DECIMAL	BINARY	TERNARY
0	0000	000
1	0001	001
2	0010	002
3	0011	010
4	0100	011
5	0101	012
6	0110	020
7	0111	021
8	1000	022
9	1001	100
10	1010	101
11	1011	102
12	1100	110
13	1101	111
14	1110	112
15	1111	120

The Digital Village

The Digital Village guarantee

At The Digital Village we believe in getting it right first time, every time. All our custom digital audio systems are thoroughly checked before installation and backed with our assurance that they function correctly. We have the greatest confidence in every system we sell - so that you can too!

- BUY -

All systems supplied are installed by our expert staff and are guaranteed to work to their published specification from day one.

- WITH -

Any hardware problems occurring within the first three months will be diagnosed by our expert staff and any faulty hardware will be swapped out immediately.

- CONFIDENCE -

All systems supplied have been assessed for suitability for their intended use. If they fail to perform adequately within seven days, we will credit the full purchase price against an alternative system of similar or greater value.

Please ask about our 30-day upgrade plan.

Do you want to configure a studio set-up? Do you need to sparkle up your mix (Bring in your tapes on DAT and we'll show you how to turn it into a master). If you need advice on Desks, Mics, EQ, Compressors, Exciters, Multi-FX, etc,

SPEAK TO NICK: Drawmer, Lexicon, TLA, Eventide, Joe Meek, Tube-Tech, Mackie, Neumann, Sennheiser, Phonic, Behringer, AKG, Røde etc.

Confused by which computer hard disk recording system to buy? We have in our 1st floor studio the latest PROFESSIONAL versions of software and hardware for the Mac, Falcon and the PC.

SPEAK TO GAVIN: Audiomedia II & III, Pro Tools Project, Session 8, Pro Tools III, Session, Soundscape, Yamaha CBX D5, C-Lab Falcon, Emagic Notator Logic, Opcode Vision 3.0, Studio Vision 3.0, Digital Performer, Freestyle, Steinberg Cubase Audio (PC & Mac), Cubase Audio 16 (Falcon), Timebandit & Recycle.

If you're wondering which keyboard or module is right for your application we have the low-down on all the sounds, features and street prices. If you realise that buying a sampler without joining the DIGITAL VILLAGE SOUND LIBRARY is a foolish thing to do....

SPEAK TO RAY: Akai S3200XL plus 16meg RAM plus 540meg Removable drive,

only £3499!

Second user and classic gear seems to be piling up and needs a new home, ring for details. Ring for demos or great prices on stand alone Hard Disk Recorders such as the Roland VS880, Fostex DMT8, Akai DR8 etc, etc.

Speak to THE EXPERTS

0181 440 3440

Phone for details on CDR and also to book a demo on the Yamaha 02R

The Digital Village

230 High Street, Barnet, Herts, EN5 5TD U.K.

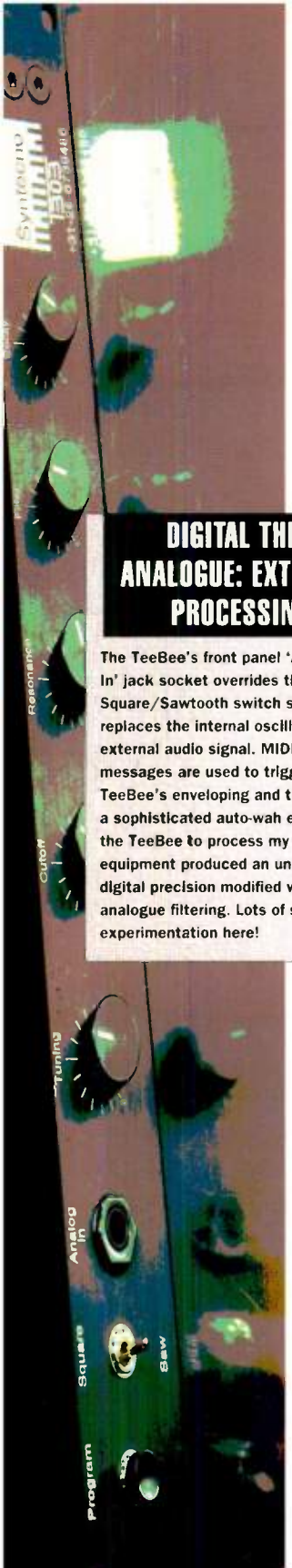
Tel: 0181-440-3440

Fax: 0181-447-1129

E-Mail: digville@cix.compulink.co.uk

Store Hours: 9.30am - 6pm(gmt) Sat: 10.00am - 5.30pm(gmt)
1030 - 1900(est) Sat: 1100 - 1830(est)

Syntecno TeeBee



DIGITAL THRU ANALOGUE: EXTERNAL PROCESSING

The TeeBee's front panel 'Analogue In' jack socket overrides the Square/Sawtooth switch setting and replaces the internal oscillator with an external audio signal. MIDI Note On messages are used to trigger the TeeBee's enveloping and the result is a sophisticated auto-wah effect. Using the TeeBee to process my digital equipment produced an unusual mix of digital precision modified with analogue filtering. Lots of scope for experimentation here!

Square/Sawtooth switch) can be saved as a System Exclusive dump via the 'Program' switch. By editing the parameters in the SysEx dump and sending it back to the TeeBee, you can change both setup and sound. This means that a sequencer can be used as a way of storing sounds and setups — rather like the volume setting and instrument assignment that you find at the start of a General MIDI sequence file.

This intimate connection between MIDI and the synthesizer control voltages is reflected in the other use of the TeeBee: as a 4-channel MIDI-to-CV/Gate converter.

POWER PLAY

The TeeBee plays a short sequence as it powers up. Switching on the unit while holding down the Program button until this sequence has stopped accesses programming mode, where many of its features are found. Once in this mode, the TeeBee trills between two notes, waiting for you to start using it. Settings are made via the unit's rotary controls; each time you make a new setting, you press the Program button. Different pitches in the TeeBee's trill indicate what the next input needs to be. This is one of the most unusual user interfaces I have ever encountered, and it takes some getting used to. Having said that, the audio prompts are easy to understand (if a little annoying after a while) and the method is consistent, if slightly cumbersome.

The TeeBee's programming mode is used to define setup parameters, although you can also use a SysEx dump instead. If you want to use the internal sequencer, the front panel controls are the only way to record and play sequences. The controls use ternary coding (see the 'Three's Company Box' elsewhere for more on this peculiar system), and so only three positions are used: fully counter-clockwise, in the centre, and fully clockwise. On the review model, these controls were quite stiff, and turning them rapidly to make changes was not very convenient. Unfortunately, the Tuning control is also one of the programming controls, and so the TeeBee's tuning almost always needs to be re-adjusted whenever programming mode is used. This can be avoided by only using SysEx dumps to change settings, of course.

Switching the TeeBee's power on and off is required quite frequently, since this is how you access programming mode, and when you turn it off, there's a noticeable thump. It may be a good idea to get into the habit of turning your mixer fader down before doing this.

BACK TO BASSICS

With only five controls, the possibilities for making sounds with the TeeBee are somewhat limited. Its bass sounds, however, are classic examples of late '70s and early '80s analogue synthesizer.

The Sawtooth/Square switch toggles between the woody, hollow timbres of the Square waveform, and the more synthetic-sounding, bright timbres of the Sawtooth; the four rotary controls then enable the timbre to be shaped in more detail. The filter Cutoff frequency control alters the brightness of the sound, while the filter Resonance control changes the 'emphasis' of frequencies near the cutoff frequency of the filter. The Resonance control doesn't go high enough to force the filter into self-oscillation, but this is consistent with the behaviour of the TB303. The ▶

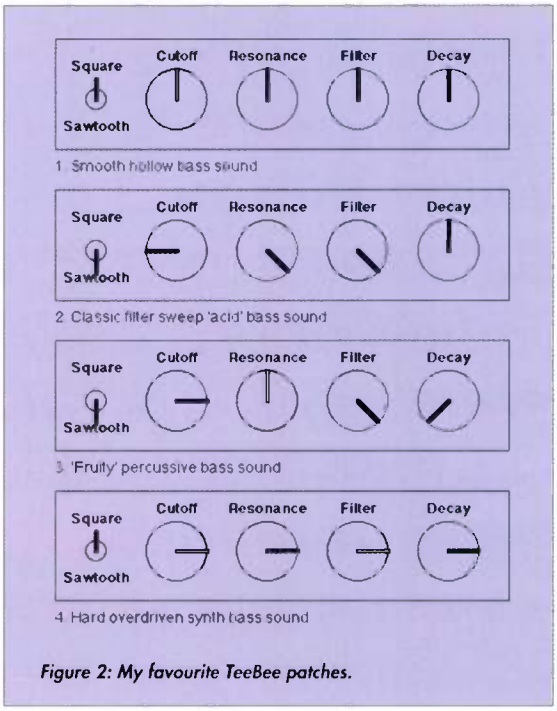


Figure 2: My favourite TeeBee patches.

SILVER DREAM MACHINE: THE ORIGINAL ROLAND TB303

The TB303 is a simple monophonic synthesizer, with almost the bare minimum of controls. It follows the basic VCO-VCF-VCA format of many analogue synthesizers. The VCO (Voltage Controlled Oscillator) provides the raw sound source, with sawtooth or square waveforms. This is then processed by the VCF (Voltage Controlled Filter) a two-pole, low-pass resonant filter which is swept by a decaying envelope (just the decay stage!). The overall envelope is very simple: attack and release are both very fast, with the filter decay stage being the only part of the enveloping that can be controlled.

Before MIDI, some things weren't quite as predictable as they are now. Portamento was produced by processing the keyboard control voltage rather than changing a parameter on a display, and was usually controlled by a variable resistance with a dedicated switch/footswitch to turn it on and off. Accents and velocity control were not standard at all. New equipment tended to redefine standards, and the TB303 is an interesting example. The TB303's 'slide' control produces a glide (or portamento) between successive notes, but also prevents the filter sweep envelope from retriggering — in fact, the sound sustains until the 'slide' is turned off! In the context of a monophonic synthesizer this makes sense — most monophonic musical instruments do not retrigger the sound when you slide the pitch. But I suspect that the sustain that results from the use of the slide control is probably an artifact of Roland's circuitry! The TB303's accent is also unusual, since it affects the decay time of the filter sweep envelope.

XRD™ 680 PLUS

POWER YOU CAN'T CONTAIN

600 WATTS!

The new XRD™ 680 PLUS powered mixer features an awesome 600 watts of total output power, 8 channels and 120 digital effects presets. Plus a whole list of features that make the XRD 680 PLUS perfect for working bands. Here's just a few:

- Active 3-band EQ with ±15 dB cut/boost on each channel
- 9-band graphic EQ with ±12 dB cut/boost
- Switchable 48 volt phantom power
- Input and output 1/4" jacks for external graphic EQ
- Full set of auxiliary and tape inputs/outputs
- 120 digital reverb and delay presets
- Dual power amps each feature 300 watts into 4 ohms (600 watts total)
- Power amps can be used for main output or split for independent main and monitor applications
- Each power amp has an independent input jack and two 1/4" output jacks
- Available in top box and rack mount format
- Easily portable
- and much more....

For bands that want stereo capability, check out the new XRD 680S PLUS with 600 total watts of true stereo sound.

Peavey Electronics, Ltd. Great Folds Road Oakley Hay Corby Northants NN18 9ET England
Tel: +44 (0) 1536 461234 Fax: +44 (0) 1536 747222

How to become a Record Producer

according to which one you and the band have most enthusiasm for at the time. Or you may have booked a session player who you want on more than one song, so he might as well do them all in the same session. This means locating to each song on the multitrack and resetting the monitor mix on the console. If you confine yourself to level/pan/reverb monitor mixes, it won't take too long to set up. Sometimes, however, during the later stages of overdubbing, you may feel that the mix you're hearing sounds really great, just by chance, and you would like to keep it as a reference for when you start mixing proper. In this case it's a simple matter to copy the monitor mix onto a DAT so you can check it later. With so few variable elements, it's pretty easy for a skilled engineer to reconstruct the mix almost exactly, and then you can go ahead and improve it still further.

HOW TO GET A GOOD MIX

Simple. Use a good engineer and go away! I mentioned earlier in the series that engineers acquire a vast amount of experience of working with music and sound, and they are the people who should be operating the faders — not the producer, unless the producer comes from an engineering background, of course. If the producer sits in the studio from the moment the first fader is raised all the way through to the finish, he will be nothing but an inhibition for the engineer, who would really like to get on and tinker with the sounds and try out lots of ideas, many of which might not work. So this is a good time for you to take a walk in the fresh air and clear your mind ready to make an objective judgment on how the mix is progressing, two or three hours after you left the engineer alone with it. You may leave behind a few ideas or guidelines, or you may even encourage the engineer to go wild and try out some crazy things. When you return, you will hear your production in all its glory and you will be able to advise on what you want more of and what you want less of. You could even say that it is entirely wrong and you want to start again. An experienced engineer accepts that the producer is in charge and won't take offence (he just won't work with you again!).

A trickier question is what *makes* a good mix. It's especially tricky for the engineer who has to

THE ENGINEER'S VIEW — PAUL GOMERSALL

Paul Gomersall has recently enjoyed the privilege of engineering George Michael's new CD, *Older*, where George, as usual, is his own producer (for the full story, see the article starting on page 40 this month).

Paul's other credits include work with producers Trevor Horn, Phil Collins (as a producer), Stephen Hague, Stephen Lipson, Thomas Dolby, Chris Porter, Laurie Latham, and others.

• WORKING WITH PRODUCERS WHO ARE ALSO ENGINEERS

"Producers like to distance themselves from the desk, as long as they have an engineer they can trust. It's one of the joys of production. If they have a problem, they might dive in and try and sort it out themselves, but usually there won't be a problem. You are the interface with all the technical stuff so the producer doesn't have to think about that. If the producer comes up with an idea you make it work for them."

What should an engineer do if a producer appears not to hear a problem?

"Point it out. One of the good phrases is 'I think we should listen back to that'. He will be listening by then. There are ways of getting your point across. Diplomacy is a big part of the job."

• WORKING WITH GEORGE MICHAEL

Monitoring: "I give him the mix output of the desk in his headphones. The headphone mix is very important to anyone. That's what they are listening to in the studio so that's what they want to hear in the headphones."

Reverb: "The way he sings the consonants, it gives a bit of excitement to his vocal sound. It's being used as another instrument. I generally set up two, three or four reverbs that I think will suit the track as it's coming together and take it from there, and George will pick what he wants."

Mixing: "The mix is an evolutionary thing. Virtually every song we do we work through to the mix. You never get a stage where everything is finished and you start mixing. It evolves, and somewhere along the line he'll want to do a vocal ride so we'll switch the mix computer on, then we'll switch it off again and add some more things and continue like that. I know we're finished when he says 'let's put one down'. He'll take a mix home and come back the next day and probably continue working on it. The programming diminishes as the work carries on and we get more involved in riding levels of things, EQ and other bits and pieces. And then suddenly it's there. It's finished. The rough mixes are really important because sometimes George will ask to refer to something we've done before and then carry on from there. So we keep all the mixes we've done in case one of them had something that was really good."

Engineer Paul Gomersall and Programmer Steve McNichol at work on George Michael's Older at Sarm West studios — and they weren't posing!

XRD™ 680 PLUS

POWER YOU CAN'T CONTAIN

600 WATTS!

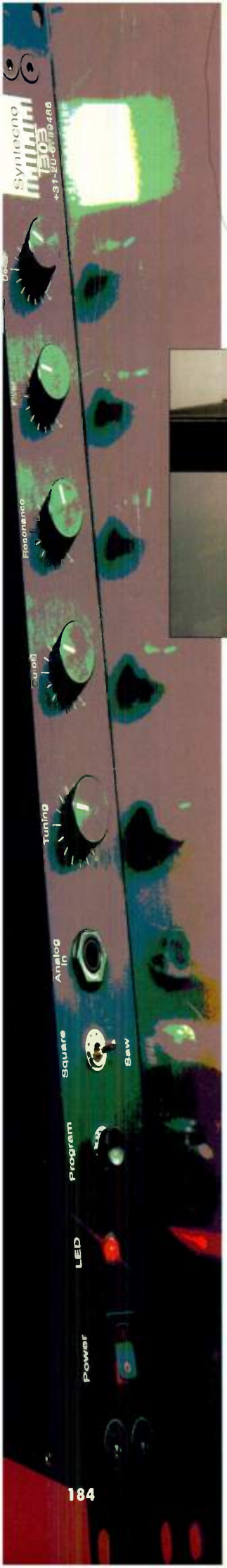
The new XRD™ 680 PLUS powered mixer features an awesome 600 watts of total output power, 8 channels and 120 digital effects presets. Plus a whole list of features that make the XRD 680 PLUS perfect for working bands. Here's just a few:

- Active 3-band EQ with ±15 dB cut/boost on each channel
- 9-band graphic EQ with ±12 dB cut/boost
- Switchable 48 volt phantom power
- Input and output 1/4" jacks for external graphic EQ
- Full set of auxiliary and tape inputs/outputs
- 120 digital reverb and delay presets
- Dual power amps each feature 300 watts into 4 ohms (600 watts total)
- Power amps can be used for main output or split for independent main and monitor applications
- Each power amp has an independent input jack and two 1/4" output jacks
- Available in top box and rack mount format
- Easily portable
- and much more....

For bands that want stereo capability, check out the new XRD 680S PLUS with 600 total watts of true stereo sound.

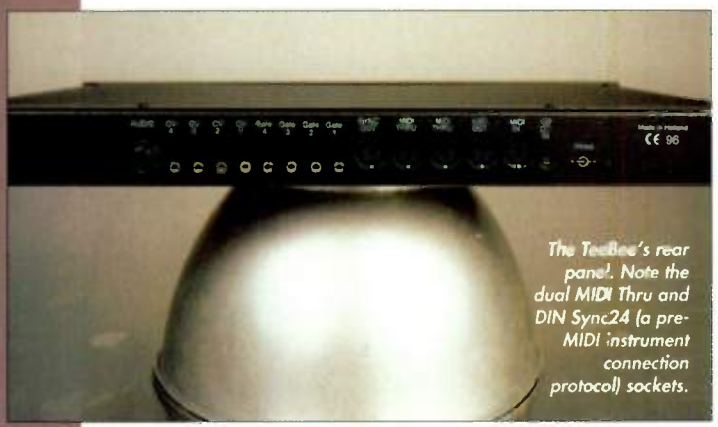
Peavey Electronics, Ltd. Great Folds Road Oakley Hay Corby Northants NN18 9ET England
Tel: +44 (0) 1536 461234 Fax: +44 (0) 1536 747222

Syntecno TeeBee



▶ Filter knob actually just controls envelope modulation amount, and finally, the Decay control sets the time over which the filter sweep envelope decays. The TeeBee's envelope is decay-only, although with the filter control set to minimum, I was able to produce slight rising envelopes.

Two important elements of the TB303's sound were 'Slide' and 'Accent' (see TB303 box for some background on the original). Both of these functions are hidden on the TeeBee. Slide is governed by a MIDI Controller, which needs to be turned on and off to control the glide between notes, in much the same way as a sustain pedal. The TeeBee's synthesizer is first-note priority, and the envelope does not retrigger if additional notes are played whilst the first is held down: strict monophonic operation.



The TeeBee's rear panel. Note the dual MIDI Thru and DIN Sync24 (a pre-MIDI instrument connection protocol) sockets.

Accented notes on the TeeBee have short decay times, producing a result that is more like a negative accent. It's selected by using the attack or initial velocity of the MIDI Note messages that are playing the TeeBee. From 1 to 100, the velocity maps to volume changes as you would expect, but from 101 to 127, the velocity causes decay to be set to the shortest time. This requires an unusual playing technique, and is probably better suited to detailed editing using a sequencer.

Figure 2 shows the settings for four of my favourite types of bass sounds created with the TeeBee.

THE CHIPS INSIDE

Because the TeeBee uses an external power supply, its case has plenty of space inside for the two relatively small printed circuit boards. The circuit board at the rear of the case holds the Intel 80196 micro-controller, the MIDI Input and Outputs, and the MIDI-to-CV converters, whilst the front panel circuit board is home for the analogue synthesizer circuitry.

Although the TB303 is normally described as having a 2-pole, 12dB/Octave resonant low-pass filter, the circuit inside the TeeBee looks more like a 4-pole 24dB/Octave design, whilst sounding like a 2-pole filter! I was unable to confirm the number of poles in the filter with distributors Blue Systems.

The layout and quality of the PCBs is good, although there was quite a lot of hand-wiring inside the case of the review unit, and the front panel switches had been mounted incorrectly, with the star washers on the outside of the case. This may be a deliberate cosmetic device, but it didn't appeal to my eyes!

MIDI IN CONTROL

Slide is assigned to MIDI Controller 0 as a default. This is an unusual choice, because it's the same as the MSB (Most Significant Byte) of the Bank Select message. This can cause one or two problems when you try to use the TeeBee with some sequencers, but it can be re-assigned to any of the first 80 controller numbers instead, as can the MIDI Controllers from the front panel rotary controls. The default setting for the 'Tuning' control is also a little strange: it's assigned to MIDI Controller 10, which is normally used for Pan control. Controller 11 maps to Filter Cutoff.

Naturally, I tried out the MIDI-to-CV conversion, and found no obvious 'zipper' noise artifacts. However, the MIDI Time Code to Sync24 conversion could not be tested during the review period, since I no longer own anything which uses Roland's Sync24 standard!

THE BOTTOM LINE

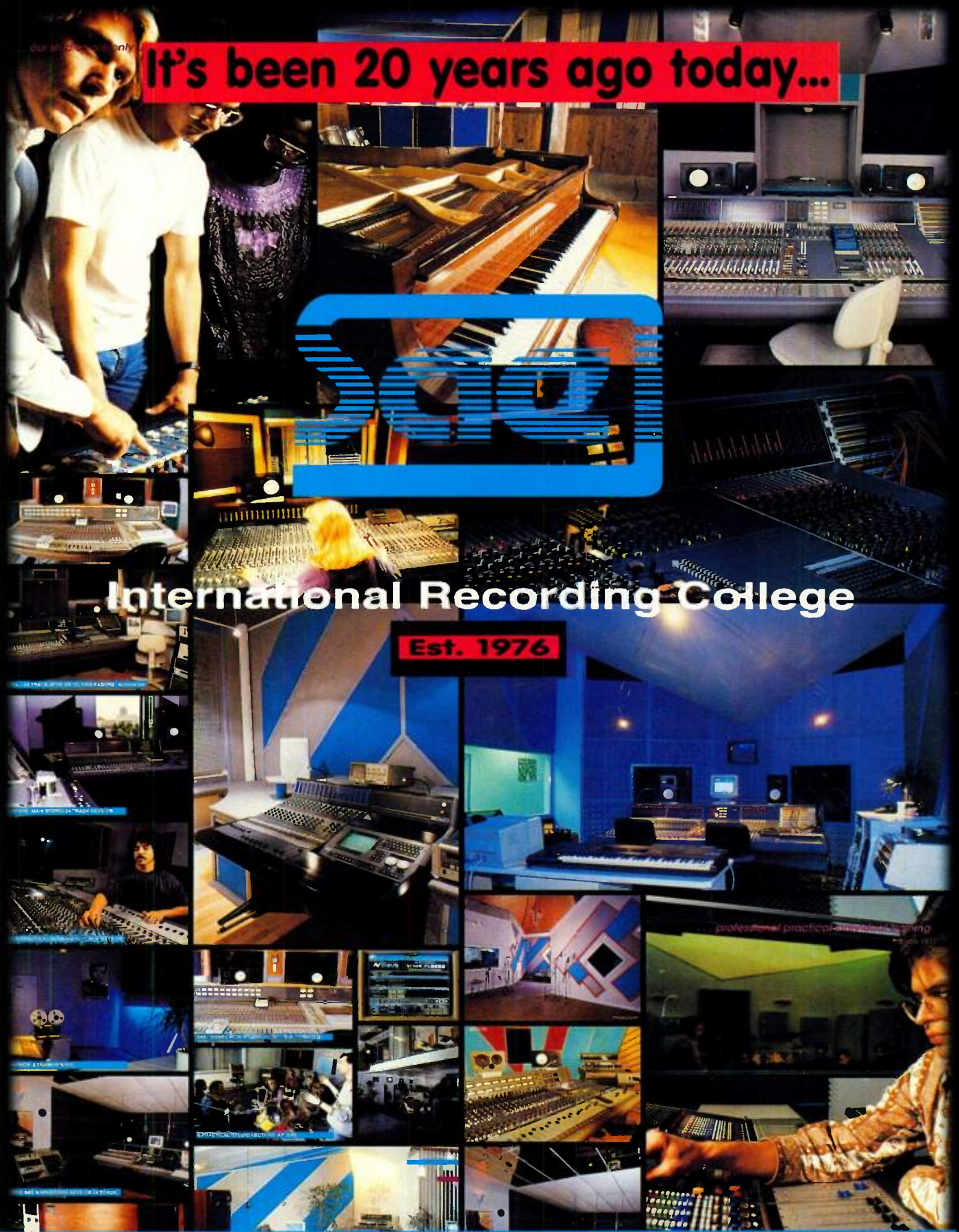
The TeeBee is in competition with other monophonic bass synthesizers, like the Novation BassStation Rack, the Control Deep Bass Nine, the Spectral ProTone, and the Synthology Clone 3. None of these has quite the same approach as the TeeBee, however, and the user interface of the TeeBee is quite unlike any of the others. Making a price comparison is hard because of the mix of additional facilities that the TeeBee offers. You need to decide if you need these features, or just a TB303-type sound.

If you can live with the unusual programming interface, mastering the TeeBee means coming to terms with the complexities of using the Slide and Accent functions effectively. Plain step sequences sound much the same on any monosynth, but the careful use of these additional TB303-type features on sequences with large leaps in pitch can definitely produce that characteristic Bassline sound.

The underlying sounds of the TeeBee are classic vintage analogue, and beyond that we enter the realms of personal preference. They're certainly completely in character with the intended market, and are not lacking in authenticity. But the final choice has to be yours — give the TeeBee an audition and then decide if it can provide the Bassline you've always wanted. SOS

Info

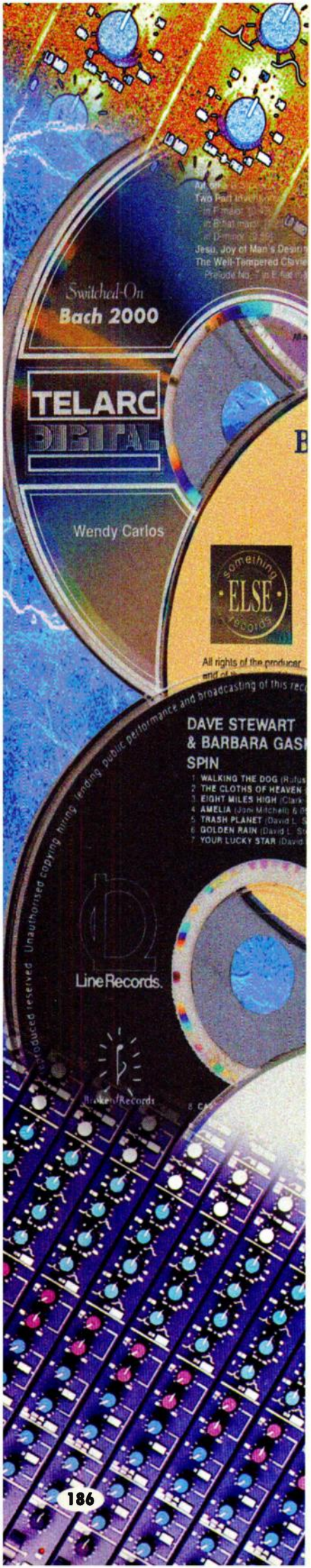
£ £528.75 including VAT.
A Blue Systems, The Old School House, Church End, Ashdon, Saffron Walden, Essex CB10 2HG (visitors by appointment only).
T 01799 584095.
F 01799 584094.
E bluesys@dial.pipex.com



Certificate - Diploma - Degree

CALL FOR A FREE COLOUR BROCHURE ON OUR FULL COURSE PROGRAM:

AMSTERDAM 020 689 4189 ADELAIDE 08 376 0991 AUCKLAND 09 373 4712 BERLIN 030 456 5137 BRISBANE 07 367 0143
COLOGNE 0221 954 1220 FRANKFURT 069 543 262 GLASGOW 0141 221 3441 HAMBURG 040 233 676 LONDON 0171 609 2653
MELBOURNE 03 9534 4403 MUNICH 089 675 167 PARIS 01 4811 9696 KUALA LUMPUR 03 756 72 12 PERTH 09 325 4533
SINGAPORE 334 2523 STOCKHOLM 08 730 5100 SYDNEY 02 211 3711 VIENNA 01 330 4133 ZURICH 01 445 2040



How to become a Record Prod

PART 7 — THE MIX

As the final mix looms, the end of the producer's job draws near. But which approach to mixing is best? DAVID MELLOR fires up the Moulinex...

Much has already been said in these pages about mixing, but from an engineer's point of view, rather than a producer's. Many years ago, before the modern era of multitrack tape, recording and mixing were part of the same process. You *had* to get a good balance between the voices and instruments at the session, because there was no way of making adjustments later. In fact, much orchestral music is recorded in the same way today, directly to stereo. Mixing directly to stereo is also very common for today's live and broadcast popular music. It's possible to do without a multitrack stage in all of these situations because the engineer knows before even one fader has been lifted what the final recording should sound like — as close to the original as possible. Since skilled engineers can achieve such remarkable results, you might wonder why we need a multitrack stage at all. The answer is that it allows much more attention to be paid to each element of the recording, in terms of sound quality, musicality, and creativity. Giving these three aspects the attention they deserve is why recording takes so long and demands so much effort.

GET IT RIGHT FIRST TIME

Ideally, the producer should start the mixing process as soon as the project gets off the ground. He should have an idea of the sound being aimed for, allowing a certain amount of scope for creativity, depending on the nature of the project. If it's a dance record, for instance, the producer must understand the style well enough to know the elements of the music his audience demand, and should add to those elements new and different sounds and textures to push the style further into the future. If the producer knows how every step of the preparation and recording process is going to contribute to the final mix, the mixing stage should be straightforward and successful. This means, among other things, getting the arrangement right and selecting the right sounds, making sure the musicians are playing in time and in tune, and obtaining a good performance from the singer by whatever means necessary. If there is a problem in any of these areas, you can only turn a deaf ear to it for so long — until the mix, in fact. Any problems present on the tape at the mixing stage will have to be disguised or covered up. Those problems should have been corrected as soon as they occurred.

MONITOR MIXING

As more tracks are being added to the recording during the overdubbing stage, the engineer and producer will be working with a mix that may bear a passing resemblance to the finished product — the monitor mix. The monitor mix is what you listen to during the recording process, and is usually thought of as a rough guide to what is already on the tape — good enough so that the musicians can get a proper feel for the music, and good enough to tell the producer how the recording is shaping up. The exact monitor mix depends on the type of mixing console you are using: some have only very basic monitor facilities — perhaps just level, pan and a couple of auxiliary sends. This means that you can't do anything in the monitor mix apart from set how loud each instrument is, where it appears in the stereo image, and how much reverb it has (the other aux will be used to send foldback to the musicians' headphones). This is not a bad way of working, however, because you will hear exactly what is on the tape as you progress through the recording. If the monitor mix sounds good, you can be sure the final mix will sound great.

This simple style of monitor mixing has its merits,

but large-scale consoles offer vastly more sophisticated monitoring facilities. You can create a mix on the monitors using EQ, compression, gating, and everything else that is part of modern studio technology. If you regard the monitor mix as something temporary, but you — and the engineer — then proceed to use all of these facilities, you may find yourself in big trouble by the time you flip the multitrack onto the big faders and start to mix from flat, because the sound will be totally different. By the time you graduate to SSL- or Neve-class studios, you should have learned the first rule of recording: nothing less than 100% effort is good enough. You should regard everything you do as being part of the finished product and make it as perfect as possible. This includes the monitor mix.

With a console that only has rudimentary monitoring facilities, you'll probably want to perfect everything on tape. With a console that has sophisticated monitoring facilities, you'll record

ucer

a good clean sound on tape, and then anything you do to the monitor mix will become part of the final mix. The console will allow you to do this so you don't have to start from scratch when the overdubs are finished. In fact, you can do this with any console that has enough channels. It's very common, once a few tracks have been recorded, to route the multitrack to the channel faders and start to mix as overdubs progress. Working in this way, you never have to say, "Right, let's clear the desk and start to mix". Instead, you come to a realisation that everything is done and all that is needed is a little polishing. Self-produced artist George Michael works in this way and his status at the top of the singles chart as I write confirms the value of this philosophy.

FROM ANOTHER POINT OF VIEW

There are many ways to make a record, and I can imagine some producers reading the above and disagreeing with it. Another style of album recording involves putting down all the basic tracks, then overdubbing other instruments and vocals, then taking a break of a few days before starting to mix the whole lot. The disadvantage of working a song at a time, all the way from basic tracks to mix, is that you can easily lose perspective. On average, people probably listen to each record they buy about six times; the producer of the record has to listen to it more like six *hundred* times during the recording and mixing process, and over-familiarity with a song and the recording of that song means that you can't judge it in the same way as a punter would. Taking a break between recording and mixing means that you can come back to the song with fresh ears and hear very clearly which bits need to be brought out, and which elements play an important but subservient role. If this is the philosophy of mixing that appeals to you more strongly, it would probably be a waste of time working on an elaborate monitor mix. You could store it on a console with recall facilities, but that would negate the advantages of taking a break before mixing. A simple monitor mix is probably the best idea.

Still on the subject of monitor mixes, another common practice is to swap between songs during overdubbing, ▶

THE REMIXER'S VIEW — MARCO SABIU OF THE RAPINO BROTHERS

The Rapino Brothers are Marco Sabiu and Charlie Mallozzi. (They are not real brothers, obviously — 'rapino' is Italian for robber). They have built up a significant and lucrative following among record companies as writers, remixers and producers, making new versions of original recordings by Take That, Roxette, Sleeper, Suggs, Rozalla, and Dubstar, among many others.

• THE NEED FOR REMIXING

"I'm not the one who said remixing was necessary. It's the record companies who want remixes, because they want to have their songs played in the clubs. If people like the song in the clubs, they will go and buy the record."

• ON FOLLOWING RECORD COMPANY INSTRUCTIONS

"Sometimes they tell us what kind of style they want. Sometimes they don't tell us anything, they just give us the vocal and we do what we want. Usually we only keep the vocals and redo everything else, unless it's a band with guitars — then maybe we'll keep the riff. It depends. It can be almost like doing a new song."

• REMIXERS VS. THE ORIGINAL PRODUCER

"I listen to the original producer's mix to try to get the kind of vibe that they used, so I can avoid doing the same thing. I don't know whether producers like what we do. We always do a radio version of a remix and sometimes the record company will use it as a single. If that version goes into the charts I think the producer should be quite happy because the album will sell better."

• REMIXING AS A WAY OF GETTING INTO PRODUCTION

"I can't see any difference between a remix and a production, because at the end of the day when you do a remix you start from scratch. The only thing you have is the vocal. To me that is a production."

• TECHNICAL KNOWLEDGE

"On that side we are quite lucky, because when I was in Italy I worked as a sound engineer, so for me now it's helpful to have that kind of knowledge. If I want a sound I know how to do it. I don't have to ask someone else, which would be just wasting time. I think it's quicker and better if you have a good knowledge of the machines you have. We have a Pro Tools 3 system with *Logic Audio*, so we do everything with that."

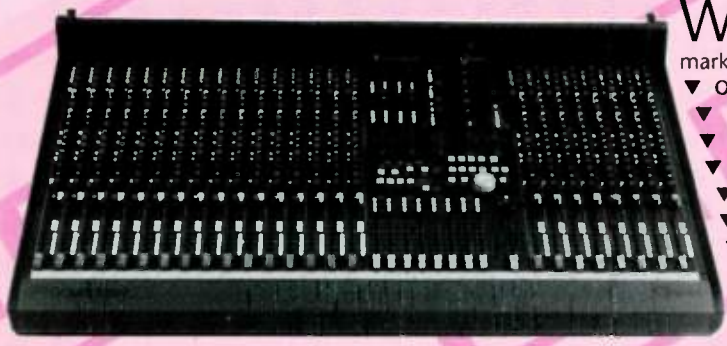
• ACOUSTIC INSTRUMENTS

"We quite like to use live drums and real guitar and bass. When we do that, we usually go into a bigger studio because we don't have the space. Then we come back to our home studio [pictured here], transfer everything into Pro Tools and start editing."

The Rapino Brothers in their compact and bijoux home studio, with Kylie Minogue, whose recent album featured four Rapino-authored tracks...

...and the 'brothers' with two members of Take That, for whom they have produced and remixed several album tracks.

Soundcraft GHOST

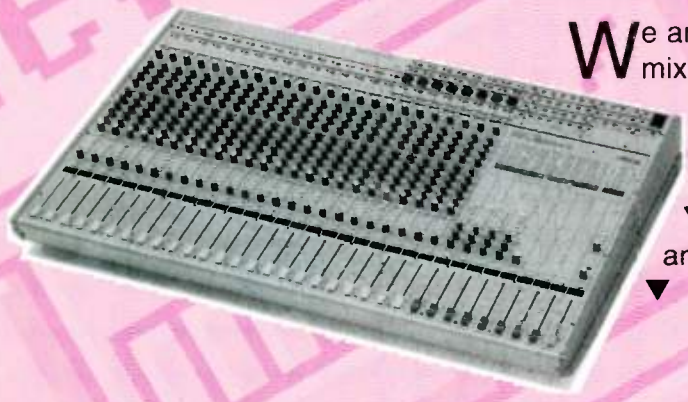


With an incredible array of features the new Soundcraft Ghost is set to dominate the sub £5000 mixing console market. Facilities include:-

- Optional Meterbridge
- Moving fader automation Version also available
- 2 bands Fully Parametric & 2 bands Fixed Eq
- Superb Sounding Low noise Mic. pre-amp
- 10 Aux Sends
- Integral MIDI Machine Control including track enable
- Jog Shuttle Wheel
- SMPTE Controls
- MIDI Muting & MIDI Faders

PRICES FROM £ 3300.00

YAMAHA MIXING CONSOLE SPECIALS



We are now able to ofer the Yamaha range of mixing consoles at REMARKABLE prices.

Examples include:-

- MM1402 £ 344
- MM1242 £ 599
- MX200-16 £ 599

and VERY SPECIAL PRICES on the RM800

- Call us for deatils.

Fostex D80

The D80 is a fully expandable, and extremely modular 8 track system that offers a remarkable IDE HDD as standard. It is even synchronisable via MTC without the loss of an audio track. Perfect for use with a sequencer.

£1495.00

EQUIPMENT PACKAGES

Fostex D80 8 Track System & Yamaha RM800-16	£	2450.00
Fostex D80 16 Track System & Yamaha RM800-16	£	3800.00
Fostex D80 16 Track System & Yamaha RM800-24	£	4050.00
Fostex D80 8 Track System & Spirit Studio-16	£	2595.00
Fostex D80 16 Track System & Spirit Studio-16	£	3945.00
Fostex D80 16 Track System & Spirit Studio-24	£	4395.00

KGM

studio specialists

High quality audio equipment deserves to be treated well.

We manufacture possibly the finest range of custom studio furniture in europe - our clients include the BBC and many more

Call us for details . . . you'll be surprised just how cost effective they are.

18-42 Charlotte St, Wakefield
West Yorkshire WF1 1UH, England
Tel: 01924 371766 Fax:01924 290460
E-Mail: sales@kgm.co.uk
WWW:http://www.proaudio.co.uk/kgm.htm

All Prices include VAT. E &O.E

SoundField SPS422

The new studio microphone system from Soundfield is now available.

Based on the highly acclaimed SoundField MkV, the **SPS422** is around the price of other premium studio mics, but offers stereo capabilty, remote control of all parameters from the control room . . . and of course the ultimate Soundfield sound.

There is no other mic. like it - call us for details.

DAT Machnes

Machines by **Tascam, Fostex, Sony** . . .
and yes we will take your old machine in part exchange

used machines from £250.00 inc. VAT

new pro. machines from £595 ex VAT

Roland

We now have stocks of the wonderful new Roland VS880, hard disc portastudio. With extensive synchronisation, MIDI facilities and optional onboard effects, it is truly the essential recording tool of the '90's.

lexicon

LEXICON LXP15-II

REMARKABLE VALUE AT ONLY

£699

THE BEST JUST GOT BETTER

Lexicon have just intorduced a new processor to their range - the PCM90.

Joining the already well acclaimed PCM80 the PCM90 is a highly programmable **dedicated** reverb processor of the highest pedigree.

Also now shipping are the dual FX board and the pitch board for the PCM80.

Call us for details.

KGM

studio specialists

18-42 Charlotte St, Wakefield
West Yorkshire WF1 1UH, England
Tel: 01924 371766 **Fax:**01924 290460
E-Mail: sales@kgm.co.uk
WWW:http://www.proaudio.co.uk/kgm.htm

Monitoring Madness

GENELEC® Possibly the most accurate studio monitors in production.

Doesn't your work deserve the best?

Call us for the lowdown.

dynaudioacoustics

Call us for a specificaton sheet on this excellent range of passive monitors

Used by many top facilities worldwide.

▼ MIDI			
ROLAND U110 Tone Module	(U)	£	215.00
ROLAND D110	(U)	£	215.00
KORG M1R	(U)	£	450.00
ROLAND CM-32P	(U)	£	180.00
JML Vintage Keys	(D)	£	550.00
AKAI S700 Sampler	(U)	£	350.00
AKAI IB104 Digital Interface	(U)	£	260.00
L Cooper PPS100	(U)	£	140.00
YAMAHA RX11 Drum Machine	(U)	£	85.00
ATARI 1040 c/w 4M/b c/w Monitor	(U)	£	295.00
MTC MIDI Controller for MSR16	(U)	£	50.00
L COOPER Synclink	(U)	£	115.00
STEINBERG CUBASE Score PC	(D)	£	290.00
STEINBERG CUBASE 2.5 PC	(D)	£	260.00
PASSPORT MASTERTRACKS Pro	(D)	£	
YAMAHA Soundedge SW20PC	(D)	£	150.00
▼ MISC.			
GPO Jackfields (various)	(U)	£	P.O.A
AKG C451EB c/w CK1	(U)	£	195.00
AKG C451EB c/w CK2	(U)	£	195.00
AKG C1000S	(N)	£	170.00
AKG C3000S	(N)	£	245.00
ELECTROVOICE Bass Bins (for S200)	(U)	£	425.00
PEAVEY Series 12 Cont.	(U)	£	50.00
ALESIS Monitor 1	(D)	£	320.00
SOUNDFIELD MKIV	(U)	£	2250.00
AKG C535 Mic.	(U)	£	225.00
GENELEC S30 Monitors	(U)	£	1750.00
UREI 833 (Big Boy studio Monitors)	(U)	£	1000.00
▼ OUTBOARD EQUIPMENT			
DRAWMER DMT Multitracker	(U)	£	100.00
EMT Plate Reverb	(U)	£	575.00
BBE 322 Sonic Maximizer	(U)	£	140.00
KLARK TEKNIK DN27A Graphic Eq	(U)	£	450.00
DRAWMER DS201 Dual Gate	(U)	£	220.00
WHITE Series 4000 Parametric Eq	(U)	£	250.00
APHEX Type C2 Aural Exciter	(U)	£	175.00
ALESIS Midiverb IV	(N)	£	335.00
ALESIS Microverb IV	(N)	£	250.00
LEXICON PCM80	(N)	£	1950.00
SPL Stereo Vitalizer	(N)	£	315.00
▼ MIXING CONSOLE			
HARRISON MR-3 36 Channel in-line	(U)	£	7500.00
SOUNDCRAFT SAPPHYRE 28 Channel	(U)	£	7000.00
SOUNDCRAFT VENUE 16-8	(U)	£	3000.00
SOUNDTRACS TOPAZ 24 c/w Meterbridge	(D)	£	1700.00
SOUNDCRAFT K1 16ch	(D)	£	POA
SOUNDCRAFT SPIRIT Live4-II 16 Ch.	(N)	£	POA
SOUNDCRAFT SPIRIT Live4-II 24 Ch.	(N)	£	POA
SOUNDCRAFT SPIRIT Studio-16	(N)	£	POA
SOUNDCRAFT SPIRIT Studio-24	(N)	£	POA
STUDIOMASTER 8-2 Diamond	(N)	£	225.00
STUDIOMASTER 16-2 Diamond	(N)	£	260.00
STUDIOMASTER Powerhouse 300 8-2	(N)	£	760.00
STUDIOMASTER 16-2 Session Mix	(N)	£	795.00
▼ RECORDERS			
TASCAM 38 1/2" 8 Track	(U)	£	695.00
AIWA/HHB Pro1 DAT Portable DAT	(U)	£	550.00
SONY DTC750 DAT Recorder	(U)	£	275.00
AKAI MG614 Portastudio	(U)	£	625.00
DBX 150X Noise Reduction	(U)	£	150.00
DBX 150 Noise Reduction	(U)	£	130.00
FOSTEX B16 1/2" 16 Track	(U)	£	1400.00
TASCAM 85-16B 1" 16 Track	(U)	£	2200.00
SOUNDCRAFT SCM381-8 1" 8T	(U)	£	595.00
UHER 4200 Report	(U)	£	595.00
AIWA HDS-1 Portable DAT	(U)	£	325.00

All Prices include VAT. E &O.E

How to become a Record Producer

according to which one you and the band have most enthusiasm for at the time. Or you may have booked a session player who you want on more than one song, so he might as well do them all in the same session. This means locating to each song on the multitrack and resetting the monitor mix on the console. If you confine yourself to level/pan/reverb monitor mixes, it won't take too long to set up. Sometimes, however, during the later stages of overdubbing, you may feel that the mix you're hearing sounds really great, just by chance, and you would like to keep it as a reference for when you start mixing proper. In this case it's a simple matter to copy the monitor mix onto a DAT so you can check it later. With so few variable elements, it's pretty easy for a skilled engineer to reconstruct the mix almost exactly, and then you can go ahead and improve it still further.

HOW TO GET A GOOD MIX

Simple. Use a good engineer and go away! I mentioned earlier in the series that engineers acquire a vast amount of experience of working with music and sound, and they are the people who should be operating the faders — not the producer, unless the producer comes from an engineering background, of course. If the producer sits in the studio from the moment the first fader is raised all the way through to the finish, he will be nothing but an inhibition for the engineer, who would really like to get on and tinker with the sounds and try out lots of ideas, many of which might not work. So this is a good time for you to take a walk in the fresh air and clear your mind ready to make an objective judgment on how the mix is progressing, two or three hours after you left the engineer alone with it. You may leave behind a few ideas or guidelines, or you may even encourage the engineer to go wild and try out some crazy things. When you return, you will hear your production in all its glory and you will be able to advise on what you want more of and what you want less of. You could even say that it is entirely wrong and you want to start again. An experienced engineer accepts that the producer is in charge and won't take offence (he just won't work with you again!).

A trickier question is what *makes* a good mix. It's especially tricky for the engineer who has to

THE ENGINEER'S VIEW — PAUL GOMERSALL

Paul Gomersall has recently enjoyed the privilege of engineering George Michael's new CD, *Older*, where George, as usual, is his own producer (for the full story, see the article starting on page 40 this month).

Paul's other credits include work with producers Trevor Horn, Phil Collins (as a producer), Stephen Hague, Stephen Lipson, Thomas Dolby, Chris Porter, Laurie Latham, and others.

• WORKING WITH PRODUCERS WHO ARE ALSO ENGINEERS

"Producers like to distance themselves from the desk, as long as they have an engineer they can trust. It's one of the joys of production. If they have a problem, they might dive in and try and sort it out themselves, but usually there won't be a problem. You are the interface with all the technical stuff so the producer doesn't have to think about that. If the producer comes up with an idea you make it work for them."

What should an engineer do if a producer appears not to hear a problem?

"Point it out. One of the good phrases is 'I think we should listen back to that'. He will be listening by then. There are ways of getting your point across. Diplomacy is a big part of the job."

• WORKING WITH GEORGE MICHAEL

Monitoring: "I give him the mix output of the desk in his headphones. The headphone mix is very important to anyone. That's what they are listening to in the studio so that's what they want to hear in the headphones."

Reverb: "The way he sings the consonants, it gives a bit of excitement to his vocal sound. It's being used as another instrument. I generally set up two, three or four reverbs that I think will suit the track as it's coming together and take it from there, and George will pick what he wants."

Mixing: "The mix is an evolutionary thing. Virtually every song we do we work through to the mix. You never get a stage where everything is finished and you start mixing. It evolves, and somewhere along the line he'll want to do a vocal ride so we'll switch the mix computer on, then we'll switch it off again and add some more things and continue like that. I know we're finished when he says 'let's put one down'. He'll take a mix home and come back the next day and probably continue working on it. The programming diminishes as the work carries on and we get more involved in riding levels of things, EQ and other bits and pieces. And then suddenly it's there. It's finished. The rough mixes are really important because sometimes George will ask to refer to something we've done before and then carry on from there. So we keep all the mixes we've done in case one of them had something that was really good."

Engineer Paul Gomersall and Programmer Steve McNichol at work on George Michael's Older at Sarm West studios — and they weren't posing!

PROSONIX
Pro Audio Solutions

P.O. BOX 32, HAILSHAM, EAST SUSSEX BN27 3XT

Bantam Patchbay 48 way, 1/2 U £89.99
Jack Patchbay 48 way, IU,
balanced, jacks front & rear £59.99
16 way looms, unbalanced, colour coded
Jack to Jack £39.99
Jack to Phono £39.99
Jack to Tails £35.99
Passive DI Box earth lift, link out £29.99
Passive Headphone Splitter
4 Way, XLR input £24.99
Dynamic Microphones
includes 4M, XLR to Jack Lead £19.99

Manufactures, inporters, wholesalers & exporters to the music industry

All prices include VAT and P & P
next day delivery add £5.00

Order Hot-Line
Tel:(01323) 848808 Fax (01323) 441185
E. Mail:101727,213 @ compuserve.com

VISA

the MOST comprehensive LIST of midi files

PROMUSIC
Midi-files for musicians by musicians

MIDI-FILES FOR MUSIC LOVERS EVERYWHERE.

Simply put, you just won't find a wider range of midi-files than ours. From the latest chart hits to the classical greats, our catalogue contains over 1500 individual files, and our list grows daily.

Professional tracks for gigging bands, compilation midi disks, tuition packs for beginners or midi software. We can provide you with what you want at the most competitive prices available and with the fastest despatch around.

So when you want to make music, make for Promusic's Midi Catalogue.

- Over 1500 midi files starting at just £3.99 each covering every musical style imaginable.
- New files every day - call us for details of latest releases.
- No minimum order quantity - just try one file to put our quality, service and value to the test. You won't be disappointed.

Stop Press
We are now on the Internet!
The INTERNET Music Shop
http://www.musicsales.co.uk

Interactive Music Packs
Exceptional arrangements of eight chart busting hits with printed music and lyrics at just £12.99 each.
Coming soon: Eric Clapton 2, Classics 1, Classics 2, Elton John, Bob Marley, Pop

The Midi Keyboard Library
A Superb new series of midi packs. Eight fully orchestrated midi files with printed music and lyrics for just £9.99. Latest titles include: Beatles 1 & Beatles 2.

Steinberg Software
Cubase - PC - £129.00
Cubase Score - Atari - £399.00
Cubase 2.5 - Mac - £379.00
& full range of Steinberg Software

ORDER YOUR BIG NEW CATALOGUE NOW
This is just a selection from our vast range of products and titles. For the full story our comprehensive catalogue is an absolute must.
Order yours right now!

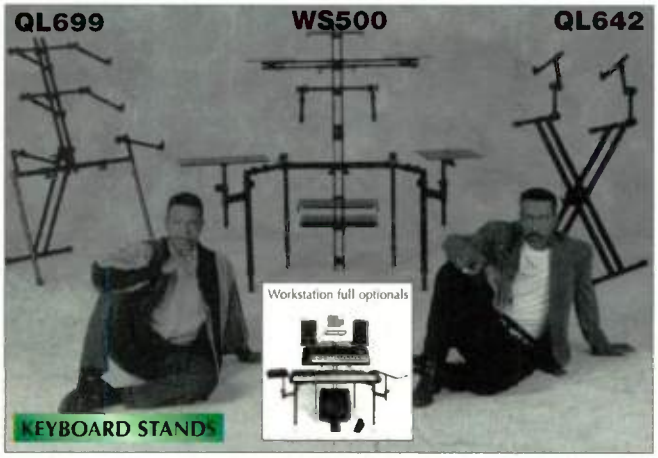
New Titles

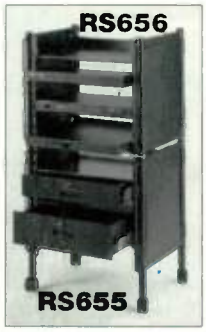
Song Song Blue	Neil Diamond
Crackin' Rose	Neil Diamond
Only One Road	Celine Dion
That's The Way I Like It	KC & The Sunshine Band
Scatman's World	Scatman
Medley	Everly Brothers
Tragedy	Bee Gees
A Whiter Shade Of Pale	Annie Lennox

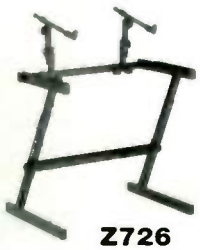
And More

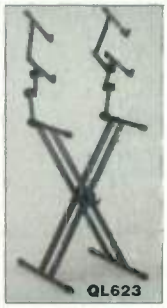
PROMUSIC Freepost. LON 6613. London N14 5BR
Tel: 0181 886 2666 Fax: 0181 886 3426 Internet: http://www.musicsales.co.uk

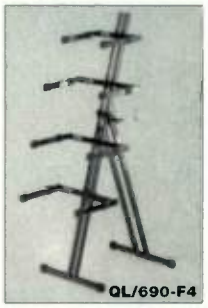
QUIK LOK
THE PROFESSIONAL MUSICAL ACCESSORIES











Brandoni Music distribute the Quik-Lok range of Stands & Accessories for both live & studio applications. Contact your local dealer for more information.

Send £1 + SAE for catalogue
• Please mark SOS in corner of envelope •

Brandoni Music Ltd
Unit 3.6, Wembley Commercial Centre,
East Lane, Wembley,
Middx HA9 7XJ
Tel. 0181-908 2323

ACTIVE SOUND ...creative technology

CALL NOW ON:
01923 246282
12 LINES
OR FAX ON:
01923 246669

THIS MONTHS CRAZY DEALS

Alesis ADAT XT	2450
Alesis 3630	199
Alesis SR16	189
ART MR1	145
Boss DS330	199
Boss ME6	249
Boss SX700	CALL
Boss BL1	99
Dynamix complete 500w PA	499
Ensoniq SQ1+	649
Ensoniq DP2	549
E-Magic Logic	279
JL Cooper Datamaster	299
Kawai K4R	299
Kurzweil Mark 5	1949
Kurzweil Micropiano	389
Microphone stands	FROM 19
Roland RAP10 inc interface	129
Roland SCC1	119
Roland MDC1	419
Roland A33	329
Roland SRV330	549
Roland CS10	89
Roland P55	299
Roland PR1	49
Roland P330	299
Roland D110	299
Roland U110	299
Roland JD800	1100
Tascam DA20	729
Waldorf Pulse	499
Washburn VGA7 Amp	49
Yamaha SY85	599
49 note Midi Keyboards	99

ALL PRICES INCLUDE VAT, DELIVERY AND 2 YEAR WARRANTY

THIS IS JUST A SMALL SELECTION OF THE MANY OTHER PRODUCTS HELD IN STOCK!!!

SPECIAL GEAR TO CLEAR

SAMPLERS/HD RECORDING	
Akai S1000PB	599
Boss RSD10	199
Fostex DMT8	1449
Roland VS880	1279
Roland JS30	499
DRUM MODULES	
Alesis SR16	179
Boss DR5	249
Roland TD7 Kit	1700
Roland TD5 Kit	850
MIXERS	
Boss MX10	199
Boss BX80	299
Phonic PMC1602B	399
Samson MPL1640	419
Samson MPL1502	199
Samson Mixpad 9	149
Stagemix 8:2	250
Stagemix 12:2	319
Yamaha Pro Mix 01	1449
Yamaha RM800:16	UNPRINTABLE

GUITAR EFFECTS	
ART ECC	VERY LOW
ART SGX2000	UK LOWEST
Boss LM2	15
Boss ME6B	299
Boss BCB3 Case	15
Boss BCB6 Case inc Pedals	349
Loads of Boss Pedals	UK LOWEST
AMPS	
Alesis Matica 900	499
Alesis RA100	250
Dynamix DPA600	350
Laney PL150	150
Roland SRA50	149
Samson Servo 150	160
Washburn VGA7	40
Yamaha P2500	499
20 Midi Lead bundle	59
20 Jack-Jack bundle	55

MONITORS/ MIXERS/ AMPS & PA

Alesis RA100	289	Samson Servo 500	329
Mackie 1202VLZ	UK LOWEST	Samson PL2404	499
Mackie 1604VLZ	UK LOWEST	Yamaha Pro Mix 01	1669
Mackie 3204	UK LOWEST	Yamaha RM800:16	UK LOWEST
Mackie 24-8	2200	Full range of Dynamix in stock	
Samson Mixpad 9	169	Full range of BV in stock	
Samson MPL1204	449	Full range of HZ in stock	
Samson MPL1502	249	Full range of JBL in stock	
Samson MPL1640	489	Full range of TOA in stock	
Samson MPL2242	599	Full range of Studiomaster in stock	
Samson Servo 150	189	Full range of Spirit in stock	
Samson Servo 240	249		

SAMPLERS & H/D RECORDING

Akai S2000	949	Roland S760	1299
Akai S3000XL	1699	Roland S760 inc DA400,	
Akai S3200XL	3299	OP760/1 & 8mb	UK LOWEST
Akai DR8d inc 1GB	2399	Roland MS1	349
Alesis ADAT XT	2599	Roland VS880	1399
Emu ESI 32	979	Roland VS800 inc FX	
Emu ESI 32 inc SCSI & 8mb	1549	and Hard Drive	2099
Emu E64	2099	Yamaha CBXD5	CALL
Emu Darwin	2400	Yamaha SU10	289
Ensoniq ASR10	1649	Full CD ROM Library	
Fostex DMT8	1449	available	FROM 29

HOME RECORDING & PRO STUDIO

Alesis MEQ230	219	Roland SDE330	699
Alesis Microverb 3	165	Roland RSS10	1999
Alesis Microverb 4	249	Roland AP700	1489
Alesis Midiverb 4	329	Roland RV70	349
Alesis Quadraverb 2	519	Roland RE800	229
Alesis 3630	229	Tascam DA20	739
ART MR1	199	Tascam DA30	1149
ART FXR Elite 2	379	Yamaha SPX1000	1099
Boss SX700	UK LOWEST	Yamaha D5000	1199
Digitech TSR24s	699	Yamaha SPX990	689
Digitech GSP2101	849	Yamaha REV100	219
Digitech Studio 5000	849	Yamaha MS202II	199
Digitech Vocalist II	449	Yamaha Pro R3	849
Digitech Studio Quad	449	Yamaha MT8X (8 track)	999
Ensoniq DP4+	899	Yamaha MT50 (4 track)	329
Ensoniq DP2	549	Yamaha MT4X (4 track)	499
Korg iH Vocal Harmony	339	Fostex D80	UK LOWEST
Roland SDX330	699	Panasonic SV3800	UNPRINTABLE
Roland SRV330	619		

PC SOUND CARDS/ SOFTWARE/ INTERFACES

SOUND CARDS - DIGITAL - ANALOGUE	
TBS-2000	152
Tahiti	299
Gravis Untrasnd	149
Soundscape Elite	249
Cardd (Digital only)	389
Trippledat (Card/SW)	979
Roland ATW-10	119
Tropez Plus	259
Maui	159
Gravis Ultrasnd Pro	199
Yamaha DBS0XG	139
Cardd Plus	679
I/O for Cardd	239
KEEN PRICES ON ALL OTHER SOUND CARDS!	
SOFTWARE	
Band in Box	89
Cakewalk Pro	159
Cakewalk Pro Audio CD	279
Cubasis Audio	229
Cubase v3.0	299
Encore v4.0	425
Jammer Pro	139
Procyon Pro	95
Quad Studio	199
Sound Studio Pro	139
Saw Plus	689
Cakewalk Home Studio	89
Cakewalk Pro Audio	229
Cubasis PC	119

SOFTWARE	
Cubase Score	459
Emagic Logic	319
Finale	680
Master Trax Pro	145
Quickscore Pro Delux	99
Sound Studio	89
Saw 4	429
CALL FOR BEST PRICE ON ALL SOFTWARE	
MIDI CARDS - ADAPTERS - CONNECTIONS	
Midiman Winman 1x1	49
Midiman Winman 2x2	95
Midiman 4x4 +SMPTE	189
Midiman Syncman	99
Midiman Syncman Pro	299
Midiman Smartsync	89
Midiman Par & Serial 1x1	79
Sound card midi conn	25
Midi cables from	2.50
Midiquest 2 port SE	182
Midiquest 8 port SE	549
Midiquest MQX32M + SMPTE	189
Opcode Studio 3	299
Opcode Studio 4	549
Opcode Studio 5LX	1099
Midiedge 1x1 + Wave adapt	59
Midiedge 2x4 + Wave adapt	120
Mac Midi adapters 1x3	39

SOUND MODULES & DRUM MACHINES ETC

Alesis S4 Plus	739	Roland MGS64	519
Emu Orbit	739	Roland PMA5	419
Emu Ultra Proteus	1199	Roland RA30	429
Emu Morpheus	989	Roland RA95	649
Emu Proteus FX	499	Roland MT120	699
Emu Classic Keys	549	Roland SD35	699
Emu Vintage Keys Plus	899	Roland MC50mk2	699
Emu Proteus 2XR	799	Roland SC33	399
Emu EIV	3949	Roland MC303	549
Korg 05RW	419	Waldorf Pulse	499
Korg X5DR	499	Yamaha QY300	799
Kurzweil Micropiano	399	Yamaha QY22	399
Kurzweil K2000R	SEE SEPERATE AD	Yamaha MU50	329
Kurzweil K2500R	2799	Alesis DM5	399
Novation BassStation	359	Alesis SR16	199
Novation DrumStation	UK LOWEST	Boss DR5	275
Roland JV1080	999	Roland TD7 Kit (Full)	1999
Roland MVS1	449	Roland TD5 Kit (Full)	1199
Roland MDC1	449	Roland SPD11	549
Roland MOC1	449	Yamaha RY8	199
Roland MSE1	449		

KEYBOARDS, SYNTHS & PIANOS

Alesis QS6	759	Roland XP80	1699
Emu E4K	2999	Roland XP50	1349
Ensoniq TS10	1649	Roland XP10	549
Ensoniq TS12	1849	Roland A90EX	1799
Ensoniq SQ1+	749	Roland A90	1549
Full range of Fatar in stock,	FROM 129	Roland A33	379
Novation BassStation	CALL	Roland DJ70mk2	1479
Korg Trinity	2099	Roland G800	1499
Korg Trinity Plus	2399	Roland FP1	1479
Korg Prophecy	919	Roland RD500	1549
Korg X5D	749	Full Roland E series in stock	UK LOWEST
Korg X3	899	Yamaha CS1X	UNPRINTABLE
Korg 15s	949	Yamaha SY85	699
Kurzweil PC88	1699	Yamaha QS300	999
Kurzweil PC88MX	2049	Yamaha P150	UK LOWEST
Kurzweil K2000	SEE OUR AD	Yamaha VL1	EX-DEMO 2799
Kurzweil K2500	3899	Full range of Yamaha digital pianos in stock	
Kurzweil K2500X	3999		

TEL: (01923) 246282 / (01923) 444599 FAX: (01923) 246669 WEBSITE: HTTP://WWW.ACTIVE_SOUND.CO.UK
OPEN MONDAY TO FRIDAY 10AM-6:30PM (SATURDAY 11AM-5:30PM).

CALL NOW ON:

01923 444599

I 2 LINES

OR FAX ON:

01923 246669

EUROPES LOWEST PRICES - GUARANTEED!!!

...creative technology

ACTIVE SOUND

MAIL ORDER SPECIALIST

GUITAR EFFECTS AND AMPLIFICATION

ART Tube MP	159	Roland GP100	739	Roland JC120	629	Roland BC30	249
ART Xtreme	279	Roland GR09	689	Roland JC85	449	Roland AC100	649
Full range of Boss pedals in stock		Roland GI10	429	Roland JC20	179	Roland KC500	599
Roland VG8	1799	Roland GK2A	119	Roland BC60	399	Practice amps	FROM £60

STUDIO PACKAGES AND PRO-AUDIO EQUIPMENT

Alesis ADAT	POA	Soundtracs - Topaz Maxi & Project		AUDIO-TECHNICA	
Emu Darwin	POA	Yamaha NS10's +Pro Mix 1 etc.		AT 4050	799
Roland VS880	POA	EV		AT 4033	499
Fostex DMT8	POA	Mackie		AT4041	249
		Allen & Heath			
AKG - C1000s & C3000				Beyer Mics	

All available now in different variations of bundled packages - 0% interest free - Full range of Soundscape in stock now!! Demos available
Massive selection of high quality studio accessories/cable/leads headphones
Lexicon / Omniphonics / Geffel / SPL / Focusrite / Akai / Drawmer / DBX / JL Cooper / Aphex / C-Audio / Digitech
Call Dave West today for TOTAL ADVICE.

ACTIVE BUNDLE SPECIAL

COMPLETE MUSIC SYSTEMS

Pentium 75 Mhz		Pentium 100 Mhz	
1GB Hard disk		1GB Hard disk	
Quad speed CD ROM		Quad speed CD ROM	
8 MB RAM		8 MB RAM	
14" Monitor		14" Monitor	
Keyboard		Keyboard	
Mouse		Mouse	
Tahiti and Yamaha DB50XG Hard Disk recording cards	£1634	Tahiti and Yamaha DB50XG Hard Disk recording cards	£1784
49 Key Midi Master Keyboard (if purchased with Music System)	£79		

LIMITED OFFER WHILE STOCKS LAST

KURZWEIL Music Systems

KURZWEIL K2000 RACK OR KEYBOARD

0% INTEREST FREE
£1899 (RRP £2299)
£189 DEPOSIT
18 MONTHLY PAYMENTS OF £95

OR BRAND NEW RELEASE

KURZWEIL K2DD (DANCE DEVELOPMENT MODEL)

£1949 (RRP £2319)
£194.90 DEPOSIT
18 MONTHLY PAYMENTS OF £97.45

ALL UPGRADES INC SAMPLE OPTIONS AVAILABLE - 1/2 PRICE MEMORY AVAILABLE NOW!

WHY YOU SHOULD BUY FROM US:

We offer same day next day delivery service Payment on delivery

Tailor designing systems to suit your requirements

Authorised service centre

Educational discounts

Installation and training

Part exchange welcome

Demo suite Try before you buy

Viewing by appointments only

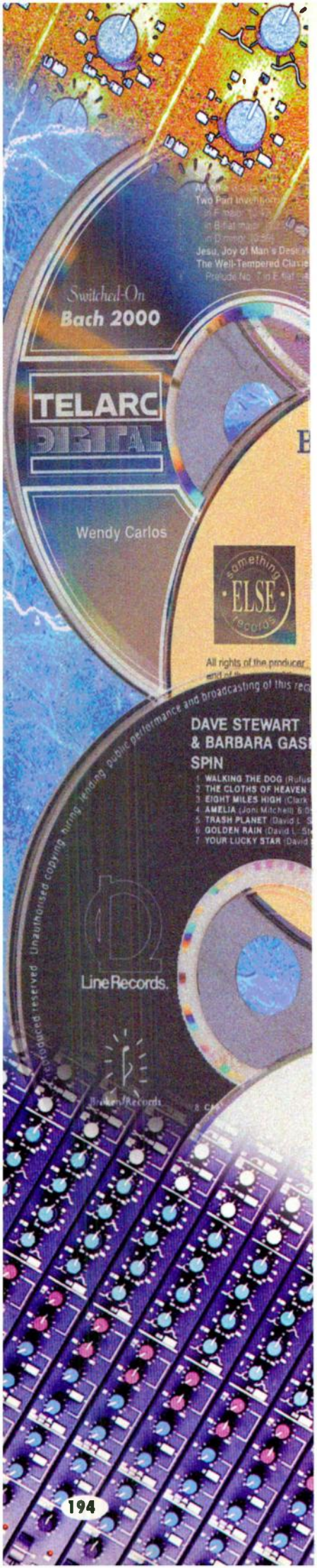
Account customers welcome

Payment by: Access/Visa/Switch etc. Cash/Postal Order/Transfer Instant Cheque Clearing

0% INTEREST FREE FINANCE APPLIES TO ALL ADVERTISED PRODUCTS & DEALS

ACTIVE SOUND (UK) LTD., PARK HOUSE, 15-19 GREENHILL CRESCENT, WATFORD BUSINESS PARK, WATFORD, HERTS, WD1 8QU
SEE US AT THE BIRMINGHAM GUITAR SHOW (JUNE '96) & LONDON MUSIC SHOW (NOVEMBER '96)

WRH



How to become a Record Producer

▶ learn every detail of how to get a good mix. A producer, on the other hand, doesn't need to know the details but has to be able to recognise when something is right, and offer meaningful comments when it isn't. You need to keep in mind the purpose of the mix. Is it a dancefloor mix that should sound great on a club PA? Or is it intended for CD listening at home? A radio mix should emphasise the 'buy me' factor, whatever it is that will attract the listener to the record store.

The engineer will always sit in the optimum listening position, directly between the speakers, while mixing, but you will probably wander around the room. This is so you have the opportunity to hear the mix in less than perfect conditions, which is exactly the way the record buyer will hear it — in a club with the bass turned up to stomach-pounding volume, or on an average home hi-fi, or on a car radio in heavy traffic, with a hole in the exhaust. Your mix has to sell the song in each of these situations, so while the engineer considers the finer points which will only be appreciated by those with good quality home stereo systems or a decent pair of headphones, you will be looking for the overall impact. If the mix sounds good from any listening position in the control room, it probably *is* good.

> "On average, people probably listen to each record they buy about six times; the producer of the record has to listen to it more like six *hundred* times during the recording and mixing process."

All studios have two or more pairs of monitors, so you can check the mix on very high-quality speakers or on the console-mounted nearfields. You can also have a cassette copy made so you can check the mix on a cheap stereo system, on a Walkman, or in the car. The more ways you can listen to the mix, the better.

STEREO FORMAT

Most multitrack recordings are mixed to DAT these days, but at a professional level, DAT isn't always considered to be entirely satisfactory. For one thing it's only 16-bit, which means that its sound quality isn't any better than the CDs people listen to at home. The engineer, therefore, has absolutely no headroom to play with, and inevitably there is a margin of unused capability that makes the recording not quite as good, technically, as it ought to be. It won't be too long before we see 20- or even 24-bit stereo formats in the studio on a regular basis, although it might be some years before any one is accepted as a standard. In the meantime, many producers are opting for the 'old fashioned' alternative of analogue reel-to-reel tape. They don't use a battered old Revox, however. Top studios have slightly worn but well maintained Ampex or Studer stereo machines that run at a speed of 30 inches per second (twice the 15ips long considered the professional norm) and take half-inch rather than quarter-inch tape. Such a machine isn't totally transparent but has a definite sound of its own, and it's a sound that producers like, particularly if a recording has been made on a digital rather than analogue multitrack. The frequency response is, in fact, better than DAT or CD, which can only manage around 20kHz at the top end. Half-inch analogue at 30ips can go up to 25kHz and beyond, and quiet signals can still be clearly heard below the already low noise floor — even without Dolby SR noise reduction. There are many who will say that half-inch is better than digital for these reasons, and so many successful records have been mixed to half-inch that it is difficult to disagree.

When the stereo master is finished, the producer's work continues into the CD mastering studio. This is the final stage, where the stereo master is committed to a U-Matic video tape or Exabyte data cartridge. After this, no further alterations can be made to the sound. CD mastering isn't quite such a creative opportunity as vinyl mastering used to be (mostly because of the technical limitations of the medium). It is, however, a chance to make sure that all the tracks have the right relative levels, EQing and compressing where necessary. You'll also set the length of the gaps between tracks, and perform any crossfades between tracks that you think are appropriate (and to hell with radio plays!).

When you leave the CD mastering studio, your work as producer is complete and you can look forward to the financial rewards for your labours. Actually, you may also have to look forward to your recording being handed over to specialist remixers — a fact of life that you will accept as gracefully as a true professional would! (See box on the Rapino Brothers.) Next month, in the final part of this series, we'll look at the business aspects of enjoying a long and fruitful career as a record producer. SOS

BANDWIDTH

Backing vocals without the dropped notes; without the tantrums; always in time (and always on time) and truly affordable - for musicians and bands of all levels. DigiTech have brought harmonisation a long way since the early 'Pinky & Perky' sounding units on the market a few years ago. Now any act can benefit from classy, complex harmonies of stunning realism and accuracy, giving the sound 'width' without the usual associated wagebill.

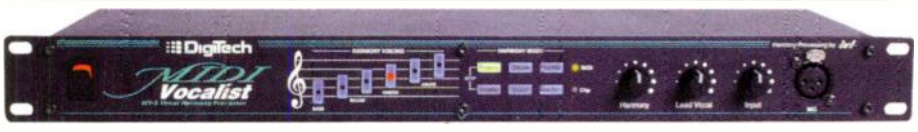
The simple-to-use and affordable **MIDI Vocalist** has been designed for musicians who want instant vocal harmonies without programming. It creates, automatically, up to five part natural-sounding harmonies from one voice input.

Aimed at the demanding professional needing high quality vocal thickening, harmonies and pitch-correction, the advanced **Studio Vocalist** offers total programmability and a host of features such as individual voice outputs and 'Gender Bender' technology which allows the choice of male or female-sounding harmonies.

STUDIO VOCALIST

- Natural harmonies and pitch correction
- Full frequency response (20Hz - 20kHz)
- Separate outs for each voice
- XLR and 1/4" jack ins and outs
- Gender Bender technology
- 48v phantom power
- Keystroke MIDI out for automation
- Optional Digital I/O

MIDI VOCALIST



- 4 voice detune for vocal thickening
- Vocoder mode for triggering harmonies via MIDI notes
- Chordal mode for automatic vocal harmonies
- Scalic mode for dynamic harmony motion
- Front panel XLR/mic. connection
- 1/4" line level input
- Bypass activation (external f/switch)

For the technically minded, the Studio Vocalist boasts full (20Hz-20kHz) bandwidth to capture more of the voice's natural overtones. However, impressive specifications only tell half the story. For only £9.95 (inc. P+P) our demo CD will reveal the Studio Vocalist's amazing musicality.

Alternatively arrange a demo at your DigiTech dealer and the Vocalists will speak for themselves - breathtakingly realistic vocal harmonizers to widen your band's horizons.

DigiTech

STANDARD MIDI FILES: THE REVOLUTION

Standard MIDI Files (SMF) discs contain MIDI data for complete backing tracks of popular songs when used with MIDI sound sources such as synthesizers and drum machines.
The Tune 1000 and Heavenly Music ranges of Standard MIDI Files have pre-programmed harmonies, fully compatible (via Vocoder mode) with the DigiTech Vocalist range.

Distributed exclusively by
ARBITER
MUSIC TECHNOLOGY
A division of Arbiter Group PLC
Wilberforce Road, London NW9 6AX
Tel: 0181 202 1199 Fax: 0181 202 7076

WRH

ALL HANDS ON DECKS!

TASCAM 302 DUAL CASSETTE DECK

PAUL WHITE takes Tascam's new dual cassette deck into the studio for practical trials.

Most dual cassette decks are pretty sad affairs, best suited to the less quality-conscious listener who wants to make a quick bootleg of a friend's tape for in-car or Walkman listening. The fact that this is a copyright infringement doesn't seem to put anyone off, but then looking at it from another angle, there are so few opportunities for radio airplay of anything other than mainstream pop that bootlegging may well be the only effective marketing tool the record companies have left!

While there are few legitimate uses for a dual cassette deck, one such is in the project studio, where clients frequently want to run off a handful of tapes from their own master. Indeed, I have a TEAC W525R dual deck in my studio for this very purpose, and like many of these decks, it offers regular or double-speed copying for a choice between speed and convenience or highest quality.

Basic dual decks are pretty limited in what they can do, because you can usually only record on one of the decks. It would be more useful sometimes if you could record on both at once — especially if your master tape is being played from DAT and not using up one of the cassette decks.

DUALITY BITES

Enter the dual deck that does it differently — the 3U rackmount Tascam 302. Both decks can be used to record and play with dubbing from decks one to two at either standard or double speed. A number of professional features have been included, making this deck very flexible both in the studio and in sound installation applications. Perhaps the most important ability is that of being able to record on both decks at once, but there's also a Cascade feature which allows multiple 302s to be connected and controlled from a single deck for quantity copying applications. Here, the master tape can be a cassette in deck one of the master machine, or it can be an external source, such as a DAT machine. Conventional phono leads are used to cascade the audio, with a further set of phono leads needed to cascade the external control connections. Each machine also has a socket for an optional hard-wired remote control.

For background music applications, the two decks can be set up to play sequentially, and because the mechanisms auto-reverse, you can play all four sides of two cassettes in order before having them repeat. By linking multiple 302s, you can have as many tapes play sequentially as you like.

The deck facilities are identical for each of the two tape drives, and each has totally independent controls apart from those associated with deck-to-deck dubbing and auto-reverse playback. Separate audio ins and outs are provided for the two decks, but these can be switched to Common mode so that only deck one's inputs are required when making duplications. There's a choice of Dolby B, Dolby C or Off for noise reduction — again independently switchable for the two decks — but there's no HX Pro (a headroom expansion system used in conjunction with Dolby noise reduction to prevent high-frequency tape saturation). Each deck has its own Pitch Control, Input Level and Record Balance pot. Master/Slave switching status is provided for applications where multiple machines are being used, and the headphone output may be switched to either deck. Other than that, the transport controls are pretty conventional, with a Return To Zero function and a 4-digit tape time counter. A custom fluorescent display provides counters and bargraph record level meters for both channels, and the tape doors are nicely damped so that they open slowly when Eject is pressed.

In use, the Tascam 302 delivers clean, bright recordings within the constraints of the cassette format itself. Slight wow and flutter was evident near the beginning of some budget cassettes, but I guess few machines would do better under the same circumstances. The varispeed option is welcome, as it allows master tapes made on poorly-calibrated machines to be brought back to concert pitch. Overall, the audio performance of this machine compares well with most mid-price hi-fi decks.

Though more costly than your average dual cassette deck, the Tascam 302 is a genuinely useful machine to have around the studio. It can handle the odd high-speed dub with ease, yet at the flip of a switch, it can make two real-time copies from an external source. Add one or more additional machines and you have a real-time copying suite. The continuous replay facilities are less useful in a studio environment, but they're well thought out and effective. Definitely a step up from your regular dual deck. SOS

pros & cons

TASCAM 302 £499

pros

- Allows you to record on both decks at once in real time, or dub from one to the other at single or double speed.
- Cascading option for multi-machine dubbing.
- Dolby B and C noise reduction.

cons

- No HX Pro.

summary

A useful studio deck for producing small runs of copies from cassette or external sources such as DAT masters.

SOUND ON SOUND

info

£ £499 inc VAT.
A TEAC UK, 5 Marlin House, The Croxley Centre, Watford, Herts, WD1 5YA.
T 01923 819630.
F 01923 236290.

INTASOUND

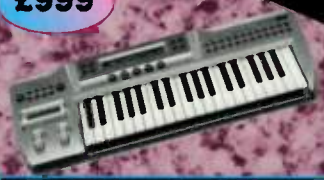
70 Narborough Road, Leicester
FREEPHONE 0500 515256 Fax: 0116 233 6687

Intasound have done it again! You can buy now, pay nothing for 6 months then take up to 18 months interest free credit on all the items in this section

£1495

Roland XP50
and you receive a voucher entitiling you to 15% of all your XP50 expansion boards.

£999



Korg Prophecy

£1099 **Quasar**

£799

Technox

£1799

Akai S3000 XL

£1195

£599

£999 **AKAI S2000**
Akai sample library in stock

£1595 NEW
New Quasimidi Raven
Cyber - 6 in stock

Roland JV1080
and you receive a voucher entitiling you to 15% of all your JV1080 expansion boards.

Yamaha CS1X

£2395

£499

Korg Trinity
Trinity + £2795

NEW

£565

£999

£399

Bass Station Rack

Roland MC303
The next Roland Dance Classic

Yamaha SY85
and get 10 free sound disks

New Roland Expansion Series
Dance, Orchestral, Vintage & Strings

Novation Drumstation £449

£599

Waldorf Pulse

£1099

Korg X3

NEW V.2 £1495

£899

Alesis QS6

£1195

Yamaha QS300

£869 **E-MU Orbit**

Nord Lead
Nord Rack In Stock

Mackie SR32.4	£1799
Mackie SR24.4	£1495
1604 VLZ	£949
1402 VLZ	£549
1202 VLZ	£399

All available on interest free credit

Mackie 8 Buss
In Stock

Yamaha Pro Mix 01
£Call

Digital Recording
C-Lab Falcon X
1G Hard Disk
FDI installed including keyboard + Mouse £1482
Cubase Audio 16 £699

NEW

Yamaha CBXD5 £1699
Free Cubase Audio (PC)
Free Logic Upgrade (Mac)

ALESIS ADAT XT £CALL
in stock and on demo

Roland VS880

£1495

INTASOUND DJ

Akai Remix £899
available on interest free credit

Roland DJ70 II £1695
Available on interest free credit

Roland MS1
Call

Yamaha SU10
£299

CLEARANCE

Roland R70	£349
Roland JV35 (New)	£549
Roland JV50 (New)	£699
Roland MC202	£249
Boss DS330	£249
Yamaha TG100 (New)	£249
Kawai KII (New)	£549
Kawai KC20 (New)	£399
Yamaha QY20	£279
Alesis Quadrasynth (Demo)	£699
Yamaha MU80	£449
Korg 05RW	£375
Roland JX3P	£250
Roland R8M	£299
Akai S1000 10Mb SCSI	£1395
Akai SO1 (Demo)	£599
Roland MS1 (New)	£325
Roland D70	£675
Korg M1	£675
Korg M3R	£299
Yamaha DX9	£175
JL Cooper Mix Master	£149

Media Revolution

There are now more recording media and data storage formats than ever before. PAUL WHITE catches up with Pro Tape's Richard Symons, to discuss the role of tape in a multi-platform future.

RICHARD SYMONS OF PRO TAPE

Richard Symons is a partner at Pro Tape, the well-known West End recording media supplier, which puts him in a very good position to monitor trends and feelings within the recording industry. I started our interview by asking for Richard's impressions of how the market is responding to digital technology.

"People entering the market are going for ADATs or DA88s, or in some cases they may have a MIDI system plus some kind of direct-to-disk system, mastering to DAT, but once they find some success and start working with outside record producers, and certainly with a record company, they tend to move up to analogue 2-inch tape."

Is this a matter of sound quality, or is there more to it than that?

"I think it's more for the sound quality, but you can't say it's superior — it's just different. And there's the reliability factor. Both 8-track digital formats are great because of their low cost, but dropouts do happen, especially if it's a long project and you do a lot of shuttling, dropping in and out, and so on. They've done very well in the live recording field, but even then, the top-end professionals are more likely to use open-reel digital or open-reel analogue machines if they have the choice. The new high-output analogue tapes let you record using more level than with standard tapes, which means you get closer to a digital signal-to-noise performance, while retaining the benefits of the analogue sound."

Alesis's ADAT XT and the S-VHS tape it uses: "We now have a professional audio format which evolved out of a consumer video camera format!"

It's true that there is a perceived difference between the analogue and the digital sound, but it's probably also true that analogue recording is about as good as it's going to get, whereas digital formats can still be developed a long way from where they are now.

"But would you want anything better than some of the analogue records you've got?"

Not from the sound quality point of view, but digital surely has numerous benefits: the signal on tape stays unchanged once it has been recorded, you can make accurate clones — which you can't do with analogue — and digital systems can give you true gapless punching in and out.

"So you're happy with the sound of analogue, but not with its versatility from an editing point of view. I totally agree, and digital technology should improve with time to give us the same quality. I'm just waiting for that time. Also, I'm not sure how big a problem high-end loss and additional noise from copying and bouncing is on 2-inch tapes, though on smaller formats you might worry about it. Digital has a very clear advantage if you're editing or cloning material, and track bouncing is quieter, but then not too much bouncing goes on at a professional level. There's a technical paper doing the rounds which says that to make digital audio work acceptably, you need a sampling rate of 256kHz, and if that's the case, it's going to be a long time before it becomes practical because of processor speeds — not to mention the data storage requirement. At the moment, you can get an album (stereo) onto a 1Gb drive sampling at 44.1kHz, but that would go down by a factor of about six."

ON BORROWED TIME

One of the things you've spoken to me about before is the fact that analogue recording equipment and media is designed specifically for that purpose, whereas most digital technology and media is borrowed from some other market area. For example, ADATs use video tape. Is this a major concern, or are

The AKAI Family Album

The close-knit Akai family of professional hard disk recording products all share the advanced component design of the DD1500, the mother of all audio post-production workstations. Entirely purpose designed for the dedicated recording, editing and syncing of audio to picture, the line is continued by the Akai DR8, an 8 track hard disk digital recorder/player as easy to use as a conventional MTR and its bigger brother, the DR16 which shares the family's powerful non-destructive editing facilities and gives a surprisingly low price level per track. Up to eight DR16s and DR8s can be chained together in combination to give a maximum of 128 tracks. **The family that plays together, stays together.**

Akai DD1500
Digital audio post-production workstation

- All primary functions accessed from dedicated keys
- No mouse or drop-down menus
- Smooth, fast operation thanks to proprietary LSI chips and multitasking operating system
- 8 track recording on a single M/O disk or 16 tracks on a hard disk
- Powerful, easy to use editing with all 16 tracks visible on screen
- Highly sophisticated synchronisational abilities including reverse play and slow motion
- 16 channel digital mixer
- Remote operation up to 200 metres away
- Disks compatible with DR8, DR16 and DD1000

Akai DR8
8 track hard disk digital recorder/player

- 16 bit linear professional quality 8 track simultaneous recording/playback
- Logical format of conventional MTR tape machine
- User choice of hard disk fit, fixed or removable
- Non-destructive editing facilities
- Disk random access allows instant playback or edit
- Standard digital interface allows 16 track backup to DAT
- Built in 16 channel programmable mixer
- Same synchronisation performance as DD1500
- Optional VGA output board
- Extensive range of common DR8/DR16 interfaces for upgrading
- Disks compatible with DR16 and DD1500

Akai DR16
16 track hard disk digital record/player

- 16 tracks of 16 bit linear digital performance from a single SCSI hard disk, fixed or removable
- Highly cost-effective price level per track
- As easy to use as a conventional MTR
- Standard digital interface allows 16 track backup to DAT
- Total editing with zero loss
- 16 channel programmable mixer
- Same synchronisation performance as DD1500
- Optional VGA output board
- Extensive range of common DR16/DR8 interfaces for upgrading
- Disks compatible with DR8 and DD1500

AKAI DIGITAL **Akai (U.K.) Ltd** E.M.I. Division, Haslemere Heathrow Estate, Parkway, Hounslow, Middlesex TW4 6NQ. Tel. 0181 897 6388 Fax. 0181 759 8268
Contact Akai Electric Co Ltd for details of your local Akai Digital distributor

LIFE AFTER ANALOGUE

It seems to me that the life of the medium used for storage didn't change for the better when we switched to digital. While some analogue recordings have suffered from so-called 'sticky shed' syndrome, there are still playable analogue tapes made decades ago. By contrast, digital tapes such as DAT, or even removable hard drives and writeable CDs, tend to have an estimated life span in the order of 10 years.

"Certainly with DAT and the smaller formats, 10 years may be all we can expect from them. If you want to keep a stereo master intact for as long as possible, it needs to be on a minimum of quarter-inch, or preferably half-inch, analogue tape. The sticky shed problem only afflicted certain types of tape, and even then we can't be certain how carefully all of it was stored. People can be very careless about how they store tape — all the effort goes into the creative process, then the master DAT gets stuck on a shelf.

"It's amazing that the National Sound Archive can still get recordings to play back that were made on wax cylinders as long ago as 1904. Somebody actually took the machine into the jungle to make ethnic recordings, but I'm prepared to put money on it that if they'd gone out with a DAT machine, we wouldn't be listening to the original recording now. You might say that we don't need to listen to the original because we can clone it, but that only stands up if you can make the copy before the original degrades and starts dropping out. So you'll replay the DAT and at the slightest hint of dropout, you'll make a copy. That's fine, but by the time you've realised there is a problem you've lost some data already, and who has time to check all their old recordings? The irony with the National Sound Archive is that they're transferring all their material to DAT.

"The basic problem centres on the fact that we're using less and less space to store more and more information. In ancient Egypt, a full stop carved into a block of stone would have occupied a three-inch-square space for a single bit of information. Five thousand years later, even though the edges have been rounded off by the elements, we can still read it. Nowadays, an optical disk of the same dimensions can store 230 million bits — which is an amazing leap — but you've only got to mishandle the disk by leaving it in the sunlight or next to a heat source, and you run the risk of losing some of that data. Of course, this is using two extremes of information storage technology, but I hope it illustrates the point."

"Studio owners tell me that when they ask an artist what they want to master on, the answer is almost always DAT — until they hear an analogue half-inch master."

we merely benefiting from the economies of scale?

"It is a concern. Take 8mm tape. It starts as a camcorder tape, you soup up the tape formulation and the electronics so you can get more information onto it, and out of that grows Hi-8 and a data storage format. Finally it gets bastardised into a digital 8-track, so now we have a professional audio format which evolved out of a consumer video camera format.

"The pro audio business is very small, and as you've probably heard, 3M have pulled out of tape sales altogether. If you look at their professional tape sales, they are very good, but seen as part of their whole tape business, which includes video tapes and audio cassettes, it's really a very small part. Professional audio will always be insignificant compared to consumer formats, which makes it impractical to develop media specifically for pro-audio recording, with the exception of the top end. On the other hand, because consumer formats are cheap commodity products, the running cost of any system that uses them is very low and there are lower hardware development costs.

"The downside is that none of it is really professional — even DAT is, strictly speaking, a failed consumer format, and if it had been designed from the start as a professional format, it would have been far more robust. Even digital U-matic uses a professional video player. Audio is always the poor relation, and the main difference in use between a consumer product and a professional one is the out-and-out hammering the pro gear is designed to withstand. You can soup up the hardware all you like, but the ultimate limitation is with the format itself. With DAT, DA88 and ADAT, you're squeezing a massive amount of very important data onto consumer formats and then expecting them to perform to professional standards in a professional environment. I suppose what I'm saying is that I'd like to see a digital format designed from the ground up, in the same way that 2-inch analogue was. You look at what the pro user needs — let's say a 256kHz sampling rate with 24-bit resolution — then you build a format around that requirement, instead of looking at available mass-produced technology and then adapting it as best you can."

FORMAT FUTURE

How will your business be affected by the way in which hard disk is becoming more popular for recording and editing work? This is another example of technology developed for one market area being used for audio work, and just one of the problems that came up was that of thermal recalibration, where hard drives would interrupt the audio flow during playback to calibrate themselves.

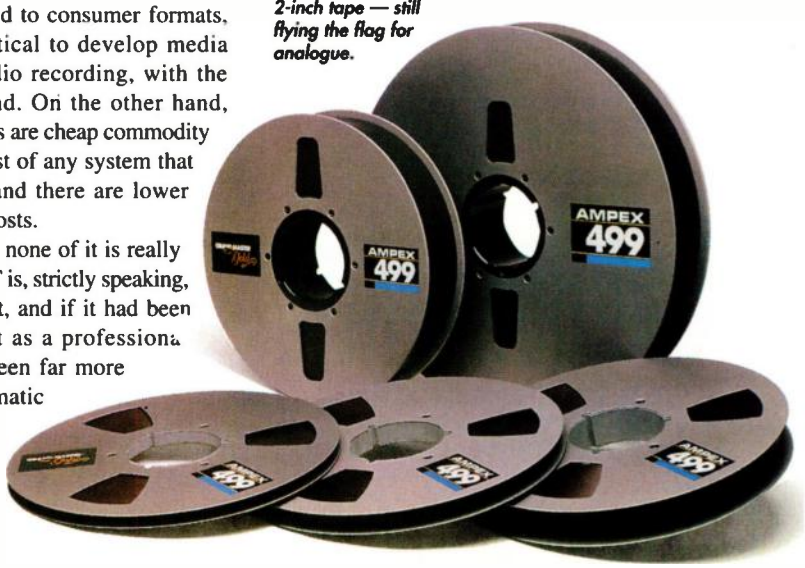
"We supply information-bearing media, so as long as people want to store information, we will supply whatever is needed."

So if, in 10 years, we're recording onto holographic perspex cubes, you'll be selling them?

"Yes! But I think there's still a lot of life left in analogue tape, just for esoteric reasons, the same as there is in valves. Look how well Tony Larking is doing with his valve range. And a lot of that is down to the way digital audio sounds.

"Two-inch tape is in a slight decline but it's still doing very well, and part of the credit must go to the high-output tapes [Ampex 499, BASF 900 and 3M 996], which can be run at 30ips with no noise reduction to produce unbelievably good results.

Ampex's high-output 499 2-inch tape — still flying the flag for analogue.



A Shure Wireless System for under £300

(with no strings attached.)

Shure T-Series Wireless Systems

You don't need to spend a small fortune to own a professional-sounding wireless system. Just step up to one of Shure's high performance, highly affordable T-Series systems.

Whichever you select, you'll get a system that's custom designed for your application, with an impressive array of standard features you'd expect to find only on the most professional systems.

Shure's exclusive 'battery saver' technology provides up to 18 hours of battery life and operates in conjunction with two LED indicators; one for on/off and another to warn when battery life is low. A convenient mute switch delivers noiseless control of on/off functions, while Shure's noise squelch circuitry virtually eliminates noise bursts.

Alternative systems are available with Shure's exclusive MARCAD® diversity receiver with its intelligent circuitry. MARCAD monitors and combines signals from two radio antenna, while eliminating dropout and switching noise.

So say goodbye to amateur hour and take a closer look at the wireless systems that can take you as far as you want to go.

THE VOCAL ARTIST

Enjoy the total freedom of movement which only a wireless system can provide - plus a choice of microphone heads, Shure's world-standard SM58 or the popular BetaGreen 3.0 microphone head.

Model ETV30S (BG3.0 head) **£259** +VAT

Model ETV58S (SM58 head) **£295** +VAT

THE GUITARIST

Designed to deliver the full sound you'd expect from a wired setup. The Guitarist offers Shure's highly reliable surface mount technology and input gain adjustment for the best signal-to-noise ratio with the widest range of guitars.

Model ETGS **£195** +VAT

THE HEADSET

Shure's ruggedly built new wireless system delivers top-quality sound and worry-free reliability. It's lightweight ultra-comfortable and fully adjustable. And will withstand hour after hour of highly active use. The unique head band keeps the headset securely in place.

Model ETHS **£295** +VAT

THE PRESENTER

Delivering wireless convenience from pulpit to podium, from small rooms to large venues. Shure's low-profile WL93 miniature lavalier microphone is among the smallest in the business. It offers crisp clean sound along with outstanding reliability.

Model ETPS **£245** +VAT

All systems come ready to plug-in and play.
Prices shown above for complete standard Systems, all models also available in Diversity versions.

SHURE

HW International, 167-171 Willoughby Lane, London N17 OSB Tel: 0181-808 2222

Please send me details on Shure T-Series Wireless Microphones

Name _____ Address _____

_____ Postcode _____

SHURE

▶ Quarter-inch tape has almost totally lost out to DAT, except in the areas of location recording for film, while half-inch soldiers on as the superior stereo mastering format. Studio owners tell me that when they ask an artist what they want to master on, the answer is almost always DAT — until they hear an analogue half-inch master. It sounds unbelievably good. It's still quite worrying that they have to sell people the idea of mastering onto half-inch as well as DAT."

DAT's inexorable rise as a format — even in areas like film location recording, where analogue quarter-inch tape retains a foothold — has been aided by handy machines like the HHB PortaDAT shown here.

One thing that worries me to some extent is that as new technologies emerge, we're ending up with a huge proliferation of formats, not only in tape, but in removable digital media such as Zip drives, Jaz drives, the various SyQuest cartridges, and so on. Do you see this as being a problem area?

"I think that probably keeps us in business, to be honest. What concerns me more is the reliability of the new formats — for example, the Zip disks have a lifetime guarantee, but what does that mean? As yet, they haven't been around long enough to prove that they're up to the task. Our society is becoming increasingly dependent on information, and manufacturers are exploiting that very effectively, giving us immediate access to a whole world of it. I'm just very concerned about how much attention is being paid to the longevity of the data we create, use and store. History gives us the best sense of perspective we can ever have, and we need to preserve it as a means of measuring how we move forward, learning from our mistakes, and even just enjoying a past era. That used to mean preserving films, books, art and artifacts, but in the completely digital near future, how much will be retrievable just a quarter of a century down the line?"

CDR: storage medium of the future, or only good for 10 years?

BACK TO BACKUP

Most people are now familiar with the benefits of hard disk recording and editing, but of course the big problem is where to back up data. What are the professionals doing?

"They're using tape streamers of some sort. We're selling a lot of Exobyte, with data DAT a close second. Optical disks are also great, but the cost is still too high for most people and the capacity isn't there. A 1.3Gb optical disk costs around £50. Of course, that will keep coming down, but at the moment, the tape-based systems are still the most cost effective. The better Exobyte systems have a read-after-write facility, so they won't go on to writing the next bit of data until they've confirmed that what they've just written is OK."

Is CDR a useful archiving medium?

"Well, it is susceptible to heat and light, but the truth is that we really don't know. You can do accelerated ageing tests on all these media, but the only way to really find out what will happen is to sit around for 10 or 15 years and wait. We see guaranteed archival figures varying from 10 to 100 years. I wouldn't want to guarantee 100% data integrity for much more than 10 years with CDR."

Does this mean that there ought to be more boxes for checking the error rates in media so that we know when it's time to clone?

"Some studios have that facility, and certainly you can get error printouts for U-matics, but yes, we have to build up a backup mentality where digital data is concerned, and we have to store the media with respect. Tape gets taken for granted until there's a disaster.

> "There's a technical paper doing the rounds which says that to make digital audio work acceptably, you need a sampling rate of 256kHz, and if that's the case, it's going to be a long time before it becomes practical."

"Last month, a big production house who use a SADiE hard disk editor and store the end results to DAT were having terrible problems with data errors on DATs, but they can't pin it down to one

The last year has seen the rise of new removable digital media, like the Iomega Zip drive shown here: "As yet, they haven't been around long enough to prove they're up to the task".

machine. They'd check the playback at their own studio, send it to the BBC, who also checked it on receipt, then when it's been transmitted, there's been a major dropout. Sometimes it's happened in the studio and it's been the only copy — completely random. If you're relying solely on DAT and you don't have a backup, you can lose a lot of work in one go. It means that you can't always be 100% confident that your work is intact, so if you're making a CD master from DAT, you really need to sit in and listen to every second of it as it goes across, to make sure it's OK."

To put things in perspective, most people manage most of the time without any problems. I've used DAT since it first came out and I've had few problems that couldn't be traced to either a faulty tape or machine incompatibilities. The same with ADAT — I can't remember ever having a dropout while using the recommended tapes, though I have had clients who've brought in recordings made on other S-VHS tapes and some of those have thrown up serious errors. I would imagine that one cause of reported ADAT errors, at least from home users, is using the same tape over and over again. If you do that with a video tape in a video recorder, you eventually get sparkles or a fuzzy picture, and I imagine the audio equivalent is an increased error rate.

"I don't want to be alarmist, but because we're selling media day in, day out, we get a broad overview of the problems with the stuff. Naturally we don't get every customer calling us up to tell us that the stock they've been using has been great — we only get a comeback if there's a problem, so that's what tends to stick in your mind. And you're right that re-using old tape is a completely false economy. Enthusiasts think nothing about spending thousands of pounds on equipment, then they'll spend years cycling around the same £20-worth of tape. In fact, forget £20 — they'll come in and look at two different brands of ADAT tape, one of which costs a tenner and one of which costs, say, £11, and you can see them standing there trying to decide which one to buy!"

And this goes right back to the guy with the cassette multitracker — you should always use a brand new tape for every session, and it should be the right type of tape. But how many people do that?

"It's amazing that the thing we store the information on gets so little respect. I've been on the other side, and when you're trying to decide whether to buy five reels of 2-inch tape and you have to choose between 456 and 499, the difference in cost comes to about £50. But at the end of the day, it's your recording. It shouldn't be a question of 'what's the *cheapest* I can get away with?'. The question should be 'What's the *best* I can afford?'."

MUSIC SOLUTIONS

AKAI

Unbelievable prices on AKAI samplers!

S3200XL 16mB EXP TO 32MB.....£3499
S3000XL 2MB EXP 32MB.....£1799
S2000 2MB EXP 32MB.....£999
REMIX 2MB EXP TO 18MB.....£849
TIME + SPACE CD ROMS & AUDIO CDs
HARD DISC RECORDING
Akai DR4 vr - 250 virtual tracks.....£1095
AKAI DR8 INC. Jazz Drive £2999
AKAI DR16 +2GIG AV HD Drive £4295

In Stock! Book Your Demo Now

KEYBOARDS MODULES

Roland PC200.....£169
Roland A90 (Controller).....£Special
Roland XP80.....£Special
Yamaha CS1x 128 Performance sounds.....£599
Yamaha QS300.....£Special
Alesis QS6 64 voice synth NEW.....£899

KURZWEIL

PC88.....£1830
K2000 V3.....£2120
K2000 V3R.....£2120
K2500.....£2995

MODULES

Midiman Gman GM/GS.....£199
Alesis DM5(Drums).....£479
Roland JV1080.....£1099
Ensoniq MR Rack 64 voice 12MB.....£1250

MIXERS

Allen & Heath GS1.....£999
Allen & Heath GS3-V 16:8:16.....£1999
Allen & Heath GS3-V24:8:24.....£call
Soundcraft Spirit Studio24.....£call
Soundcraft Spirit Studio 16.....£call
Mackie 32-32-8 OR 24PKGS.....PHONE
Samson MPL 1502.....£499
Samson Audio MPL 2242.....£685

COMPUTER SEQUENCING SOFTWARE

Cubase VST(MAC).....£325
Cubase 8 core V3 VST.....£469
Emagic Logic (Mac PC).....£389
Emagic Logic Audio (PC).....£399

Simms Memory! Simms Memory!

4 Meg 72 pin.....£80
4 Meg 30 pin.....£85
16 Meg 72 pin.....£220
16 Meg 30 pin.....£380

Summer Sizzlers! Seasons Specials! Summer Sizzlers!

Akai SG01 vintage Module
Akai SG01 Piano Module
Akai SG01 KGM Module
Only £299 each including VAT

Complete system gives 48 timbre, 96 voice, 495 presets, 20MB Rom including Master Keyboard Special deal £949

Midiman Keyman 49 note Master Keyboard, Channel Bank, Program select, 10 numerical Keys any Akai module only.....£375 Free Delivery
novation drumstation.....£449 inc. Free Delivery
novation basstation rack.....£389 inc. Free Delivery
novation basstation Kbd.....£349 inc.p.s.u.+ case Wordwide Export

MIDIMAN-Interface Solutions

Minimacman 1In 1Out.....£29
Macman 1in 3 Out.....£39
Winman 1x1 IN 1 out(PC).....£49
Winman 2x2 2IN 2out(PC).....£79
Portman 1in 1 out S/F interface.....£79
Syncman Sync Box.....£99
Smart Sync.....£79

EX-DEMO AND USED EQUIPMENT

Roland Juno 60+JSQ + Stand.....£349
Roland D50 + Card.....£399
Novation BassTN Rack.....£349
Novation Bass Keybd.....£270
Yamaha V50 Workstation.....£390
Lexicon Alex Reverb.....£245
Yamaha DX21.....£120
Kawai K1R + Cards.....£180
Samson Servo 150 Amp.....£220
Midiman MicroMixer 18 Chan.....£179
Midiman 8 Chan Multimixer.....£58
CAsio C23000 Synth.....£160
JBL Control 1 monitors.....£170
Ath-M7A Mon H/Phones.....£89
Midiman Desktop Music System (Mac).....£129
Emagic Notator Logic 1.7(Mac).....£160
Digitech Studio Quad Effects.....£420
Roland U110 + Cards.....£230
Samson MPL 22:4:2 Mixer.....£590
Tascam Port A07 4 Trk.....£330
Allen & Heath GS3 16 CH.....£1250
Ensoniq ASR10 Kbd Sampler.....£1195
Samson S11 M/C.....£45
Zimmer Racks 10U.....£80
Demo Racks(Var Colours).....£98

Microphones
Audio-Technica

ATM 27HE Dynamic Vocal Mic.....£98
AT 4033 + Shock mount.....£485
AT 4050/CM5 Multi Pattern.....£745
AT Studio 6 Pack-Deal 7 Pro MCS.....£839

Headphones

ATH-M40 Full Range Studiophone.....£95
ATH-D40 Bass Enhanced Studiophone.£95

AKG

C3000Lge Diaphragm Cond.....£299
WMS50 Radio Mic.....£389
C414 ULS.....£849

MONITORS

Alesis Monitor 1's.....£289
Alesis Monitor 2's.....£899
Souncraft Spirit Absolutions.....£Call

Behringer, DBX, LA Audio, Aphex
Compressions/LimitorsGates/Expanders
Exciters/Equalisers
TL Audio Drawmer SPL Alesis
Too Many To List!!! Phone!!

Racks, Stands, Cases,
Patchbays, Looms, Leads
Made to your requirements,
Part Exchange your old gear
for new. Cash Deals!!!

MAIL ORDER NEXT DAY DELIVERY
(ALL MAJOR CREDIT CARDS ACCEPTED)

MUSIC SOLUTIONS

11 HYDEAN WAY SHEPHALL STEVENAGE HERTS SG2 9XH
TEL. 01438 750751
FAX 01438 750754

BLUE SYSTEMS

Professional Retail, Design

Everyone's

the designer

THE PLAY OFF

ALESIS ADAT XT

New improved transport
10 Auto Locate points
Track Delay, Offsets

TASCAM DA88

Record up to 113minutes on one tape. No other 8trk tape format can compete on features, build quality & reliability. Still the best and most sortafter from professionals.

Alesis £2450 inc VAT
ADAT XT

Why Choose BLUE?

Blue Systems is a professional audio, retail, distribution, design, service & manufacturing company setup to service the needs of record companies, management companies, artist's and recording studios. Over the years we have gained much respect from the prompt and personnal service that we provide. Give us a call and see why everyone is turning "BLUE"!!

TOOLS OF THE TRADE

RØDE NT2

Mic from down under is comparable to the AKG414 at only 499 inc VAT.
Dual pressure gradient transducers.
Max SPL 145db with pad.

BLUE SYSTEMS

HD RECORDING

DIGIDESIGN

Direct to Disk ~ Direct to Disk
PowerMac 7100/80 24/700CD £2150
PowerMac 7500/100 24/500CD £2075
BLUE PC P100 16/1.2GB + session8, + 882 I/O & Cubase Audio £3210

** Software **

Emagic Logic £335
Emagic Logic Audio (inc Seq) £546
Steinberg Cubase Audio £587
Steinberg Score £420
Steinberg Cubasis Audio £125

MONITORING

Genelec
KRK
Dynaudio
Tannoy
Yamaha

We can supply a wide range of monitors & amps so suit needs and budgets.

MIXING WITH THE BEST!

Yamaha O2R

Yamaha's new O2R is an eight buss fully programmable digital console with 40 input channels (24analogue,16 digital), 100mm motorised faders, 50 internal effects processors. All controlled on-board via the automation. With a price tag of just £6999, means you can have a fully digital studio for under £10,000.

MACKIE

The cream of the 8 buss analogue mixing consoles sub £5000. Excellent EQ, mic amps and over all noise floor with flexible aux routing. Can be expanded with input expanders which just bolt on. Call for a brochure to find out more.
Mackie 24:8 £3195.00 inc VAT
Mackie 32:8 £4100.00 inc VAT

SoundTracs

The Topaz project 8 is a very high spec desk with lots of features. in 24 or 32 formats giving up to 72inputs on mix down. Classic SoundTracs EQ, with a very low noise floor. A must for anyone thinking of a project studio. - Automation ready!
Topaz Project 8 - 24:8 £2450 inc VAT
Topaz Project 8 - 32:8 £2999 inc VAT
FREE Meterbridges worth up to £1100

Audio
Servicing & Manufacturing
turning Blue

BLUE SYSTEMS

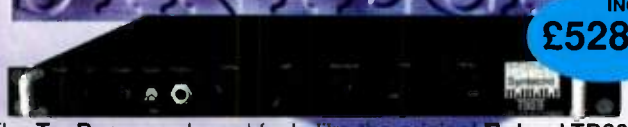
HOT & HAPPENING

INC VAT £582

MUTATOR

The Mutator is a stereo analogue filter/effects unit based on technology developed in the 60's. Quite unlike your standard reverb, delay, chorus & flanger, the FXs achievable with the Mutator are unique and quite simply defy description.
Now Available with MIDI control.
Once you've tried one there's no letting go.

SYNTECNO TEEBEE



INC VAT £528

The **TeeBee** sounds and feels like the original **Roland TB303**
All the original sound knobs (Tuning, Cutoff, Resonance, Filter & Decay) can be controlled from the front panel. These parameteters if changed, are sent as MIDI controllers on the MIDI output.. TeeBee slide can be switched on&off by means of MIDI controller. TeeBee sound is pitchwheel&Velocity sensitive. It also has an analogue input for internal filter, which can be controlled via MIDI. Roland Sync24 output PLUS 4 CV/Gate outputs, with selectable Volt/Oct or Volt/Hz & polarity switching for each output. Internal 16 MIDI channel recorder/player. Call for a brochure.

INC VAT £689

The Lexicon LXP 15MkII. An amazing FX unit with the floorless name of Lexicon! Special Deals (limited period). Call for a brochure and see why all the top studios use Lexicon.

BLUE COCKTAILS

Fostex DMT8
8Trk Digital Recorder

Version 2

- True CD quality Digital Recording direct to harddisk.
- Jog Shuttle Wheel
- Cut & Paste editing
- 22 inputs available on mix down
- Digital I/O for recording & Mastering
- 12.5 minutes of recording as standard

Your 'Wish List Multitracker
Fostex DMT8 inc 1.7GB HD £1525 inc 24hr Delivery
Fostex DMT8 inc 2.5GB HD £1649 inc 24hr Delivery
1.7GB = 42.5Minutes 8Trk recording @44.1
2.5GB = 62.5Minutes 8Trk recording @44.1

AKAI

A new breed of Akai:
-Upgradable via SIMMS.
-Excellent AD/DA.
-Industry standard

AKAI S2000XL	10MB £1099
AKAI S3000XL	32MB £1999
AKAI S3200XL	32MB £2799
Call for Memory & Upgrades	

Fostex D80
8Trk Digital Recorder

Taking Multitrack recording one step further! Imagine removing the tape of your digital multitrk, adding a harddisk, making the unit modular in 8, 16, 24 tracks & the result - The **FOSTEX D80.**
-True Multitrk recording
- CD quality recording
- Cut, copy, paste & move editing
Definitely a must!

Specials:
D80 850MB INC VAT £1549
D80+2.5GB INC VAT £1699
+ FREE 540MB HD & Bracket - While Stocks Last

SpL *Vitalizer* - *Dual Balanced XLR Version*

INC VAT £349

The *Vitalizer* is maybe the best in its class of enhancer / exciter processors. It utilises different process to other such products, the effect deals with the full frequency range and is substantially smoother and richer. Also includes 'Surround' effect. SPECIAL DEAL

Novation DrumStation

INC VAT £449

Fed up with with going through all those TR909 & 808 samplers? The exciting new **DRUMSTATION** is the answer to your prayers, with bangs and crashes for all occasions!! - Available now.

THE GENERAL STORE

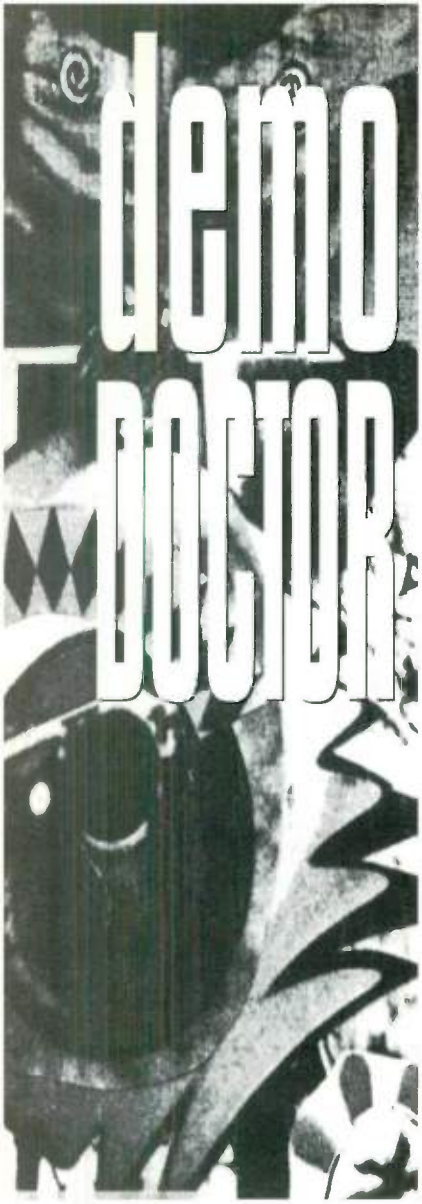
5.2GB AV drive Removable
Now Shipping
£1450 Inc VAT

IOMEGA JAZZ Drive INC VAT £565
Inc Cart & Cables
IOMEGA ZIP Drive INC VAT £169
Inc Cart & Cables
SyQuest EZ135 INC VAT £195
Inc Cart & Cables
SyQuest 1.3GB Removable £CALL
Blue MultiDrive 1U rack mount Fits 3 internal drives on 2 SCSI busses
Call for details

ALL PRICES INC VAT @ 17.5%. E&OE Prices correct at time of press - VISITORS BY APPOINTMENT ONLY

BLUE SYSTEMS
WorldWide Delivery
The Old School House - Church End - Ashdon - Saffron Walden - Essex - CB10 2HG
Tel: 01799 584095 Fax: 01799 584094 Email: bluesys@dial.pipex.com

WRH



If you'd like our resident specialist JOHN HARRIS to review your demo tape, just send it on cassette or DAT, with recording details and a photograph, to: Demo Doctor, Sound On Sound, PO Box 30, St Ives, Cambridgeshire PE17 4XQ.

Readers submitting demo tapes should note that SOS regards the inclusion of photos or artwork with demos as permission for the magazine to reproduce this material free of charge, as illustration, with any review of the accompanying tape.

DARREN CLEARE

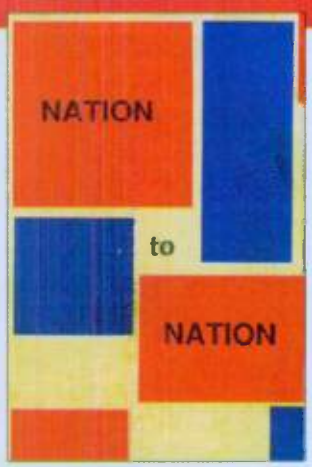
Recording Venue: Home.
Recording Equipment: Yamaha QY10 sequencer/sound module, Yamaha TG33 sound module, Aiwa ADF410 cassette deck.

It always makes me cringe when I read letters that say "I have written over 50 tracks", with the obvious implication being that they are all great. Few people seem to exercise quality control over their work when enthusiasm for churning out songs takes over! Still, Darren's tape is very worthy of mention for his use of sound.

The first composition crosses electro/acoustic music and ambient dance, with knocking, percussive synth, tuned kick (upfront, with a long decay), a grating and very high-pitched melody line, and good use of industrial chords as a backdrop. Sonically, it's very well put together, and I also like how the kick pattern occasionally drops beats to keep the listener awake. It's interesting that Darren doesn't use any external effects, because he's still managed to choose sounds with appropriate processing. Those of you with one sound generator will realise how difficult this actually is. The kick drum decay, for example, could be gated reverb or a long decay time and the low industrial chords sound as if they have been treated with delay, stereo panning and modulation. These chords also sit well within the track because their bandwidth has been limited to about 2kHz. So they provide body and warmth in what is an otherwise hard set of sounds.

The second composition demonstrates once again that Darren has given a lot of thought to the sounds and their overall texture. Some very low bass underpins this more ambient track and in places sounds exactly like a car engine revving up outside. It's quite a relief when this cuts to a bell sequence. However, the bell section really goes on far too long with no variation, before cutting back to the start of the piece. It was an interesting idea to then put the two sequences together but, again, the idea is in danger of outliving its usefulness. ❑

NATION TO NATION



Recording Venue: Home.
Recording Equipment: Atari 1040 ST running *Cubase* and *Creator*, Tascam 424 Portastudio, Philip Rees TS1 Synchroniser, Studiomaster Reddimix 8:2 Mixer, Alesis Microverb and Midiverb II effects, Zoom 9050 effects, Philips 730 DCC recorder.

This is an interesting demo from Dave, Paul and Tim, who are collectively called Nation to Nation. The band name is certainly reflected in the first track, a collage of different 'World' sounds. For instance, sampled tablas play a big part on the rhythm track, with strong support from four-on-the-floor kick and mixed cabasa and hi-hat. Yet there are also American Indian-style invocational vocals, the sound of children singing, which could be from Africa or Asia, some pretty heavy guitar chords, and some ethereal Indian flute. Given that the vocals have been dubbed over from cassette, the quality is pretty good, with no obvious signs of deterioration in clarity. The use of analogue synth filter zaps is also good, tying the track firmly into the ambient side of dance. If there is any criticism, it is that thematically the track is too varied and goes on a little too long.

The second song is more conventional rock/pop in style, featuring '80s-style string synth and bells with early Simple Minds guitar playing from Tim Roberts. Heavily effected vocals, which are also EQ'd to sound megaphonic, cut in from time to time. These use quite a lot of slapback echo with a slightly longer delay time than would normally be used — probably 130ms or more — and work well, even if that particular production trick is well used.

For me, the band sound more exciting when they're experimenting with early synth textures, especially the Mellotron-style strings, and mixing this with World music percussion and guitar textures. Returning to this format for the third composition, the sound is much more 'now'. If they could only join the structured singing style of the second track to this ambient dub, they might have something. Even so, this is a well-mixed demo where the use of effects, particularly echo, help to make vocals and guitar sit well with the synthesized sounds and samples. ❑

WIN AMPEX TAPES

Ampex Professional Media by QUANTEGY

As an incentive to send in your best demos, Quantegy, makers of Ampex tapes, are kindly providing prizes for the best demo tape submitted each month. The lucky winner has a choice of: 20 x Ampex 472 90-minute chrome audio cassettes, 10 x Ampex 467 DAT 94-minute cassettes, 5 x 456, 457 or 499 quarter-inch open-reel tapes, or 5 x 489 44-minute SVHS DAT cassettes.

CONCERT SYSTEMS

AMPLIFIERS	WATTS/ch 4 ohms	Price
C-AUDIO		
RA3001	625	£799.00
CREST		
VS650	325	£545.00
VS1100	550	£785.00
VS1500	750	£999.00
CA6	600	£1240.00
CA9	900	£1399.00
CROWN		
PT3	760	£849.00
MT2400	800	£1412.00
VZ3600	1655	£2380.00
PEAVEY		
Stockist of all Peavey Equipment. Best UK prices.		£Phone
SAMSON		
Servo 500	250	£359.00
STUDIOMASTER		
7000	350	£499.00
12000	600	£599.00
QSC		
USA1300	650	£799.00
Ultra Lightweight Amp PL1.8	650	£1565.00

Three Year Warranty

DESKS

MACKIE

MS1202 VLZ 3 band eq NEW	Phone for Best UK Prices
MS1402 VLZ 3 band eq NEW	
SR24/4	

STUDIOMASTER

Mixdown Classic 8	£1499.00
Powerhouse 300	£749.00
Powerhouse Vision 8	£899.00
Horizon	£1149.00
P7 16 channel	£2049.00

ALLEN & HEATH

GL3000 24:8:2	Ring for best UK prices
GL2000	

SOUNDCRAFT

Folio S/X 20 inputs	£499.00
RACPAC 18 inputs	£599.00
Spirit 8 24/8/2	£3299.00
Power Station	999.00
Spirit Live 4/2	PHONE

MICROPHONES

AKG MICROMIC

C411PP acoustic instrument	£99.00
C416PP piano/accordian	£129.00
C417PP lavalier	£99.00
C418PP drums	£129.00
C419PP wind instrument	£129.00
C420PP headset	£149.00
D81 double bass	£199.00

DYNAMICS

D112 instrument	£175.00
D3400 instrument	£90.00
D3500 dual capsule instrument	£99.00
D3600 vocal	£199.00
D3700 vocal	£99.00
D3800 vocal	£149.00
D3900 vocal	£189.00

RADIO SYSTEMS

WMS300 simply the best 8 different channels!	£899.00
WMS100 Mk2 dynamic or condenser or instrument were £1056 only a few left at	£479.00

AUDIO TECHNICA

ATM 25 Kick Drum	£139.00
ATM63 snare etc	£99.00
ATM 73A Best Headworn condenser available £149.00	
ATM1000 Vox instrument etc	£59.00
ATM 2000 Vox/instrument etc	£89.00
ATM 3000 Vox instrument etc	£79.00
SHURE BETA 58 £129.00 BETA 57	£129.00
SM58 £99.00 SM57	£99.00
CROWN CM310 specialist vocal mic exceptionally loud without feedback	£199.00

EFFECTS, COMPRESSORS + GATES

ART

FXR Stereo Digital Multi FX 256 presets	£140.00

APHEX Main Dealer. Call for competitive prices!

104 Aural Exciter with Big Bottom	£203.00
105 4 ch logic assist gates	£399.00
106 4 ch Rider Compressor	£339.00
107 2 ch Tubessence Valve Mic Preamp Excellent	£464.00
108 2 ch Easyrider Compressor NEW £203.00	
109 2 ch Tubessence Valve Parametic Eq	£339.00
661 Expressor Valve Comp/Lim	£648.00

DIGITECH

Studio Quad	£399.00
Studio Vocalist	£799.00
Vocalist 11	£459.00
Midi Vocalist	£359.00

YAMAHA

SPX 990	£729.00
SPX 1000	£1179.00
REV 5	£1479.00

ALESIS

Microverb 111	£159.00
Midiverb 1V	£299.00
QuadraVerb +	£329.00
QuadraVerb 11	£529.00

BEHRINGER

Dualflex 11 Stereo Enhancer	£125.00
Ultrafex 11Stereo Enhancer	£210.00
Protector 8ch ADAT Limiter	£250.00
Autocom Stereo Comp	£165.00
Composer St/comp limit/exp	£250.00
Multicom 4ch/comp/limit	£250.00
Intelligate St/gate/exp/duck	£250.00
Multigate 4ch/gate/exp	£250.00
Autoquad 4ch/freq/gate	£330.00
Ultracurve 64 bit DSP	£550.00

LEXICON

Alex	£349.00
Reflex	£399.00
LXP5	£399.00
LXP 15	£849.00
PCM 80 or PCM 90	Call for best UK prices

DBX

262 St/Comp NEW	£TBA
266 St/Comp Gate	£316.00
286 Vocal Processor	£341.00
290 St/Reverb	£369.00
274 Quad Gate	£485.00
242 Para Equaliser	£305.00
120 xp Sub Harmonic Synth	£296.00
172 Super Gate	£858.00
1066 Comp/Lim/Gate	£474.00

Unit 4d, Stag Industrial Estate, Atlantic Street, Altrincham, Cheshire

Tel: 0161 927 7700 or Fax: 0161 927 7722

We are open 10-6 Mon-Fri, Sat 10-4. Mail Order facilities available

EASY PARKING - FRIENDLY SERVICE

GIG SOUNDS Ltd

86/88 MITCHAM LANE,
STREATHAM, LONDON SW16
TEL: 0181-769 6496 or 5681
FAX: 0181-769 9530

Established 1978

The Original The Best Mail Order - Part Exchange

MON-FRI 10AM 6.30PM SAT 10AM 6.30 PM

GIG SOUNDS Ltd

195 London Road,
CROYDON, SURREY CR0 2RJ
TEL: 0181 686 4546
Fax: 0181 681 5775

The Music Retailers Association

Call with Confidence All prices include VAT

KEYBOARDS & MODULES

Akai S3000 XL Sampler	£1750
Akai S2000 Sampler	£950
Akai SG01 V Vintage module	£299
Akai SG01 KGM Module	£299
Fatar 610 Plus Mother	£329
FATAR 900 mother	£599
Ensoniq MR Rack	£1299
Ensoniq SQ1 Workstation	£675
Korg X5 Performance Key	£665
Korg X3 Workstation	£999
Korg Trinity	£2300
Korg Prophecy	£999
Kawai K II	£999
Kurzweil PC88	£2000
Roland JV35	£660
Roland XP50	£1370
Roland XP80	£1799
Roland A30	£365
Roland JV 1080Mod	£1070
Emu Morpheus	£1040
Yamaha SY35	£540
Yamaha SY85	£850
Yamaha MU80	£650
Alesis DM5 Drum Mod	£499
Alesis D4 Drum Mod	£290

FX PROCESSORS

Alesis Microverb 3	£189
Alesis Microverb 4	£289
Alesis Microverb 4	£389
Alesis Q2	£629
Alesis 3630 compressor	£270
Digitech TSR6	£229
Digitech TSR12	£389
Digitech TSR24	£790
Behringer intelligate	£325
LA Audio 4x4 compressor	£349
Drawmer Dual gate s/h	£200
Dynacord DLS223 s/h	£500

RECORDING

Roland VS880	£1499
Fostex DMT8	£1499
Soundscape	£2499
Tascam 464 4 track	£539
Tascam 424 4 track	£499
Tascam Porta Q7	£349
Tascam Porta Q3	£199
Fostex XR3	£249
Fostex XR5	£379
Fostex XR7	£499
Yamaha MT50	£399
Philips DCC Recorders	£249
Tascam DA20	£799

SOUNDSCAPE - SIMPLY THE BEST

The best selling hard disk recorder is available as either a single unit, multiple modules or as a complete running PC package

Soundscape

Free 1 gig drive with every soundscape sold

GIG sounds have enjoyed great success with Soundscape and are pleased to say that the time stretch pitch shift option is now available from us for £150 only Call Gareth for Demo.

P.A.SYSTEMS

Peavey HISYS 1XT each	£325
Peavey HISYS 2XT each	£349
Peavey Eurosis 3 each	£169
Peavey Eurosis 2 each	£144
Peavey Eurosis 1PM each	£280
EV SX200	Phone

Martin speakers/FBT and a huge range of microphones for PA/Recording

LONDONS BIGGEST music store

FAST MAIL ORDER SERVIVE ON STOCK ITEMS

FREEPHONE STREATHAM 0500 123 616

Finance. Written details on request

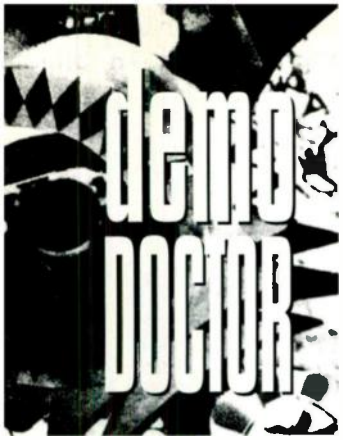
Overnight Delivery

Streatham Tel: 0181 769 6496 Croydon Tel: 0181 686 4546

DRUMS - GUITARS - WOODWIND & BRASS - BOOKS & MUCH MORE

SECONDHAND GOODS BOUGHT AND SOLD. GUITAR & HI TECH SERVICE DEPARTMENTS

HUGE RANGE OF ACCESSORIES. SOUND ADVICE IN PA - RECORDING - KEYBOARDS ETC.



CONTRIBUTION

Recording Venue: Home.
Recording Equipment: Fostex X28H cassette multitracker, Aiwa DAT recorder, Roland Sound Canvas synth module, Emu Emax 1 sampler, Yamaha V50 synth, Alesis Quadraverb GT effects, Tandy Microphone.

This is a moody, eloquent demo from Kent-based band Contribution — but talk about getting your money's worth from an effects unit! The first song uses the Quadraverb GT to good effect on nearly everything, from phased and echoed vocals to industrial bass clang and, of course, guitar. I'm pleased to report that the wet/dry mix is well handled, so that the effects never completely take over. The result is a homogenous mix coloured by the idiosyncrasies of the Quadraverb — slight sibilance on the vocals and a grainy reverb quality. This suits the guitar in particular, creating a two-note power-chord drone which underpins the track in a most un-guitar-like fashion.

The second song employs mood swings between exposed strings and voice, and full backing. The backbeat drags a little when it arrives and I think a more modern rhythmic feel should have been used — possibly some kind of breakbeat. The last song, 'Insular Life', uses a better kit sound from the Roland Sound Canvas, with some bite provided by a higher-pitched snare.

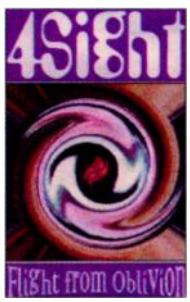
Overall, this is a promising demo. The songs come across with their well-delivered angst vocals, and the style is early '80s synth pop with lashings of rock guitar. However, the use of effects gives the tape a more quirky feel. ❑

QUICKIES

MORE UNFRIENDLY PEOPLE IN MY BACKYARD: This offering is described as 'post-industrial indie thrash', with heavy distortion on the guitar riffs

through a backing which sounds vaguely classical in places — brash and full of pomp. The spun-in female vocal (Tori Amos) works well on a track as paranoid as the name of the band. The second song is more straightforward thrash at an incredibly fast pace, complete with screaming vocal, but what elevates it above the rest is the 10-second interlude of choir vocal when the guitar drops out. This is really quite an unexpected twist that throws preconceptions out of the window and ties in nicely with the female vocal on track 1. Perhaps the band should label themselves 'thinking man's post-industrial indie thrash'!

4 SIGHT: Horrendous, tabloid-worthy punning occasionally clogs the pages of *SOS* too! Still, if it was good enough for Shakespeare...

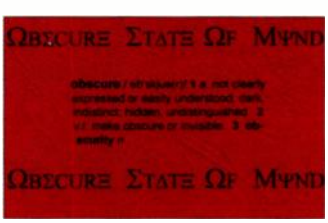


Meanwhile, back at the demo, Graham and Leon have put together some rather good trancey dance music. Pulsing downward filter sweeps provide the hypnosis, low sub-bass throbs gently on beats one, two and a half, three and four, and it could be leaning towards the ambient in places, with the addition of girlie choir synth. Yet the synthesized filter sweep twanging and drum programming keep it just that bit uptight. At 21 minutes, 34 seconds there has to be some variation, and the lads keep the vibe going. Good festival fare for those hot summer nights.

ANDREW LLOYD: Andrew's produced a solid demo with definite soul leanings. He sings and plays drums rather well too, taking the unusual step of recording kit drums to a cassette multitracker. Drums and synth were recorded in stereo, then bass and percussion were added live as the whole lot was routed to the remaining stereo tracks. Vocals and extra keyboards finish off the production. The Mackie 1202 mixer must have come in useful, and its famous mic inputs have come up trumps on the drum sound, which is one of the best real kit sounds I've heard off a cassette-based analogue multitrack. If there's any criticism, it's that the bass on the first track is a bit woolly and the snare could have done with a little reverb. However, as 'rough sketches' go, these recordings are better than many we receive on larger recording formats — which only goes to show that there's no substitute for good musicianship and a musical ear when it comes to recording at home.

WILD BUNCH: Swedish media student Jorma Linna has quite rightly taken advantage of the fine equipment in his college studio. His resulting demo is excellently recorded Status Quo-style boogie, even though Jorma regards his mixes as 'kind of rough'. For me, they've captured the energy and slightly messy edge that this kind of music requires. All the sounds are punchy, courtesy of some decent compressors; in your face, the result of good mixing and good choice of reverb balance; and big, due to the use of good sound sources and thoughtful choice of microphone positions. I suppose a little more time spent on the vocal effects would have been useful, maybe using some slapback delay instead of the small room reverb. There's also a little hiss noticeable between tracks, but nothing a decent gate or digital editor couldn't handle.

OBSCURE STATE OF MIND: This outfit relies heavily on synthesized backing to produce music which has the feel of the Pet Shop Boys without the humour. Perhaps this is why Darren and Chris have had no success with record companies so far, but more likely it's to do with the singing. Here I have to concur (for a change) with the A&R at EMI, who felt that the vocals were a bit weak. However, I didn't think that the lyrics were also lacking. The actual recording is OK, with a slightly dull vocal sound that has been treated with too much reverb. Strings are used as a chordal wash behind



every song, and some substitute needs to be found to stop different songs sounding too similar. It doesn't hurt to drop chords out altogether in the verses, for example, and just use them to make the chorus pick up. For instance, on the third song, 'Children of the Universe', the percussion I could hear in the background at one point could have been used on the verses instead and brought to the front of the mix.

JONATHAN OVIN: Jonathan worries about the quality of his demo because it was recorded direct to a normal cassette and not to DAT.

However, with all-digital sound sources triggered from an Atari/*Cubase* setup, he's really got nothing to worry about on this score. Considering that he was also only 14 when he was working on this instrumental project at school, the recording shows a good grasp of sound and balance. He's more successful when he attempts something structured, like the second track, 'Yello' — a homage to heroes, perhaps? Choice of sounds on this short track is good and I especially liked the obviously synthesized kick drum.

THE BARTOKS: This band have been making all the right moves, playing support to Skunk Anansie and for various A&R people, yet they're still looking for a good album and tour

deal. Tracks 1 and 2 of the tape, recorded at Ca Va studios in Glasgow, sound excellent, and it's difficult to understand why a band as good as this can't get any financial backing in Britain. The songs are strong, the singing and playing excellent, and they've captured the production sound of the moment in both vocals and guitar style. Wah guitar and moving octaves instead of chording all the time works brilliantly. In comparison, the tracks recorded on a Portastudio sound compromised sonically, but the songs still come across well. One criticism I will make is that the addition of keyboards detracts from the skeletal attack of the band. It may be that the sounds chosen — mainly strings and piano — date the production, bringing The Bartoks dangerously close to the worst of '80s rock. ❑

KEYS Musical Instruments Ltd

71 Henshaw Street
Oldham OL1 2AA

KORG

Trinity	£1999
Trinity Plus	£2499
01/Wpro	£1899
05R/W	£399
X5DR	£575
X3	£999

YAMAHA

QS300	£999
W7 inc Exp Board	£999
MU5	£199
Hello Music (PC)	£199

ROLAND

XP10	£499
XP50	£1250

MACKIE

CR1202	£299
CR1604	£849

KURZWEIL

PC88	£1899
PC88mx	£2395

KURZWEIL

K2000R £2500

including:
SMP1-Sample Option,
P/RAM, ROM1-Orchestral Sound Block,ROM2-Contemporary Sound Block
Usual combined price over £4000

K2500X £3150

88-note weighted action keyboard Endless sound creation possibilities. Powerful sequencing and effects. Fully upgradable by K2000 style options and software upgrades. RRP over £3800

USED GEAR

Boss CS10 Micro-Monitor	£100
Casio CSM1 Module	£50
E-Mu ProFormance Piano Module	£150
Korg KMX8 Mixer	£130
Korg T3 Workstation	£800
Kurzweil HX1000 Horn Expander	£450
Roland R5 Drum Machine	£150
Simmons MIDI Mixer	£150
YamahaSY77 Workstation	£700

CARDS CLEARANCE SALE

Description	Use with	Card Type	Price
ROLAND...			
M256D	D50	RAM-256k	£10
PN-D50-00	D50	ROM-Factory Set	£10
50's & 60's(SC2)	E-Series	ROM-Style	£20
70's & 80's(SC1)	E-Series	ROM-Style	£20
Around The World(SC1)	E-Series	ROM-Style	£20
Country(SC1)	E-Series	ROM-Style	£20
Country(SC2)	E-Series	ROM-Style	£20
Latin(SC1)	E-Series	ROM-Style	£20
Latin(SC2)	E-Series	ROM-Style	£20
Guitar & Keyboard	U110	ROM-Voice	£20
Mallett	R8	ROM-Voice	£20
YAMAHA...			
Voice & Rhythm Set	DSR2000	ROM-Various	£10
Chorus 1	HS8	ROM-AWM	£20
Harpsicord	HS8	ROM-AWM	£20
FVPO1-Best Selections 1	HS-Series	ROM-Voice	£20
FVPO2-Best Selections 2	HS-Series	ROM-Voice	£20
RP1	MC-Series	RAM	£10
RP3	HS-Series	RAM-8k	£10
RP5	HS-Series	RAM-32k	£10
RAM4	RX5	RAM	£5
MCD32	SY22	RAM-32k	£10
Synth Goes Live	SY55	ROM-Voice	£10
KORG...			
Akira	M1	Program	£20
Bun May	M1	Program	£20
World Omnibus	M1	Program	£20
Brass	M1	PCM/Program	£30
Piano	M1	PCM/Program	£30
Various(Untitled)	M1	PCM/Program	£30
MCR03	M1	RAM-128k	£30
DSC01	DS8	ROM-Voice	£5
Performance 2	WaveStn	Program	£10
Drums	M3	PCM/Program	£10
OTHERS...			
Ensoniq MC32	SQ1/SQ2	RAM-32k	£20
Kawai DC8	R80	RAM-8k	£10
Kawai DC16	K1/K1m	RAM-16k	£10
Technics SYP5	KN800	RAM	£10

Cards listed may be new or used although all are sold with a minimum warranty of three months - Call for details. Postage is not included in the price of cards listed

Tel: (0161) 627 0614 Fax: (0161) 620 0614

DACS

Easy, reliable interconnection of MIDI devices. Transparent gain to optimum levels. Crystal clear, adaptable and loud headphone monitoring systems. All at the right price. These were our targets. We have reached them. Optimise your studio, or stage rig with DACS' Top Performers.

For further information on these and our full range of products and services please call us on +44 (0) 191 438 5585, fax us on +44 (0) 191 438 6967, or write to us at Stonebills, Shields Road, Pelaw, GATESHEAD, Tyne and Wear, NE10 0HW, ENGLAND

OUR TOP PERFORMERS

The MIDI Patch Bay 10 MIDI Devices interconnected

This unique product has been actively solving musicians' MIDI interconnection problems for years. Drawing its power from MIDI, the bay features full and half normalising and a very fast MIDI THRU.

Direct Injection Units

8 channel Professional Unit: *A mains powered, 1U rack mount unit, it gives a line level balanced output on XLR connectors (rear panel). Variable gain inputs (guitars, keyboards, line level, speakers), are on the front panel. Suitable for studio and stage. After a recent recording, Dave Maughan, the session's producer said*

"These are the best keyboard DI's I've come across".

InterFace

A modular system offering interfacing between -10dBV and +4dBm, balanced or unbalanced, ***InterFace*** *will connect low level multi-track tape recorders to line level desks and outboard equipment*

HeadMaster Headphone Monitoring Systems

A complete headphone monitoring solution from the simple to the sophisticated. Let us supply you with a system to match your requirements and your budget.

Digital Processing & Direct to Disk Recording Systems for PC and Mac.

We are now the Northern dealer for Spectral's ***Audio Prisma Digital Audio Workstation.*** *Call us now to arrange your demonstration. We can also offer your ideal fully configured system (including computer) using Spectral's* ***Audio Prisma****, Pro Tools, Session 8, Soundscape or Card D, with GRM Tools and the Composers Desktop Project.*

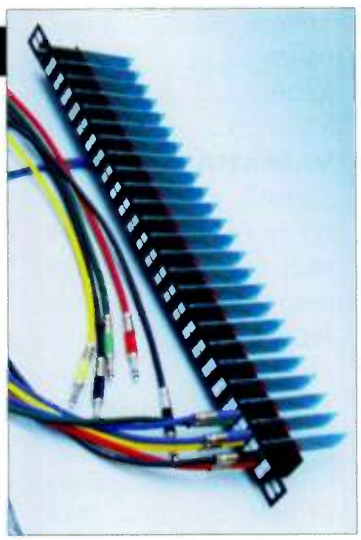
OTHER PRODUCTS

We specialise in custom built items to your specification because of this specialisation our prices are highly competitive. All the above can be customised, and we also make microphone pre-amplifiers, distribution amplifiers, intercoms, audio and digital audio switching and routing, ring modulators

brief encounters

CONCISE REVIEWS OF ESSENTIAL ACCESSORIES

PROSONIX 48-WAY BANTAM PATCHBAY



While professional studios invariably make use of compact bantam patchbays, most home studios are forced to go the quarter-inch jack patchbay route, mainly because of cost. Admittedly, there's a certain convenience aspect to quarter-inch jacks, because of the predominance of the jack as an instrument connector, but in my experience, the normalising contacts on most budget jack bays become intermittent after a few months. While bantams are not immune to intermittency problems, the design of the connectors makes them less vulnerable to dust, and most of the professional systems are easily disassembled for cleaning.

Those who'd prefer to use bantams may be interested in the Prosonix bantam patchbay, which provides 24 pairs of TRS sockets in just half a unit of rack space, and which costs around the same as a decent budget jack patchbay. Each pair of sockets comprises a Neutrik NJ3TT/2 dual-socket assembly mounted on its own circuit board, with a 4-way DIP switch. Because the connector assembly is fully enclosed, the only way in for contamination is via the jack holes. Should cleaning become necessary, a plastic cover can be prised off, revealing the gold-plated contacts. The boards themselves simply slot into the metalwork, so you don't need any tools at all to take the patchbay apart.

Normalising is handled by three of the four DIP switches (the fourth is redundant), allowing you to normalise the tip and ring separately, and also to isolate the input and output grounds if required. When normalised, the sockets follow the semi-normalised convention, whereby the top row (outputs) can be used to provide a feed without breaking the signal flow, but inserting a jack into the bottom row breaks the contact. The rear connections on the review model were hard-wired, which entails soldering your cable harness directly to the patchbay; while this may seem tedious, it actually saves a lot of money in connectors and is a lot more reliable. However, Prosonix are planning models with connectors on the back, including the 'D' connector used by some manufacturers (Tascam and Fostex, for example).

Bantam patch cables are traditionally very expensive compared to quarter-inch jacks, but Prosonix have sourced a range of low-cost cables from Piranha, who use Neutrik plugs and cable, both in a choice of colours, to produce a balanced patch lead for under £10.

Prosonix may be a new name in the patchbay market, but the guys behind the company were founding members of the original P&R, a name which is well known to project studio owners, so it's not surprising that they're applying their talents to bringing prices down. This is the first of their products I've seen, but there seem to be few compromises, and it's obvious that a lot of thought has gone into simplifying the design to reduce manufacturing cost. Inevitably, panel space is in short supply for labelling, though standard sticky labels apparently fit, but even so, you'll need to use some fairly cryptic abbreviations. My own instinct would be to use bantam patchbays for insert points, aux send/returns and outboard gear, but to retain standard jacks for any line inputs likely to be used for DI'ing instruments. That way you avoid having to make or buy adaptor leads. Other than that, bantams clearly have the advantage when it comes to saving space and keeping the contacts clean. *Paul White*

£ Bantam patchbay £89.95; Patch cables £9.95 each. Prices include VAT and UK p&p.
A Prosonix, PO Box 32, Hailsham, East Sussex BN27 3XT.
T 01323 848808.
F 01323 441185.

MUSIC HOUSE DATA PRODUCTS POWERMASTER RACKMAC C2 APPLE RACKMOUNT KIT

The idea of making computers rackmounting for studio use is not a new one, but the necessary hardware tends to be expensive. After session musician (and *SOS* reader) Whyman Baker casually commented on the astronomical price of existing rack kits, Powermaster decided to produce their own version, which is now on sale at a more realistic price of £199.

In these days of RAM raiding there's a security benefit from rackmounting your computer, especially if you use security rackmount screws such as the ones available from Studiospares. Designed to fit the Centris/Quadra 650 and 7100-style models (other versions are being developed), Powermaster's contribution to the protection racket is effectively a satin-black sheet steel shell, enclosing the whole computer aside from the front panel and the connector area of the rear panel. The parts of the shell are held together by simple bolts, and once the hardware is mounted in a rack cabinet, there's no way the computer can be removed without first taking the hardware back out of the rack.

Of course, security isn't the main idea behind computer rackmounting — it also helps keep things tidy by moving the clutter off your desk and into your rack. If you're taking a computer on the road, rackmounting has obvious practical benefits, though to prevent transit damage, you should always use the type of rack system with an inner cabinet shockmounted inside a larger cabinet using foam or springs. This consideration applies to any shock-sensitive audio equipment, not just computers.

Having assembled and used the Powermaster Mac racking system, I'm impressed by how solidly it is constructed and how much neater my system looks because of it. Now I have my Mac and my rackmount hard drives in the same box, which keeps SCSI cabling runs short and cuts down on exposed wiring. This is a simple concept, but the implementation is well designed and well engineered at less than half the cost of the previous competition. *Paul White*

£ £199 inc VAT.
A Syco, Kimberley Road, London NW6 7SF.
T 0171 624 6000.
F 0171 372 6370.

Don't tell anyone. They'll all want one.

PR

DIRECT MAIL

NOT TRUE.

ADVERTISING

EXHIBITIONS

BROCHURES

INCENTIVES

POINT OF SALE

People don't buy what they don't know.

CORPORATE ID

SWAN PUBLICITY LTD

Call Gez Kahan on 01628 487820.

SIMPLY THE BEST

FOR DIGITAL AUDIO, A.V. & SAMPLER RECORDING, ACCESS & STORAGE PRODUCTS

the POWER MASTER GENESIS

The PowerMaster Genesis is an essentail tool for all Sampler's and Computer based recording systems. Designed to carry out every digital write, access and storage requirement possible the Genesis is equipped to house both fixed internal and front loading removable mediums.

the RACKMAC C2

A secure 19" 4u rack housing for the Apple Macintosh 7100, 650 Quadra & Centris computer. The C2 design offers full accessibility to the CD Rom, Floppy drive, reset switches & all rear connections.

For information phone,fax or return this slip to:

Music House Data Products

Music House . 3 Heath Road . Breachwood Green . Nr Hitchin . Herts . SG4 8PL. ENGLAND.
TEL: 44 (01438) 833222
FAX: 44 (01438) 833051

Name.

Address.

Country.

Post code.

Telephone.

Fax.

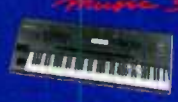
BABEL SYSTEMS

Hammersmith, London W12 8PA

0181 749 8222

Call for the latest finance deals and our best cash prices.

KURZWEIL Music Systems



K2500

FROM £127 PER MONTH

SOUNDTRACS

TOPAZ

FROM £116 PER MONTH

YAMAHA

PRO MIX 01

FROM £71 PER MONTH

ALESIS

ADAT XT

FROM £119 PER MONTH

E-MU

E 64

FROM £97 PER MONTH

Soundscape

SSH DR1

FROM £109 PER MONTH

KORG

TRINITY

FROM £114 PER MONTH

FOSTEX

DMT8

FROM £67 PER MONTH

E-MU

ESI 32

FROM £44 PER MONTH

E-MU

E4K

FROM £129 PER MONTH

BEHRINGER

Eurodesk

FROM £99 PER MONTH

WALDORF

PULSE

FROM £33 PER MONTH

Roland

JV 1080

FROM £52 PER MONTH

Roland

VS 880

FROM £80 PER MONTH

AKAI

S3000 XL

FROM £76 PER MONTH

AKAI

DR8

FROM £128 PER MONTH

Have the equipment you want now for an affordable monthly payment, No Deposit Mail order finance delivered to your door nationwide or call round and see us in person.

If the item you need is not listed then please call us for a quote.

FREE UK DELIVERY

Finance subject to status, written quotations on request.

VAT included in all prices.

http://www.bogo.co.uk/babel/babelhomepage.html

brief encounters

NUREALITY VIVID 3D STEREO ENHANCEMENT SYSTEM

There have been many inventions aimed at producing a wider or deeper stereo image from conventional stereo speakers, but few can be as cost-effective as the Nureality Vivid 3D. The aim of the Vivid 3D is to treat the stereo signal in such a way that the reflected components of the sound appear to come from outside the loudspeakers, just as they would in a real-life ambient environment.

This tiny box takes its power from an external adaptor and connects to your system via two phonos and a stereo mini-jack. The connectors hint at the Vivid 3D's target market, which would appear to be computer games and stereo TV. There are no real user controls other than volume: you can simply select 'SRS' to process a stereo signal, '3DM' to add a sense of width to mono sounds, or bypass the effect altogether.

With the box in circuit, switching from bypass to SRS mode causes a noticeable increase in level, which the manufacturers say is due to how the circuitry rebuilds off-axis information. When we hear something off-axis, it is different in both timbre and level to something heard on-axis, due to the human hearing system's frequency response. Microphones don't behave in the same way, and SRS mode aims to correct this by splitting the signal into middle and side components (rather like the output from an MS mic pair), applying the necessary tonal correction to the side signal and then recombining the two. The subjective effect is to reduce the impression that the soundstage exists only between the two speakers; sounds in the centre of the mix are little affected, but sounds panned hard left or right seem to be diffused around the room.

An email message to the manufacturer answered all my technical queries and also revealed that the process has been granted a number of patents. Using my phase meter, I detected the use of out-of-phase components (a usual ingredient in stereo widening) in the 3D setting used to widen mono sources — but it's claimed that the SRS system adds no additional phase shift.

Because of the tonal coloration introduced by reconstructing off-axis sounds, I'd be reluctant to treat complete studio mixes with this process, but it is useful to pick out odd bits of percussion, little synth details and, of course, effects. Feeding a stereo reverb back through the Vivid 3D produced a noticeably more spacious sound.

Because SRS doesn't use delay or phase shift, it should have better mono compatibility than some other stereo enhancement processes, but by the same token, the results may not be as dramatic as, say, RSS or QSound. However, it is a useful and very valid effect based on sound psychoacoustic principles that can be exploited in the studio to make mixes more interesting. The signal path is reasonably quiet, and apart from the oddball 'games' connectors, it's no trouble to use. Other models are available which offer the user more control, and there's also talk of a rackmount unit in the near future. At the current price, however, this is one area of space exploration that most people can afford. *Paul White*

£ Vivid £D £39.95 inc VAT, plus £3.50 p&p; Vivid 3D Plus (which adds a Centre mode for enhancing central imaging) £49.95.
A Bull & Bear Ltd, Macmillan House, Kensington High Street, London W8 4SG.
T 0171 795 6977.
F 0171 938 4944.

ROLAND MC50 OPERATIONS HANDBOOK LEVEL 1

The Roland MC50 is one of the best hardware sequencers ever made, but it can be a bit puzzling for the first-time sequencer user. One reviewer dubbed it "Darth Vader's Filofax", and an air of mystery has surrounded it ever since. This book, written by Bobby Maestas and published by Alexander Publishing, proves that the MC50 is actually as flexible as many software sequencers, provided you make the effort to grasp all its basic functions before you dive into the murky depths of the editing pages.

The book is set out like an instruction manual, with everything explained clearly and with a minimum of fuss. There are 21 chapters, beginning with an excellent section on how to connect the MC50 to several keyboards, and ending with the delights of tape and MIDI sync. I was grateful to see a decent explanation of the 'Event Copy' procedure on the MC50, something which never fails to catch me out. The MIDI sync chapter is also extremely useful, because many hardware sequencer fans have a drum machine in their setup. This partly makes up for the lack of information about rhythm programming and advanced editing. Anyone seeking advice on these aspects of the MC50 will find everything they need in the Operations Handbook Level 2.

Few people would put an instruction book on their list of priorities, but MC50 users will appreciate the straightforward style of this one. It shows that with patience and a little understanding, an MC50 will be your friend for life. *Richard Clews*

£ £22.99 (no VAT payable).
A Sounds OK, 10 Frimley Grove Gardens, Frimley, Camberley, Surrey, GU16 5JX.
T 01276 22946.

Phone the Mail Order Hotline Now! on 0161 474 7626

MICROPHONES

GROOVE TUBES

Groove Tubes valve mics are available from stock.

We have a limited number of the older single output PS1 e available. Total system price with PS1 £779

from £899! for MD1 + PS2a & Cable

SAMPLERS

AKAI

FREE ZIP Drive with S3000XL/3200XL at RRP. Plus 4 x 100Mb carts.

FREE ZIP!

16M 72 pin SIMMs £199!!

	RRP
AKAI S2000	£999
AKAI S3000XL	£1799
AKAI S3200XL	£3499

Phone for our best prices on all AKAI samplers

E-MU

SPECIAL EMU E64 Turbo includes 500Mb internal hard drive, 8Mb RAM and 240Mb library. All this for only £2595!

EMU ESI-32 + SCSI + ZIP Drive + Library £1199

OMEGA Zip Drive £199 100Mb

OUTBOARD

£699! REVERB / FX

LEXICON LXP-15 MkII Special Offer: £699

	RRP	Axis
ALESIS Midiverb 4	399	329
ALESIS Microverb 4	299	249
ALESIS Quadraverb 2	649	525
DIGITECH Midi Vocalist	449	399
DIGITECH Vocalist 2	549	479
DIGITECH Studio Vocalist	999	869
DIGITECH TSR-6	299	259
DIGITECH Studio Quad	499	399
ENSONIQ DP/2	649	549
LEXICON Alex	389	349
LEXICON Reflex	469	389
LEXICON LXP-15 MkII Special Purchase	979	699
LEXICON PCM-80	2113	1979
LEXICON PCM-90	2589	POA
MUTRONICS Mutator - remarkable!	581	499

DYNAMICS & EQUALISER

£229! Axis

BEHRINGER MDX2100 Composer

Special Offer price: NOW Even lower! £229

	RRP	
APHEX 106 Easyrider™ 4 chan compressor	399	339
APHEX 107 Tubessence™ Mic preamp	546	459
BEHRINGER MDX2100 'Composer'	299	229
BEHRINGER MX1200 'Autocom'	199	169
BEHRINGER XR2000 'Intelligate'	299	239
BEHRINGER 'Autoquad' 4 x gates + Filters	399	349
BEHRINGER 'Multigate' 4 x gates	285	249
BEHRINGER SNR1000 'denoiser' 2ch	199	149
BEHRINGER SNR2000 multiband denoiser	299	259
BEHRINGER 'Multicom' 4ch	299	259
BEHRINGER 'Suppressor'	250	219
BEHRINGER 'UltraCurve'	648	POA
DBX 1066 dual compressor/limiter/gate	527	429
GROOVE TUBES CL* valve comp	989	939
GROOVE TUBES EQ1 5 band valve EQ	529	499

GROOVE TUBES CL1S valve compressor - new!

JOEMEEK VC3 Pro Channe	299	289
LA AUDIO 4C 4 x comps	464	399
LA AUDIO 4G 4 x comps	464	399
TL AUDIO Valve Compressor	1173	999
TL AUDIO 2 channel Pentode Valve preamp	1051	985
TL AUDIO 2 channel 4 Band Valve EQ	821	699
TL AUDIO FA2 2 channel valve preamp/DI	405	345
TL AUDIO 'Indigo' series valve dynamics	703	599
SAMSON E-62 2x31 band graphic EQ	329	279
BEHRINGER PEQ2000 parametric EQ	250	219

ENHANCERS

SPL Stereo Vitalizer Astonishing Value @ £339 each! £339! EACH

APHEX104 Type C2 Aural Exciter™	299	249
BEHRINGER 'Dualfex II'	145	119
BEHRINGER 'Ultrafex II'	242	199
BEHRINGER 'Bassfex'	250	219
BEHRINGER 'Edison'	250	219
SPL Stereo Vitalizer (see above)	469	339

WE WILL BEAT ANY GENUINE PRICE QUOTED BY £10 IF THE DEALER IS WITHIN A 30 MILE RADIUS OF AXIS AUDIO SYSTEMS

MONITORS

ALESIS Monitor Ones	£299
DYNAUDIO BM10's	£599
FAR Studio Monitors - full range	POA
KRK K-ROK's	£350
SOUNDCRAFT Absolute 2's	£249
TANNOY System 6 NFM II	£379

RECORDING

HARD DISK RECORDING

IN STOCK!

AKAI DR8

ONLY £2999 INCLUDING MIXTAB!

1Gb AZ drive inc carr £999

DR16 IN STOCK! £POA

Packages with Hard Drives...

AKAI DR8 + Marantz 1 Gb JAZ drive	£3079
AKAI DR8 + 1.0Gb AV Gb drive	£2799
AKAI DR16 + 2.0Gb 'Barracuda' AV drive	£4899

AKAI DR4-VT

New version Looks identical to the old one but now with 250 virtual tracks, true 4>2 stereo bouncing and it's white! List price: £1099

FOSTEX D-80

Removable Front Panel

£1499! INCL 840Mb IDE

£1399 Limited Offer!

The FOSTEX D-80 is the rack mount version of the DMT-8, offering all the convenience of cut,copy & paste editing along with the familiarity of tape transport controls and operation.

Up to 1.7Gb IDE drives may be used simply by slotting one in to the receptacle beneath the removable wired remote/front panel.

Free COP-1 optical adpt + optical cable with every D-80

MIXERS

If it's a new recording console that you're after, you've come to the right place! Axis Audio are THE people for mixing consoles. (And we usually have a very fine selection of used ones too!)

MACKIE

The full MACKIE range of consoles is in stock and on demonstration!

	RRP	Ex
MACKIE 8 Bus 16:8:16	2875	Call
MACKIE 8 Bus 24:8:24	3595	Call
MACKIE 8 Bus 32:8:32	4395	Call
MACKIE Side Car™	269	Call
MACKIE 24 chan extender	2695	Call
MACKIE CR1604VLZ 16:2:2	949	POA
MACKIE MS1402 VLZ 14:2 mixer	549	POA
MACKIE 1202VLZ	399	369
MACKIE Stands for 8 bus series	269	Call
MACKIE SR24-4 24:4	1495	Call
MACKIE SR32-4 32:4	1995	Call

SPIRIT by Soundcraft

Prices from: **£1X99!** IN STOCK!

Please call us for our extra special price on Spirit Studio consoles.

SPIRIT STUDIO 16:8	£1
SPIRIT STUDIO 24:8	£1
SPIRIT Folio SX	£5

IN STOCK!

ALL IN STOCK! **£599!** Inc VAT

BEHRINGER

	RRP	
EURODESK MX8000	2199	£1
EURORACK MX2642	748	£6
EURORACK MX2802	648	£4

SPECIAL DEAL EURORACK MX2642 £599!!

FOSTEX / BEHRINGER Package Deal

24 Tracks

IN STOCK!

3 x FOSTEX D80's + EURODESK

Save £££'s **£5995** Including VAT — Including drives, looms and sync cables

The DEAL... 3 x FOSTEX D-80's PLUS the totally fantastic BEHRINGER MX8000 24:8 Eurodesk Including looms and sync cables . Each D80 has a 850Mb drive fitted providing 18 minutes of record time accross all 24 tracks. Larger drives may be fitted; POA

ALLEN & HEATH

AUTOMATIC FOR THE PEOPLE

GS3-V VCA FADER AUTOMATED

Free Optical Cable

We have a very limited quantity of these unique decks available for sale immediately. 16 and 24 input versions available

- 8 Bus Expandable
- Midi muting on every input & output!
- VCA fader automation - BUILT-IN! NOT MOUSE DRIVEN!
- Built-in sequencer (No computer required)
- 4 x stereo aux returns
- 6 x aux sends
- EQ on monitors etc

GS3-V 16:8:16	£1999	Ex-demo
GS3-V 24:8:24	£2999	Topaz 24:8 +MB £1899 one only!

SOUNDTRACS

The Topaz from Soundtracs has just undergone a facelift and now looks much more the part. • One or two ex-demo consoles may be available - please call!

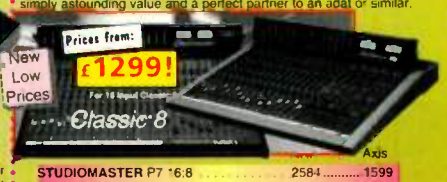
	RRP	
SOUNDTRACS Topaz Project 8 24 8	2937	2350
SOUNDTRACS Topaz Project 8 32 8	3877	CALL!

STUDIOMASTER P7

And introducing the Maximum Classic 8

16 or 24 inputs with midi muting and a meter bridge as standard - simply astounding value and a perfect partner to an adat or similar.

Prices from: **£1299!**



New Low Prices

	RRP	Axis
STUDIOMASTER P7 16:8	2584	1599
STUDIOMASTER P7 24:8	3288	2099
P7 8 channel extender	969	POA

AMPLIFIERS

ALESIS RA100 65wpc	£299
ALESIS Matica 500 250wpc	£399
ALESIS Matica 900 450 wpc	£525
SAMSON Servo 150 50wpc	£225
SAMSON Servo 240 80wpc	£299
OMNIPHONICS 'Footprint' 50wpc	£299

MASTERING

DAT RECORDERS

£LOW TASCAM DA20 £POA

£1166 TASCAM DA30 MkII

£1199 PANASONIC SV3800

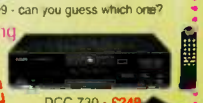
£799 FOSTEX D5

One of the above machines we sell at £699 - can you guess which one?

PHILIPS Digital mastering

DIGITAL DCC COMPACT CASSETTE

£249 Inc 5 x 90 min tapes- FREE!



DCC 730 - £249

DCC 170 - £249

CD RECORDERS

£2099 MARANTZ CDR

MARANTZ CDR-615

CDR-615	£2099
CDR-620	£3499

It conforms to Red Book standard. CDR-620 will also master CD-ROM, Photo CD, CDI etc over SCSI.

ADAT XT

List price of the superb ADAT XT is £3199 inc VAT. A limited quantity of ex-demo units available at £2265 incl! (Shh! ex-dem could be new!)

ADAT XT now in stock - 100% compatible with V4-much faster transport and superior tape handling in general. List price £3199. Our price SEE ABOVE

AXIS AUDIO SYSTEMS

PROFESSIONAL AUDIO EQUIPMENT SALES & SERVICE

Axis Audio are Lexicon PCM approved demonstrators

0% Interest on selected items Written details available

Tons of [illegible] for sale. Fax or [illegible] list.

PROFESSIONAL AUDIO EQUIPMENT SALES & SERVICING

FAX on (0161) 474 7619 for an instant quote

PHONE ORDER

EXPORT VAT FREE

INTEREST FREE CREDIT (Written details on request)

Installation Service

MAIL ORDER

TECH SUPPORT

VISA MasterCard

If you want to use our speedy mail order service but wish to pay cash, then you can! All you do is pay in to any branch of the Nat West bank with our account details - please phone for further instructions. (0161) 474 7626

Phone the Sales Order Hotline Now! on 0161 474 7626

All prices shown are subject to change without notice. All prices include VAT. E&OE

Hours of Business Mon-Fri 9:30 - 6:00 Sat 11:00 - 2:00

0161 474 7626

AXIS AUDIO SYSTEMS LTD 3 WATERLOO ROAD STOCKPORT CHESHIRE SK1 3BD FAX: 0161-474 7619 Email: sales@axisasl.demon.co.uk

Sounds of the '80

ENSONIQ SQ80 WORKSTATION SYNTH

On its release in the late '80s, the SQ80 had to slug it out with Roland's D50 and Korg's M1, and didn't come out on top, at least as far as sales were concerned. STEVE HOWELL takes a look at an early and underrated workstation that still has a lot to offer.

Back in 1986, before this eminent publication had even reached its first birthday, and was a mere 80 pages rather than the bookshelf-battering size it is today, Ensoniq released the ESQ1 synthesizer [*and* SOS *reviewed it too, in the August '86 issue — Ed*]. This was a revolutionary instrument, integrating advanced sequencing and sophisticated synthesis years before the word 'workstation' had been applied to keyboards. For the first time, it was possible to create complete multitimbral compositions from one box (albeit with only 8-voice polyphony). Ensoniq also deserve credit as being the first company to introduce the polyphonic, multitimbral mode of sequencing we all now take for granted. Prior to this, whilst some synths offered multitrack or multitimbral operation, each part was strictly monophonic. On the ESQ1, each part was dynamically polyphonic, stealing voices as and when they were needed and/or available. It was to be a couple of years before Korg, with the M1, were to launch an instrument to rival it.

Costing around £1100 when released, the ESQ1 was out there on its own for a while, with its wide range of unique sounds and multitimbral sequencer. But then came the Roland D50, crammed with chiffy noises, pan pipes, bowy strings and other, less describable sounds, all aided and abetted by a simple reverb/chorus combination. The D50 took the world by storm, and soon its ability to combine sampled attacks with sustained loops was regarded as *the* way to create new sounds.

ENTER THE '80

Ensoniq countered with the SQ80 (reviewed *SOS* February '88); basically an ESQ1 with extra waveforms, polyphonic aftertouch, an expanded sequencer section, and a floppy disk drive for saving and loading sounds and sequences. A serious rival to the D50, surely? Sadly, 'twas not to be. The reason is something of a mystery, because not only did the SQ80 offer a clean combination of sequencing and sound creation, its synthesis capabilities were also considerably more advanced than anything else around at the time. Just look at the specifications: three oscillators per voice, each with their own Digitally Controlled Amplifiers (DCAs), feed into a resonant low-pass filter and out to a stereo output amplifier. To complete the impressive lineup, three freely-assignable multi-wave Low Frequency Oscillators (LFOs) and no less than four freely-assignable multi-stage Envelope Generators are also available. On top of this, there's a single-triggering monophonic mode, portamento, oscillator sync, ring mod, and more. It's the SQ80's modulation capabilities, however, that are so appealing to hardcore programmers. Virtually any controller can be routed to any module but, rather than using patch cords, as on modular synths, it's all done in software. At the time, the only thing that compared was the keyboardless, sequencerless 6-voice Oberheim Xpander, at considerably higher cost.

DIGITAL SYNTHS DO IT WITH NUMBERS

Unlike the Xpander, however, the SQ80 is not analogue. Ensoniq achieved what they did at such remarkable cost by doing the bulk of the signal generation and processing digitally. The traditional Voltage Controlled Oscillators (VCOs) found on analogue synths were replaced with digital oscillators reading out samples from wave memory, rather than generating the real thing — more waves to play with, but ultimately less beefy, largely due to the waves' restricted bandwidth. The

Production Station K2500

Specifications:

- 88 note Fully-Weighted Keyboard, 76 note Semi-Weighted Keyboard & Rack Mount Versions.
- True 48 note Polyphony (192 Oscilliators)
- Kurzweil's V.A.S.T. Processing Power.
- 16 Part Multi-timbral.
- Up to 28MB of Spectacular Kurzweil Sound ROM.
- 8 drum channels for 32 layer programs.
- 8 Analogue Outputs & Insert Points Plus Stereo Mix Outs.
- Dual SCSI Ports.
- Full MIDI Controller Capabilities inc 8 Sliders, 2 Ribbon Controllers, Footswitches, Pedals & Breath Controller - All Assignable.
- User Upgradable Software (Flash ROM).
- 32 Track Full-Function Sequencer.
- Advanced File Managemant System.
- Advanced Sample Processing - Reads Roland, Akai & Ensoniq Libraries & Import/Export of Type "O" Std MIDI Files, AIFF & WAVE Files.
- Up to 128MB Sample RAM (30 Pin SIMMS).

Options:

- DMTi - Digital Multitrack Interface with 8 channels of digital output.
- KDFX - 8 Buss Digital Effects.
- Sampling with "Sample While Play" - Gives Digital & Optical i/o.
- ROM Soundblocks - Stereo Piano, Orchestral & Contemporary.
- Program Memory Expansion.
- KB-3 - Drawbar Tonewheel Organ Synthesis Mode.
- Live Mode - Process any signal with V.A.S.T.

PRODUCTION POWER:-

K2500 - Kurzweil's most powerful sampling synthesizer ever. The spectacular new Soundset, Advanced Synthesis, Sampling, Sequencing & Stunning Effects enable you to take a project from concept to completion without ever leaving the K2500 enviroment.

SEIZE THE POWER!

K2500

KURZWEIL *Music Systems*

Pure Inspiration

The Washburn (UK) Limited Group of Companies
Amor Way, Letchworth, Herts, England SG6 1UG
Telephone: 01462 - 482466. Fax: 01462 - 482097

filter, however, is a true analogue 4-pole (24dB/Octave) job, which nevertheless lacks the 'welly' of its analogue counterparts, probably due to the fact that it is being fed with 'bandwidth-challenged' sampled waves.

That's not to say that the SQ80 is sonically weak, however, because it is far from that. It can produce strong, rich pads and strings, and fair simulations of most analogue synth sounds. It's not so hot on truly woofer-wobbling analogue basses. With a mere 256Kb of wave memory to read from (synths today measure their wave ROM in Megabytes!), long multisamples, of pulse width modulation, for example, are not possible, so any sonic movement has to be created with oscillator detune and/or modulation. This is easy enough, given the three oscillators and the sheer number of LFOs and modulation possibilities.

The wealth of digital waveforms on offer allows you to create distinctive metallic and other 'non-analogue' noises, and also gives the SQ80 an appealing 'PPG-esque' quality. The ability to combine analogue and digital waves across the three oscillators also enables a wide range of hybrid sounds to be created.

Strings, piano, bass, electric piano, organ, reed and other such waves are on offer too. These latter waves are single-cycle multisamples, not the detailed multisamples of modern ROM-based synths. They're capable of giving a good impersonation of the sounds they represent, but if you use them as interesting waves in their own right, you won't go far wrong. Some of the SQ80's voice-like and breathy waves can be used to create totally unique vocal sounds not readily found elsewhere, and in an attempt to capture some of the D50 market, Ensoniq included some short, one-shot clicks, bumps, thumps, plucks, clicks, and scrapes to use as attack transients. Some of these waves don't transpose terrifically well, being rather aliased at the lower reaches of the keyboard, but most are useful additions to the sonic armoury, and for some sounds, that digital grunge can really add character. The SQ80 does have some drum sounds, but these are hardly worth mentioning, being of low bandwidth and quality. I class them as virtually unusable except, possibly, as attack transients for percussive sounds.

FUN IN THE WAVES

The SQ80 came supplied with a floppy disk containing hundreds of sounds, and many of these are very usable. They also form a good starting point for experimentation.

Editing or creating a sound on the SQ80 is a doddle. On the right of the panel, rather cleverly laid out to represent the signal path of a voice, is a set of keys which give direct access to sonic building blocks such as Oscillators, LFOs, Envelopes, and Filter. To edit a sound, simply press the key for the one you want to affect and use the 10 keys around the custom fluorescent display for direct access to each parameter. To tweak the cutoff of a string sound, for example, press 'Filter', then 'Freq', and waggle the Data Entry slider. Simple, quick and effective. Each module's parameters are available on one page, so there are no awkward cursor movements or page scrolling.

The three oscillators, their associated DCAs, and the filter each have two modulation inputs, and each mod input may have any of the 15 available controllers assigned to it — including the three LFOs, the four envelope generators, and real-time MIDI controllers such as the wheels, aftertouch, velocity, keyboard, and an (optional) pedal controller, plus a definable external MIDI controller (such as breath, for example). These can be mixed and inverted for a wide range of modulation and performance possibilities.

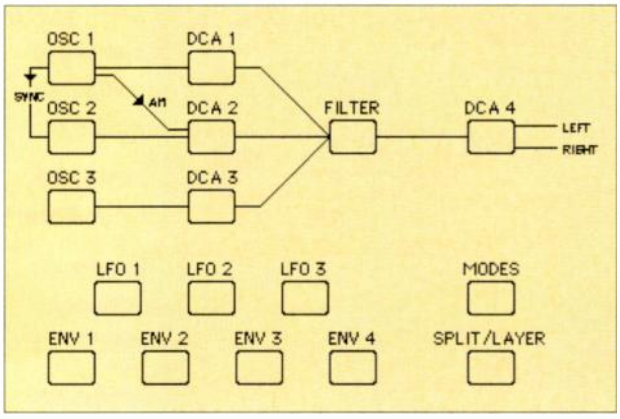


Figure 1: A schematic of the controls on the top right panel of the SQ80. The layout of the top section also helps you to grasp the programming architecture of the synth.

JACK OF ALL TRADES?

The SQ80 can produce a wide range of serious analogue, digital and FM-ish hybrids, with some attempt at S+S. It can do lush and dreamy pads, unusual vocal textures, spiky basses and clavs, excellent bells and other metallic sounds. It's very adept at organ sounds and no slouch with electric pianos. Modern, fashionable sounds can be created on it but, perhaps more interestingly, so can unique sounds not so readily available on other synths — with an SQ80, you might stand out from the musical crowd a little. The sounds won't stand direct comparison with a true analogue (but neither will more contemporary digital synths), and its digital sounds won't worry a PPG or FM synth too much. However, that said, you can get surprisingly close on all counts.

Oscillator sync between the first two oscillators was a welcome innovation for a synth with all-digital sound generation, and although the results may not be as impressive as a MemoryMoog, many interesting and unique sounds can be created with the wealth of waveforms available on the SQ80. The ability to use any controller to modulate Oscillator 2 adds much flexibility to the range of sync sweep sounds available. A missed opportunity, perhaps, is the SQ80's inability to cross-modulate one oscillator's frequency with the output of another oscillator within the flexible modulation matrix; I can only assume that this is a hardware limitation rather than an oversight on the part of Ensoniq's designers.

The fact that each oscillator has its own DCA allows quite fine control over the oscillators' level, and the DCA for Oscillator 2 serves a dual purpose, in that it can act as a ring modulator, with one input derived from Oscillator 2 and the other from Oscillator 1. Some interesting clangorous noises can be coaxed out of it, especially when you consider the number of waveforms you can use to cross-modulate each other.

The three DCAs are summed to the input of the analogue low-pass filter and can be set to overload the filter slightly. As mentioned, this is an analogue 4-pole resonant filter, but controlled from the SQ80's digital control sources. Cutoff frequency and resonance controls are provided, as is a dedicated keyboard tracking control. Like the oscillators, it has two controller inputs which allow different control sources to be combined, mixed and inverted, for fairly flexible tonal control.

The filter passes to a final stereo output DCA, where you have control over the output level and pan position of the sound. The pan section has one control input, and any of the controllers may be used to move the sound between the left and right outputs, enabling the introduction of a great deal of stereo movement into a sound.

The three LFOs are identical, each offering triangle, square, sawtooth and noise waveforms (sadly, there is no random 'sample and hold' wave available and the noise waveform does not make a good substitute). The output level of the LFOs can be affected by any of the controllers — so you can 'shape' the LFO modulation via one of the spare envelope generators. Using real-time MIDI controllers, you can control LFO depth via velocity, keyboard position, aftertouch, an

Sound Business 0181 559 0373 Sound Business 0181 559 0373

EAST LONDON AND ESSEX'S TOP RECORDING EQUIPMENT CENTRE,
NEW AND SECONDHAND

SOUND BUSINESS DIGITAL

Recording equipment sales. Your one stop studio centre

Tascam DA88

Fantastic 8 Track Digital Recorder

£PHONE

NEW ALESIS ADAT XT

Even Higher Specification

★★★★★ STAR BUY

All prices available on application . Call Now!

Fantastic New Spec from Sound Business Call Now !

Roland VS8/80

8 Track Digital recorder

Retail £1499 inc

Fantastic Deals Call for info & Price

STOP PRESS NEW RELEASE STOP PRESS

A REMARKABLE SYSTEM NOW COMPLETED.
TOP CD QUALITY

FOSTEX FOSTEX

DMT-8

The Fabulous new fostex DMT-8 8 Track portable hard disk recorder, features to blow your mind.
Please call for details

D-80

True Multitrack Recording,
CD Quality Recording and Playback,
Removable front panel remote,
Unique virtual reels, Cut, Copy, Paste & Remove Editing,
8, 16 or 24 Tracks,
Analogue & Digital I/O,
Flexable locate functions

Sound Business House, (Near Woodford Central Line Station) Essex/London

Telephone: 081-559 0373
Fax: 081-559 0444
Mobile: 0860-188388

United in and dedicated to the pursuit of musical excellence

OPEN SEVEN DAYS 9am to 9pm

Please See Main Advert on Page No. 151

Sound Business 0181 559 0373 Sound Business 0181 559 0373

MASS TECHNOLOGY

Unrivalled for quality, the MASS series of Studio Amplification from MASS Technology has been conceived after years of design experience and with a unique approach to the application of technology. Each model is of first class quality and will provide accurate and outstanding results to suit the most discerning studio engineer. Most importantly, they have plenty of power and will ensure a clean and natural sound, whether in a top digital recording studio or home recording environment.
The MASS Technology range is designed to match most popular studio monitor speakers and will easily interface with all leading mixing consoles and includes both XLR and 1/4" Jack/Phono connections. Our amplifiers have special 'Pin-Fin' heatsinks which efficiently dissipate heat, this means that (apart from the MASS 1000) our amplifiers are 'Fan free' - this eliminates the noise and interference which can occur on some fan cooled amplifiers. Manufactured with full chrome front panels and "classic look" VU's on the larger models, our amplifiers look great and sound even better!

MASS 1000 Watt Studio monitor amplifier £999
2*500W RMS-2 Ohms
2*350W RMS-4 Ohms
2*250W RMS-8 Ohms
Stereo or mono bridged operation

MASS 500 Watt Studio monitor amplifier £399
2*250W RMS-4 Ohms
2*180W RMS-8 Ohms
Stereo or mono bridged operation

MASS 250 Watt Studio monitor amplifier £349
2*125W RMS-4 Ohms
2*75W RMS-8 Ohms
Stereo or mono bridged operation

MASS 150 Watt Studio monitor amplifier £275
2*75W RMS-8 Ohms
Stereo or mono bridged operation
Completely Independent controls

MASS 75 Watt Studio monitor amplifier £199
2*35W RMS-4 Ohms
Stereo or mono bridged operation
1U-Half Rack Size

MASS 4 Studio headphone amplifier £199
4 seperate stereo outputs
Seperate gain control and clip indicator
Copes with any mix of headphones
Low noise output stage
Electronic Balanced gain input stage

Distributed in the UK, by
Key Audio Systems Ltd.
Unit D, Chelford Court,
Robjohns Road, Chelmsford,
Essex CM1 3AG.
Tel: 01245 344001
Fax: 01245 344002

KEY Audio Systems

optional pedal, or mod wheel. The LFOs are extremely functional and to have three of them is certainly a treat, but if I have any criticisms of them, it would be the inability to modulate the LFOs' rate from the matrix — a curious omission.

The four envelopes are also identical, with four rates and four levels. You can control the envelopes' output level and attack time using velocity. A key-scaling function allows you to make keyboard position control release times — higher pitches create shorter release times, as on many acoustic sounds such as piano, guitar or tuned percussion.

In an attempt to simulate some kind of reverb on the SQ80, Ensoniq introduced a function which involves a second release stage kicking in — instead of going to zero immediately, the second release reaches a low level and then fades to zero at a fixed rate. The effect can be bypassed if you wish. The idea may sound a bit strange, but it's not ineffective on some sounds — onboard DSP processing it most certainly isn't, however.

Last in the voice programming department is a 'global' page, where you may, amongst other functions, switch on a single-triggering playback mode that emulates analogue monosynths, plus a glide function that works in both polyphonic and monophonic modes.

SUPER SEQUENCING

So the SQ80 is capable of producing a very wide range of warm analogue sounds and strong digital sounds, plus many, many more besides, with sophisticated but easy control. On top of all this, however, is a nifty little sequencer which, whilst not rivalling software-based sequencers, is extremely functional, on a par with many hardware sequencers, and more versatile than one would at first imagine.

The sequencer features eight polyphonic tracks, all easily accessed in sequencer mode from keys around the display. Each track can control internal and/or external sound sources, and can send out Program Changes and MIDI volume. Up to 60 sequences of any length and time signature can be chained together, drum machine style, into 20 songs. There's a maximum note capacity of 20,000 notes (although aftertouch, particularly the SQ80's polyphonic aftertouch, can consume a lot of this, so it's advisable to switch it off except for sounds that really need it). Sequences are held in memory even when the SQ80 is powered down (though you can save both sequences and sounds to the onboard floppy drive if you wish), so you can come back to your work with no tedious loading time. Tracks can be mixed, muted, merged, quantised, transposed, deleted and otherwise manipulated after the event, and sequences can be copied, appended and deleted. Also provided is a simple autolocator, and all these functions are accessed very simply using the nine Sequencer keys to the right of the display.

Recording a sequence is very easy, as is overdubbing. You can select a loop playback mode so that when an overdub is complete, the sequence will loop round and immediately play back what you've just recorded. When the overdub is looping, though, you can't then continue to overdub more data into that track as on, say, Akai's MPC60/3000, which is a shame.

After recording, you can edit a sequence at the track level, including erasing, copying and merging tracks. Quantising is available, with a resolution of quarter notes to 32nd-note triplets. Generally, this works very well and will tidy up sloppy timing quite adequately without adverse effects on the performance. Like many of the sequencer's edit functions, quantising is non-destructive, and the SQ80 allows you to audition the original, unquantised sequence, or the quantised one before deciding whether to keep the new sequence or return to the original.

No step-time input is possible, but you can edit in step-time. Finished sequences can be chained together in any order you wish in Song mode, and since the tempo of each sequence is retained as steps change, some degree of tempo variation is possible within a Song, even though gradual *rallentandos* and the like are not possible within the sequences themselves.

Finally, the sequencer can be synced to MIDI clock (with Song Position Pointers — SPP), and there is also a simple FSK tape sync code (without SPP) for syncing the SQ80 to tape.

All in all, then, the sequencer is more than functional. It offers quite a simple approach to building up sequences and songs and is better than many other so-called 'workstation' sequencers I have used, even recently. In fact, my only criticism of the sequencer is its lack of step-time recording facilities, for those occasions when really tight, solid sequenced riffs and arpeggios are required. The SQ80's ability to sequence both internal sounds and/or external modules with Program Change and MIDI volume control allows it to be quite a sophisticated central controller in a budget studio, if you can live with the 8-track limitation.

EXPRESS YOURSELF

As a master controller, the SQ80's keyboard has a curious feel to it. It certainly plays well enough, even offering a choice of velocity curves to suit your playing technique, but the polyphonic aftertouch mechanism, with a separate sensor underneath each key, makes it quite 'clattery' and noisy to play. The action is fine, though, and the polyphonic aftertouch is great fun and very expressive on sounds such as strings, brass, vocals and pads — if you dig into just one note, only that note is affected by whatever modulation type (amplitude or vibrato, for example), you've assigned to aftertouch.

WELL-KEPT SECRET

The SQ80 has much to offer: extremely versatile synthesis which can produce a wide range of very good, usable sounds, in the analogue, digital and, to an extent, S+S styles; a more than capable sequencer, especially with a few external modules hooked up to overcome the synth's limited polyphony; and an eminently playable keyboard, one of the few to feature polyphonic aftertouch. The integration of sounds, sequencing and control of external MIDI gear is very thorough, everything is well laid out, and the direct access to sounds, synth parameters, sequencer tracks and edit functions makes operation very quick. It's a truly underrated instrument.

But it's precisely because the SQ80 has been overlooked that I bring it to your attention now, because it has very little resale value at the moment and is a bargain waiting to be had. I recently bought one for £299 and that was from a shop! I think I did very well, however, and you should expect to pay a bit more than that — around £400 would be about right for an SQ80 in good condition. This would give you an excellent sound source and a versatile little sequencer that could form the centre of a budget home studio.

Buy one for its sound-making potential. Buy one because it is so easy to use. Buy one for its cracking little sequencer and the fact that you can control a whole bunch of external modules from it so easily. Buy one because it's cheap and you get a hell of a lot for the money!

RELATIVE VALUES: THE ESQ1

If you're on an even tighter budget, check out the Ensoniq ESQ1, which is functionally identical in terms of sound making but has only 32 waveforms instead of 75. The sequencer is also more restricted, offering only 30 sequences and 10 songs. If you're looking at an ESQ1, make sure it has the memory expansion installed — without it, there's a measly 2,500 note limit, which the expansion board takes to a more sensible 10,000 notes. The ESQ1 has a velocity-sensitive keyboard with a nice action but no aftertouch at all, it has no disk drive, and off-line storage of sounds and sequences is only possible using cartridges or cassette dump.

"The Eurodesk means a signal routing flexibility and audio signal quality never before achieved"
Keyboard Magazine - May '95

£2199 inc VAT

Let the world hear how you feel

The 48/24 Dual Input EURODESK® MX8000 from Behringer

Creating your finest Mix is a long and time consuming business. The priority is to have a creative edge - a sparkle of vision that allows the best of your ideas to reach the final take, and as the heart of your music is your console, it must work alongside, feeling the Mix like you do.

Between thought and expression lies the new 48/24 EURODESK from Behringer, leaving you free to expand on what you are best at - creative ideas, producing your finest mix - **to let the world hear how you feel!**

For full colour brochure contact: **01483 458877**

Distributed in the UK by: **BEHRINGER (UK) Ltd**
St. Vincent House 59 Woodbridge Road
Guildford Surrey GU1 4RF

Tel: +44 (0) 1483 45 88 77
Fax: +44 (0) 1483 45 88 22

BEHRINGER
Your ear is the judge

Distributed in Germany by: **BEHRINGER GmbH**
Otto-Brenner-Str. 4
D-47877 Willich

Tel: +49 (0) 21 54/ 42 85 21
Fax: +49 (0) 21 54/ 42 85 23

KEYBOARDS

AKAI MX73 mother keyboard, flightcase, pedals, £350; Oberheim Matrix 6R, £400; Roland MC50 hardware sequencer, £300; Boss half rack chorus, £100. Quality gear, top nick. ☎ 01923 824684.

AKAI PM76 piano card, suitable for Akai keyboard, less than a year old, £150 ono. ☎ David 0115 9233489 (Nottingham).

AKAI SG01V vintage synth module, unused, £250; Rickenbacker 330 6-string, Fireglow, pristine, £550. Swap both for sampler. ☎ Stewart 0161 301 5264.

ALESIS QS6 synth, brand new, £700. ☎ Malcolm 01256 766558.

BIG BRIAR ETHERWAVE Theremin, with fully-featured MIDI/CV interface, £800 ono. ☎ Adam 01747 820536.

BIT 99 programmable analogue synth, MIDI, excellent condition, £250 ono; TOA D3 stereo 4-channel rack mixer, £200 ono. ☎ 0161 766 3956.

BOSS DS330, £180; Boss SE50, £200; Novation Bass Station keyboard, £200; Realistic Mixer, £50. Replay 16, £40; Roland JX8P, £280. The lot, £850. ☎ 01244 375183 after 6pm (Chester).

BOYD BABY GRAND, excellent condition, superb tone and cabinet, good home wanted, must be heard, £2500. ☎ Dave 01702 351468.

CASIO CZ1000 digital synth with MIDI, good condition with manual, £120 ono or swap for drum machine. ☎ Phil 0113 2305036 (Leeds).

CASIO VZ1, 5-octave, pressure and velocity sensitive keyboard, 3 controllers, £250; Yamaha TX81Z sound module, £150; Panasonic LF3000E external 128Mb Magneto-optical drive, £300 plus disks. ☎ 01222 549350.

CASIO VZ1, manual, box, iPD synth, 3 controllers, aftertouch, 16-note poly, 8-part multi, £295; Evolution EVS1, boxed, £70. ☎ Cliff 0191 422 4753.

CASIO VZ10M synth module, vgc, £180 ono. ☎ John 0141 423 1106.

CASIO VZ8M module with editor/librarian (Atari) vgc, £100; Phonic graphic equaliser, hardly used, £100. ☎ John 01225 723513 (Bath).

CHEETAH MK5V MIDI controller keyboard, 61 keys, pitch and mod wheels, £100. ☎ Ryan 01782 836698.

CHROMA POLARIS analogue synthesizer by Fender, circa 1984. Fully programmable with onboard sequencer plus MIDI. Good working order with handbook and data tape, £395 ono. ☎ 01329 238522 (Hampshire).

CLAVIA NORD LEAD rack, full MIDI control of all knobs and buttons, man at bank forces sale, friendly offers please. ☎ 0171 351 5639.

CRUMAR TRILOGY, early 80s polysynth, organ, synth sections, oscillator sync, good condition, £225. ☎ Richard 01305 782554 after 6.30pm.

DAEWOO DIGITAL PIANO, EU20, 18 months old, full-size 88-note, dual/split keyboard, play/record demonstration tunes, many styles and voices available, piano stool, extended warranty, £900 ☎ 01480 301519.

EMU MORPHEUS, powerful multitimbral synth, 193 filters, morphing, boxed, manal, £700. ☎ Sean 0171 221 7274.

EMU PROTEUS 1XR, 384 sounds, boxed, manual, home use, immaculate, £360. ☎ 01234 824168 (Bedford).

EMU PROTEUS 1 pop/rock module, as new with manuals, £325; Yamaha TX81Z, as new, £165. ☎ Ian 01702 616961.

EMU PROTEUS sound module, immaculate, £225; Roland D10 synth, home use only, £225, or both for £400. ☎ Mike 01734 892933 (Wokingham).

EMU ESi 32, £760; Roland JD800, £985; Korg Wavestation, £640; Kawai K1, £220; K4R, £325. Rhodes 660, same as Roland U20, £295; Korg 03/W, £375. ☎ 01261 832898.

EMU ORBIT, Alesis QS6; BBE Sonic Maximiser; Mackie 1202. ☎ Ian 01207 509866.

EMU PROTEUS FX sound module, as new, boxed, less than a year old, £275. ☎ Richard 0171 250 3325.

EMU PROTEUS 1, £399; Goldstar GMK49 controller keyboard, £120; Roland CA30 arranger, £79; Bars & Pipes Amiga software, £29, all with manuals, prices negotiable. ☎ 01233 655078 (Belfast).

ENSONIQ SQR rack synth, built-in effects and drum sounds, £250; Roland D110 classic rack synth, multiple outputs, effects, drums, £190, or both for £400. ☎ Paul 0956 432965.

ENSONIQ SQR+, 21-voice, will swap with £150 for SQ2 or with £250 for SQ2 32-voice. ☎ Norman 0191 456 1055, 9-5.

ENSONIQ SQR+, good condition, multitimbral, built-in effects, £325 ono or swap for Bass Station rack. ☎ 01547 840287.

ENSONIQ TS12, weighted keyboard, onboard sequencer, effects, immaculate, boxed with manuals, flightcase, £1600. ☎ 01939 232489.

FATAR STUDIO 90+ weighted 88-note master keyboard, pristine, home use only, £400. ☎ 01865 750878.

FATAR STUDIO 90+, excellent condition, £400. Flightcase for above (new), £60; flightcase for U20, £45. ☎ Brad 01633 865758 eves/weekends.

GEM S2 workstation, £800; Roland D50, £400. ☎ Rory 0171 223 8817.

GEM S2 TURBO workstation, boxed, as new, flightcase, sounds, excellent condition, £1200 ono. ☎ 01939 232489.

GEM S3 TURBO, 76 Keys, great sounds, disk drive, loads and saves standard MIDI files, comes with flightcase, library and manuals, vgc, £775 ono. ☎ Steve 01159 274354 (Nottingham).

KAWAI K1R digital synth module, excellent condition, boxed, manuals, PSU. Ideal first synth, £140 ono. ☎ Matthew 01522 523203.

KAWAI K4R module, 8 outputs, powerful filters, good S+S and pseudo-analogue sounds, vgc, boxed with manuals, £295; Chase Bit 99 MIDI analogue polysynth, Oberheim circuitry, manuals and flightcase, £200. ☎ Chris 0161 860 5795.

KAWAI K5, 16-part multitimbral, multi-dimensional synth, excellent condition with manual, £360 ono. ☎ Carl 0161 737 1110.

KORG DW8000, manual, data cassette, £390; Yamaha FB01 plus editor, £90. ☎ 01724 711629.

KORG i2, immaculate condition, never been gigged, still boxed, £1600. ☎ Ken 01733 579338 (Peterborough).

KORG i3 workstation/keyboard with £379 memory upgrade, £100 flightcase and several disks with new patterns, etc, all yours for £1350. ☎ Drew 01273 700108 (Brighton).

KORG i3, absolutely immaculate condition, virtually unused since purchased, boxed, all manuals, selling to buy Trinity, £1375, no offers. ☎ Graham 01606 882881 after 6pm.

KORG M1, vgc, manual, footpedal and flightcase, £500 ono. ☎ Paul 01332 662990.

KORG M1 with original box and manual, excellent condition, inc PCM 2-card set and 'Getting The Most Of' video, £675 ono; Yamaha CBX-T3 GM sound module £100. ☎ Bruce 01705 511489 (Hants).

KORG M1 with original box and manual, excellent condition, seven Vallhalla ROM CDs, £650 ono; Yamaha A100 power amp, boxed, as new £120. ☎ 01673 862568 (Lincs).

KORG M1, perfect condition, with flightcase, £550. Yamaha SY77 synth, mint, £690 , Roland U20, mint, £375; Roland R70 Drum machine, £295. ☎ George 01243 376905.

KORG M1 with two cards, video manual, good condition, £565; Replay 16 Atari sampler, £65; Steinberg Pro 12 Manual, £5. ☎ Mark 01772 888341.

KORG M1 plus 3-tier stand, boxed, manual's, perfect condition, classic, £600 ono or swap for effects plus 4-track. ☎ Seamus 01208 813534.

KORG M1, immaculate, extra sound card, boxed, £550. ☎ John 01623 751928 (Notts).

KORG M1, home use only, excellent condition, still boxed with all manuals, £600. ☎ JJ 01909 485262.

KORG M1E, vgc, £450; Roland MVS1, mint condition, box, manual, £350; Korg DW6000, vgc, £175; Elka Soloist 505, £50. ☎ 0116 2835455.

KORG MONOPOLY, needs tuning, otherwise good cond, 4 VCOs, sync, arpeggiator, £250 ono; Roland SH1000 plus flightcase, £100. ☎ Tim 01904 633626.

KORG 01W/FD with extra sounds and General MIDI disk, £750, boxed with manuals, for quick sale. ☎ 01457 872301 after 4.30pm.

KORG O1W/FD, 32-note poly, box, manual, upgrade, RAM & ROM card, extra sounds on disks, excellent cond. ☎ 01235 768466.

KORG 01W/FD, Dance PCM card, box, manual, sounds, home use, immaculate, £1000. ☎ Lee 01142 2669073.

KORG 01W/FD, excellent condition, full flightcase, £1000. ☎ Daniel 01962 865736.

KORG 01/WFD, mint, never gigged, boxed, manuals, 16-track sequencer, disk drive built in, £900; Alesis SR16 Drum machine, £120; Roland U220 sound module, 2 cards, £250; RD1000, £1200. Andy Wyatt, Umanak, Lower St. Tilmanstone, Nr. Deal, Kent CT14 0HZ.

KORG 01RW module, classic sounds, 16-part multi, 32-note poly, sequencing and multi-fx, excellent condition with box and manual. ☎ 01939 232489.

KORG 05R/W module, £340; Roland A30 mother keyboard with mains adaptor, £240; Emu Proformance 1+, £175. All in immaculate condition, boxed with manuals. ☎ Ben 01480 468124 (Cambs).

KORG POLY 6, unused last four years, original box and instruction manual, good condition, never used on the road, £210 ono ☎ 01803 211140.

KORG POLY 61, totally analogue synth, 6-voice, two oscillators, 24dB/Oct filters, five octaves, arpeggiator and trigger inputs, excellent condition £130. ☎ Kev 01208 873649 (Cornwall).

KORG POLY 800 plus manual, £170; Korg Poly 61, £200; Roland TR505, £100; Phonic BKX8800 Mixer, £110; Tascam Porta One, £100. ☎ Dean 01206 852729 (Colchester).

KORG PROPHECY, 5 months old, £800 ono. ☎ Chris 0116 2366057 (Leicester).

KORG PROPHECY, as new, boxed, less than a year old, £575. ☎ Richard 0171 250 3325.

KORG PROPHECY, boxed, as new, with owners manuals, £750. ☎ 01274 620004 (Bradford).

KORG PROPHECY, £850, card, boxed, etc, swap possible. Morpheus or ESI 32/5760 + cash. ☎ Dave 01403 262566 (W.Sussex).

KORG T3, excellent condition, manuals, disk, home use, £650; Roland D50, manuals and cards, £390. ☎ Chris 01253 347189.

KORG TRINITY, brand new, £1995 ono ☎ 01429 222517.

KORG T3EX, excellent condition, manuals, £725; Yamaha QY10, excellent condition, £75. ☎ 01942 204721.

KORG VC10 Vocoder, £350 ☎ 0115 978 1132 (Nottingham).

KORG WAVESTATION EX and sound card, superb sounds, mint condition, £750 ☎ Keith 01245 264417 before 5.30/01376 513993 eves.

KORG WAVESTATION, three performance cards and one sample card, professional hard case, £600. ☎ Lee 0191 201 5063 days/0191 416 5631 eves (Tyne & Wear).

KORG WAVESTATION, good condition, plus 2 RAM cards, boxed, upgraded to 3.19 software, great sounds, £740. ☎ 01869 253838.

KORG WAVESTATION AD as new, all manuals etc, £850 ono. ☎ Paul 0973 304474 or 01924 410656.

KORG WAVESTATION SR module, boxed with manual, excellent condition, £450. ☎ 01392 211396.

KORG X3, boxed, manuals, disks, £650 ono. ☎ Dave 01427 874905.

KORG X5DR module, £395; Roland SC155 Module, £250; Emu Classic Keys, £375; Roland LAPC1 card + MIDI box, £100, all boxed, as new. ☎ 01705 261895.

KORG X5DR module, plus 2000 extra sounds and editor, £420. Can deliver. ☎ 01529 303299.

KURZWEIL K2000 keyboard, V3, 16Mb RAM, 540Mb internal hard drive, boxed, excellent condition, sensible offers. ☎ 0171 794 3843.

KURZWEIL PC88, £1400; Korg X2, £1000. ☎ Hugh 01844 208737.

MOOG MINIMOOG, the fattest bass sound around, very good condition, £950. ☎ Oxford 01865 371909.

NOVATION BASSTATION, £240; Atari 1040ST with monitor, £190; Soundcraft Folio 12.2, £330; Cheetah SX16 2Mb sampler, £360; Akai SG01v module, £260; Zoom 1202, £140; Philips DCC, £160. ☎ 01727 763124.

NOVATION BASS STATION (Keyboard version), as new, £239; blank cassettes, 30 minutes, unused or some used once, boxed, 10 for £3 plus postage (got 30). ☎ 01933 678608.

NOVATION BASS STATION, unused, bargain, £280; Roland DJ70 sampler £700; Powertran Vocoder, excellent sound, analogue, 14 filters, £275 ono. ☎ Nick 01432 266752 (Hereford).

OBERHEIM MATRIX 1000, as new, boxed with manuals, £290; Boss DR660 drum machine, as new, boxed with manuals, £190. ☎ 01705 825304 (Portsmouth).

OBERHEIM OBX with Kenton MIDI, excellent condition, £699; Roland R8M, 2 cards, £369. ☎ 0115 978 0582.

OBERHEIM OBMX, 4 voice, expanded, £1800; Mackie 24:4, £1390; Boss SX700, £390, Boss GX700, £390; Zoom 9010, £425; dbx 160A, £275; Joe Meek Voice Channel comp, £475; Emu Morpheus, £800; Korg Monopoly, £350; Emagic Soundiver Atari, £199. ☎ Oscar 34 4 4114039 (Spain).

OSCAR SYNTH, V. OM2, MIDI, £800; Roland TR808 drums, mint, £450; Moog Prodigy, £250; Korg MS10, £185; Roland SM101, £250; Samplecell Mac 32Mb, 32 voice, mint, £1500. ☎ 0171 221 2214.

PEAVEY SPECTRUM BASS, as new, £200; Yamaha RX5 drums, two cartridges, £225; JVC Nicam hi-fi VCR, with remote and manual, £175. ☎ 0113 268 0331.

QUASIMIDI TECHNOX, 9 months old, ultimate dance sounds. 808/909 kits, perfect, £550; Boss DR660 drum Machine, 255 editable sounds, 39 kits 808/909, 10 months old, £220. ☎ 01964 624067 (Hull).

RHODES STAGE 73 electric piano, £150, no offers. ☎ Andy 0114 2862209 (Sheffield).

RHODES STAGE 73 MKII, £200; Emu Proformance piano module, £150; Siel DK80 analogue polysynth, velocity and MIDI, £120; Korg Mini 700 monosynth, battered, £40. ☎ 01426 209138 (pager).

RHODES MK80, very good condition, £800; Roland R5 drum machine, £150. ☎ Dave 01628 37047.

ROLAND A880 mother keyboard, 6 months old, as new, with manuals, £800 ono. ☎ 0171 740 6620 eves or weekends.

ROLAND ALPHA JUNO 2, £150; Novation Bass Station, £300. ☎ Russel 0402 259942.

ROLAND D5 synth, with 2 ROM cards and hard case, excellent condition, box, manual, £325. ☎ Matt 01455 220665.

ROLAND D5, vgc, only, £199; Roland U110 sound module with two cards, only £199. Both absolute bargains. ☎ Jonathan 01978 756117, eves.

READER ADS

HOW TO BOOK YOUR READER ADS

Fill in the form below, up to 28 words (one per box) and post to:

Reader Ads, Sound On Sound, Media House, Burrel Road, St Ives, Cambs PE17 4LE

Your ad will appear in the next available issue after receipt.

PLEASE NOTE

We are inundated with Reader Ads, and whilst we endeavour to publish ads in the next available edition of the magazine, space restrictions mean that this is not always possible, and there may be a one or two month delay. Therefore, if you wish to *guarantee* that your advert appears in the next available issue, may we suggest that you call our Hotline on 01480 461786 and use your credit card to book yourself a Classified Lineage advert — your ad will then appear in the Classified Ad pages, and not in Reader Ads. This costs a mere 80 pence per word (inc. VAT), and the minimum number of words is 12 (£9.60 in total).

☎ **01480 461244** (office hours) ☎ **01480 461786** (24 hr answerphone)

Fill in the form below
(up to 28 words, one per box) and send to:
Reader Ads, Sound On Sound, Media House, Burrel Road, St.Ives, Cambs PE17 4LE.

WARNING: Always check when buying secondhand music software that you are not buying a pirate copy; ensure that all disks and manuals are included. We reserve the right to refuse or amend ads, especially if we believe they offer pirated software, pirated MIDI files or pirated sounds. We accept no responsibility for typographical errors or losses arising from the use of this service. *Trade Ads will not be accepted.*

PLEASE NOTE

Please indicate which one classification you would like your ad to appear in.

☐ KEYBOARDS ☐ SAMPLERS ☐ DRUM MACHINES ☐ WANTED ☐ MISCELLANEOUS
☐ SEQUENCERS ☐ RECORDING ☐ PERSONNEL ☐ COMPUTERS/SOFTWARE

NAME _____ ADDRESS _____

_____

_____

Reader Ads will only be accepted if the name and address details are completed.

WRH

ALCHEMEA NOW OFFERS ALL GRADUATES AN EXTRA 12 WEEKS OF PRACTICAL STUDIO TIME AND GUARANTEED JOB INTERVIEWS

CAN YOU HANDL

DAILY LECTURES PRESENTED BY DEDICATED AND COMMITTED PROFESSIONALS

CAN YOU COMMIT YOURSELF TO

MINIMUM OF 30 HRS PER WEEK OF HANDS-ON INDIVIDUAL PRACTICAL TIME

CAN YOU KEEP UP WITH TIGHT DEADLINES FOR THEORY ASSIGNMENTS AND PRACTICAL PROJECT

OUR STUDIES AT ALCHEMEA

ABOVE ALL THIS, DO YOU HAVE IT IN YOU TO STUDY HARD TO PASS ALL EXAMS THROUGHOUT

FOR A FREE PROSPECTUS AND A PERSONAL TOUR OF THE COLLEGE TELEPHONE THE ALCHEMEA INFORMATION LINE (24 HRS) ON 0171 3594035, FAX ON 0171 3594027 OR WRITE YOUR NAME, ADDRESS AND TELEPHONE NUMBER ANYWHERE ON THIS PAGE, TEAR IT OUT, FOLD IT AND SEND IT TO US.

ALCHEMEA
The London College of Professional
Audio Engineering and Production
2-18 Britannia Row
The Angel
Islington
London N1 8QH

ROLAND D10 multitimbral synth, excellent condition, flightcase, 4 sound cards, pedal, manuals, £430. ☎ 01785 222783.

ROLAND D70 Super LA synth, 76-note keyboard, mint, little used, with sound card, expression pedal, dust cover, box and manuals, £850 inc p&p. ☎ Lee 01228 401480.

ROLAND D110 module, good condition, manual, £225. ☎ Richard 01305 782554 after 6.30pm.

ROLAND D110 multitimbral synth module, £179. ☎ Julian 0181 549 5252.

ROLAND EP3 MIDI digital piano, £70. ☎ Lee 01222 470699.

ROLAND HP7700 digital grand, black polyester finish, new cost £10,400, perfect condition, offers around £5500. ☎ 01633 282614.

ROLAND JUNO 6 analogue polysynth, vgc with manual, £150 ono. ☎ Horsham 01403 264884 or 265396.

ROLAND JUNO 6, very good condition, £200. ☎ Yo/Andy 01902 561702.

ROLAND JUNO 60 programmable analogue synth, excellent condition, case, manuals, complete with ISQ60 sequencer. Hardly used, £450. ☎ Pete 01376 519520 (Essex).

ROLAND JUNO 106 with flightcase, £550; Juno 2, £30; Bass Station, £250; Roland U20 with 2 cards, £450; Sony DTC690 with Pro modification, £400; Keyboard stand, £40. ☎ 01322 387656, Darren.

ROLAND JV30,16-part multitimbral, excellent condition, boxed, manual, PSU, unplugged, as new, £450; JV35 as above, not expandable, hardly used, £550. Both great synths. ☎ 01892 543633.

ROLAND JV80, mint condition, sound card, flight case, £525 ono; Korg Poly 800, £150 ono; Alesis SR16 drum machine, £160 ono ☎ 01446 722804 (Cardiff).

ROLAND JV880 sound module, manuals, mint, home use only, bargain, £480; Tascam MM1, 20 channels, MIDI mute, manuals, mint, £470; Akai S2800, £1000. ☎ Pascal 0181 368 1877.

ROLAND JV880 module, excellent condition, boxed with manual, 28-note polyphonic, 4 outputs, 19-inch rackmountable, £390. ☎ Reading 01734 267754.

ROLAND JV880, £450; Yamaha RM50 drum module, £350; Akai S01 sampler, £450. Home use only, all boxed with manuals. ☎ Adam 0171 494 0682.

ROLAND JV EXPANSION board, Vintage Synth, brand new, £200 ono; JV Experience board, £60 ono. ☎ Chris 0181 748 4631.

ROLAND JX1, £200; Alesis SR16, £160; Cheetah MQ8, £90; Fostex X26, £190; Casio RZ1, £90; Yamaha REX50 digital multi-effects, £90. ☎ Jonathon 01792 472560 (Swansea).

ROLAND JX3P plus PG200 programmer, both mint with manuals, £350 ono. 4Mb SIMMs, £60; 8Mb SIMMs, £110; 16Mb SIMMs, £210; SCSI drive, 270Mb, £70; SCSI drive 330Mb, £80. ☎ 01274 611343.

ROLAND JX3P programmable preset polyphonic synth, vgc, inc flightcase, £290. ☎ Ray 01708 744535 (Essex).

ROLAND JX3P, stand, semi-flightcase, PG200 programmer, TR606 drum machine, Cube 60 keyboard amp, instruction manuals, little used, all in mint condition, £500 all package. ☎ 01329 845265 (Hampshire).

ROLAND JX3P analogue synth, good condition, plus manual, £250. Roland R8 drum machine, £295; Korg Poly 800 analogue synth, okay condition with manual, £120. ☎ 0181 224 2964.

ROLAND JX3P analogue synth, superb condition, £220. ☎ Simon 01705 652007 (Portsmouth).

ROLAND JX8P, £350, R70, £250; Boss chorus, £25; Denon DRM510 cassette, £65, all in original boxes, perfect condition. ☎ 01543 410869 (Warwick).

ROLAND JX8P analogue polyphonic MIDI synthesizer with PG800 programmer, card and manual, excellent condition, £690 ono; Juno 106 classic analogue synth, very good condition, £350 ono ☎ 01487 831287.

ROLAND JX8P, £350; Studiomaster IMP1 MIDI mute, £125; Roland Jupiter 4, £400; Jen SX1000, £90; ART Proverb, £90; Casio VZ1, £275 ☎ 01344 387424.

ROLAND JX8P analogue polysynth, good condition, £350 ono. Atari compatible existing EPS sample editor. Eze by Geiva software, £95 including dongle and documentation. ☎ Chris 0421 507144.

ROLAND JX8P, £350 or swap for DX7 MkII, Matrix 6R, £625; Roland MKS7, £275; Chase Bit 99 and flightcase, £325; Kawai K3, £225; Jen SX1000, £100; Emu Emax 11R, £875. ☎ Dave 01394 387424.

ROLAND JX10 (Super JX), very good condition, quick sale wanted, hence £400 ono. ☎ Jonny 0171 7486220.

ROLAND JUPITER 6 analogue synth, vgc, manual, studio use only, £650. Emu Proteus/1, vgc, £300; Akai S1000, 8Mb, SCSI, DIG I/O vgc, £1200. ☎ 0151 526 2178.

ROLAND MDC1 dance module, 1 month old, boxed, as new, £399. ☎ Phil 01865 245110 (Oxford).

ROLAND MKS70 monster synth module, complete with PG800 programmer, £600; Oberheim Matrix 6R synth module, £350. Look no further for ultimate analogue sounds. ☎ Tony 01473 685573 (Suffolk).

ROLAND MKS80 Super Jupiter with PG80 (Sysex programmer, offers. ☎ Dave 0151 638 7931/leave message at 0151 289 3580.

ROLAND MT32 multitimbral module, excellent condition, £120 ono. ☎ 01534 485089.

ROLAND RD250S electronic piano, very good condition, £545; Roland PR100 disk sequencer, £85. ☎ Martin 015242 41619.

ROLAND SC33 Sound Canvas, £200; Kawai K1R, £200, or both for £350, both boxed with manuals ☎ 01266 632412.

ROLAND SC88 Sound Canvas, mint, £600 ono ☎ Roman 0589 825 905 or email ram20@hermes.cam.2c.uk.

ROLAND SH02, MPU101, DEP5, DEP3, Mutron 3, Casio FZ10M, Korg Synthi pedal, Electro Harmonix Electric Mistress, Watkins Copycat, Frontline X2 dual drum synth, Alesis compressor, Revox A77. ☎ Ed 0171 735 0798.

ROLAND SH09 + MC202, top condition with manuals (202 boxed), better than TB303, £250 each, £450 both. ☎ Ben 0181 542 7494.

ROLAND SH101, with handgrip and manual, £250 ono; Mackie 1202 mixer, £230 ☎ Richard 01482 796712.

ROLAND SH101, boxed, never used, totally unmarked with MG1 modulation grip and strap, also boxed and unused. Ideal for collector. Must sell together, offers. ☎ Duncan 0114 248 2760 eves (Sheffield).

ROLAND SH101, excellent condition, as new, manual, £190. ☎ Peter 01689 856860 (Kent).

ROLAND SH101, mint, with PSU, £295 ono; Roland SH1000, average condition for age, £150 ono; Farfisa organ, chrome stand and manual, bargain, £70. ☎ Mark 01782 849019.

ROLAND SH101, £175, Juno 106, £450; Yamaha DX7, £295; Peavey Spectrum analogue filter, £250; Breakthru sequencer software for Atari ST, £65. ☎ 01305 774367 (Dorset).

ROLAND SH1000 analogue synth, hard case, manuals, recent service, reluctant sale, £160 ono ☎ Dan 01273 722248.

ROLAND SH1000 analogue monosynth with CV and gate inputs, very collectable 1970s synth with resonant filters and noise, average condition for age, includes original case, £180 ono ☎ 01782 849019.

ROLAND SOUND CANVAS, remote control, boxed with manual, 100% original condition, £250, no offers. ☎ Steve 0113 2785603 (Leeds).

ROLAND SUPER JX10, very good condition, manuals, £500; Behringer Ultrafex 2, six months old, £175. ☎ Mark 01274 611343.

ROLAND SUPER JX10, super condition with flight case, bi-timbral, 12 voice polyphonic, two oscillators per voice, 76-note keyboard, £650/offers. ☎ Joel 0151 726 1560 after 6pm.

ROLAND U220 with percussion card, £225; Roland super JX module (collectors item), £495, Roland MKS50, £195, Peavey MIDI Master Patchbay, £150, Casio VZ8M, £85, all mint. ☎ 01302 880975.

ROLAND U20, £450; Roland U110, £200; ART Multiverb FX, £200; Notator SL, version for Atari ST, £100, all in good condition. ☎ Dave 01227 275663.

ROLAND U220 module, home use, never gigged, with Ethnic card, £350 ono. ☎ 0181 994 1796.

ROLAND XP50 keyboard, excellent condition, never used. ☎ 0181 5954878 after 7.30pm.

SEQUENTIAL PRO 1, manual, £340; Roland SH09, manual, £170; Alesis 1622 mixer, boxed, manual, £380; Roland PG800 Programmer, £290; Cheetah MS6, manual, £250. ☎ 01825 724093.

SEQUENTIAL PROPHET 5, full MIDI REV3, absolutely mint condition, reluctant sale, £1000; Roland JX10 analogue, 3 ROMs, memory cart, etc, immaculate, £500. ☎ Robert 01933 380926 (Northants) or 0181 548 8136.

SEQUENTIAL PROPHET T8, true analogue, programmable MIDI synth, loads of knobs for ease of creating fantastic warm sounds, polyphonic aftertouch and velocity, 76-note keyboard, amazing machine, £2200. ☎ 01363 775214.

SEQUENTIAL SIXTRACK 6-voice analogue synth with arpeggiator and sequencer, carry case as new, £325. ☎ 01524 736158.

STUDIO ELECTRONICS SE1, boxed, Minimoog with memories in a rack. ☎ 0121 351 4011.

TECHNICS KN3000, one month old, £1700 ono, looking for Korg i2. ☎ Tom 01522 750527.

TECHNICS SX KN2000, as new, home use only, with box and manual, £1250 ono. ☎ 0161 309 6371.

TECHNICS SX KN2000, excellent condition, home use only with box and manual, £1200 ono. ☎ 0181 809 6371 9am-9pm (North London).

TECHNICS SX WSA1 virtual modelling synth, 61 keys, 64-note polyphonic, 5 months old, hardly used, £1500. ☎ Matt 01480 385059.

TEISCO 60F monophonic analogue synth, mint condition, fully serviced, ARP circuitry, Gate and CV In and Out, external input into filter, beautiful build quality, smooth, fast filter, very rare. ☎ 01535 645233.

TEISCO 100P preset analogue synth, manufactured under licence from ARP, velocity-sensitive keyboard, flanger, great bass, Gate and CV Ins and Outs. £100 ono. ☎ 01535 645233.

VOX SUPER CONTINENTAL ORGAN, 1966, very good condition, with original Z-stand, case and Vox carry cover. ☎ 0831 262589 or 01274 602621.

WALDORF PULSE full MIDI control analogue synth, £450 with 10-month guarantee; Casio CZ101, £100 with case and manual. ☎ Cambridge 01223 357097.

WURLITZER EP200 electric piano with stool, £200; Yamaha TX7, £125; Moog Prodigy, £120. ☎ 01689 852707 (Orpington).

YAMAHA CLAVINOVA electronic piano, 88 weighted keys, £495 ono; EMT10 and EMQ1 MIDI data recorder, £50 each. ☎ Dave 01785 662895 (Stafford).

YAMAHA CS01 analogue monophonic micro synthesizer, mint condition, battery or mains, breath control, resonant filter, built-in amp and speaker, owners and service manuals, Gate/CV. ☎ 01535 645233.

YAMAHA CS60 8-voice analogue polyphonic synth, mint condition, fully serviced and tuned, monster sound, the best ring modulator with full envelope control, great variable ribbon controller, hard case, Kenton MIDI available. ☎ 01535 645233.

YAMAHA CS80, classic keyboard, good condition. ☎ Mark 01302 890336 (Doncaster).

YAMAHA CS15 analogue synth, 2xVCO, 2xVCF, 2xVCA, 2xEG, LFO, PWM, Portamento glide, pitchbend, 2xCV in, 2xTrig in with separate chorus pedal, £250. ☎ Mike 01908 604820 (Milton Keynes).

YAMAHA CVP89 digital piano, top of range, hardly used, unwanted present, £4500 ono, first to see will buy. ☎ Danny 0973 676717.

YAMAHA DX5 with manuals, two ROMs, flightcase, as new condition, £650. ☎ 0181 785 0206 mornings.

YAMAHA DX7S, perfect condition, £295, Yamaha SY85, manuals, mint, £695; Korg Trinity Plus, £2395. ☎ 01932 761988.

YAMAHA DX711D, classic synth, boxed with manual, home use only, mint condition, free Yamaha RX17L drum machine, £300. ☎ 01234 267256.

YAMAHA DX711FD, ultimate version of this classic synth, bi-timbral, unison mode, good MIDI spec, £425 ono. ☎ Paul 01527 550135/541511.

YAMAHA DX7S, immaculate, ROM pack and manual, £350. ☎ Liz 0151 734 0772.

YAMAHA DX11 keyboard, home use only, £225 ono. Manual. ☎ Roy 01255 812889 (Clacton, Essex).

YAMAHA DX21 MIDI FM synth, boxed as new, home use only, manual, tuition tape and sustain pedal, 128 presets/16 user memories, £250. ☎ Stewart 01353 669854.

YAMAHA DX21 MIDI synth, excellent condition, £150; Yamaha RX21 MIDI drums, £50; Yamaha DP100 dynamic processor, £50. All with manuals. ☎ Jonathan 01252 873766.

YAMAHA DX27 4-operator FM synth, excellent condition, 192 presets, with PSU, clip-on music stand, manuals, playbook, loads of sounds on cassette, PD editor and sounds on disk for Atari ST. Affordable way to go FM with a full-sized keyboard, £180. ☎ 01354 695239.

YAMAHA DX100 classic synth, mint condition, plus manuals and PSU. Swap for Casio CZ101 or sell for £100 ono. ☎ Joe 0171 258 7286.

YAMAHA MU50, mint, hardly used, with manuals, £300. ☎ Lee 01222 470699.

YAMAHA MU5 tone generator with PC/Mac interface, £250. ☎ Dave 0171 624 1816.

YAMAHA MU80 synth module, amazing spec, £350; Yamaha CBXK1 mini mother keyboard, £90; Tascam 424 4-track portastudio, £350. All as new. ☎ Jez 0171 738 3206.

YAMAHA MU80 super module, 64-note polyphonic, 32-part multitimbral, 32 discrete MIDI channels, 729 sounds, 2 months old, £400. ☎ Andy 0191 285 8293.

YAMAHA MU80 sound module, 64 note poly, 32 part, analogue input, £430, boxed, as new. ☎ 01223 300488 (Cambridge).

YAMAHA PFP100 Clavinova electric piano, mint, £1100; Tascam M1024 24:2 mixer, flightcased, £550; Roland M12E rack mixer, £350; Yamaha QX3 sequencer, £260; Roland EP3 electric piano, £150. ☎ Richard 0113 294 5649.

YAMAHA SY77 workstation, extra sounds, hard flight case, good condition, home use only, £400 ono. ☎ 0973 308941 or 01992 558845.

YAMAHA SY77, excellent condition, extra sounds, £650; MT3X 4-track, 6 channels, £290 ono. ☎ 01902 836203.

YAMAHA SY77 workstation, ROM cards, disks and manual, home use only, £600 ono ☎ 0121 475 4655.

YAMAHA SY77, vgc, 5000 extra sounds, £700 ono; Yamaha SY35, boxed, as new condition, £325 ono, P/X for cheaper synths, D70, etc. ☎ 01287 642376 (Cleveland).

YAMAHA SY77 workstation with sequencer and disk drive, hundreds of extra sounds on disk, £600 ono or p/ex for Roland XP50. ☎ Rob 0161 633 9817 (Lancs).

YAMAHA SY85 synth, boxed, excellent condition, complete with stand, MIDI leads, audio leads, user manuals and data disks, £750 ono. ☎ Stuart 01905 767358 (Worcs).

YAMAHA SY85 synth, only 3 months old, memory card, disks, X-stand £595. ☎ Andy 0116 232 0248.

YAMAHA SY85 and Kawai K1R synths, fully boxed with manuals, home use only, £850, will split. ☎ Andy 01484 647131.

YAMAHA SY85, boxed, as new, various disks and flightcase, £725. ☎ Darren 0802 825771 (Northampton).

YAMAHA SY85 workstation with RAM expansion and extra sounds. Immaculate condition with manuals, forced sale, £750 ono. ☎ 0181 455 2463.

YAMAHA SY85 multimbral workstation, £650. ☎ 01273 885231.

YAMAHA SY85, £750; Atari Mega 4ST with hard disk and monitor, £150; Steinberg Midex+, £200; Cubase V3, £200; Digitech Vocalist II, £350; Yamaha TX16W, £500; Yamaha MV1602 mixer, £450. ☎ 0181 661 2786.

YAMAHA SY85 workstation plus extra sounds and manuals, vgc, £680. ☎ Glen 01843 230375.

YAMAHA SY99, expanded 1Mb RAM, MCD64 RAM card, sample disks, instruction books, £1000, no offers. ☎ 01485 540536 (Norfolk).

YAMAHA TG33, 32-note, 16-part, 192-voice, FM and AWM synthesis, vector control, effects, dual stereo outs, very good condition with manual, £250 ono. ☎ Adam 0121 313 0477.

YAMAHA TG33 synth module and RAM card, 128 presets and 128 programmable sounds, random programming feature, mint condition, all manuals, £250. ☎ Dave 01443 450758 (Cardiff).

YAMAHA TG55, good condition, sound cards available. ☎ 0181 778 3321.

YAMAHA TG55 sound module, manual, leads, £100; Alesis Datadisk SQ, £100 both excellent condition. ☎ Jim 01264 357957 (eves), 01256 483430 (days).

YAMAHA TG77 rackmount synth, as new, boxed £650. ☎ John 01344 750959 (Berks).

YAMAHA TG77, equals 16 DX7s plus resonant filters and samplers thru same filters, £500. ☎ Rich 01924 848823 (W. Yorks).

YAMAHA TG100 sound module, £160; Tascam 4-band parametric EQ, £100. ☎ Tony 01727 763124.

YAMAHA TG100 GM sound module, 16-part multitimbral, Atari editor and sequencer software, all for £230; Tascam 244 4-track, £110, in need of repair; Fender Rhodes Stage piano £120, in need of repair. ☎ Steven 01920 467567 (Herts).

YAMAHA TG300 synth module, as new, boxed with manuals, an absolute doddle to program, £295. ☎ Chris 01785 819929 (Staffs).

YAMAHA TG300, 2 years old, excellent condition, with PSU and manuals, £300 ono. ☎ Mick 0113 257 9790.

YAMAHA TG500, £560; Korg M1 pedals and flightcase, £680; Hohner HS2 (silver Casio VZ1), flightcase, £300; 2U SKB case, £70; Frontline 2U 8-channel line mixer, £120, boxed, mint. ☎ 01223 504623 after 7pm (Cambs).

YAMAHA TG500, £500, TG100, £135, both boxed; Emu Proteus/3 World, £275, all excellent condition with manuals; Atari editing/librarian software, home use only. ☎ Gary 01202 579640 (Bournemouth).

YAMAHA TG500 MIDI Module, extra RAM card, immaculate, £490; Kawai K4 keyboard, extra RAM/ROM cards + editors for Atari, £350, all boxed with manuals. ☎ Rob 0802 813990 (Croydon) 24 hrs.

YAMAHA TX7 and QY10, £99 each/£149 for both inc. delivery, or swap for any MIDI synth module. ☎ Mozani 088 764415 (Malaysia) after 10am UK time.

YAMAHA TX802 multitimbral DX7 in rack, vgc, quick sale, £300; Alesis HR16 drum box, £100. ☎ Rob 0181 879 3418 after 6pm (Wimbledon area).

YAMAHA TX802 multitimbral FM synth module, good condition, just £300. ☎ Steve 01895 441515.

YAMAHA V50 FM workstation, 16-note polyphonic, 9-track sequencer, excellent condition, £375; Yamaha VL7 virtual acoustic suynth, brand new, £920. ☎ Eileen 01744 758883 (Merseyside).

YAMAHA W5 workstation, including Vintage board, 76-note keyboard, superb sounds/drums, massive 100,000-note sequencer, immaculate condition, boxed manuals, long original warranty, £999. ☎ 01952 260064.

YAMAHA W7 workstation, as new, boxed, 12 months old, home use only, £650 ono. ☎ 0121 605 6399.

RECORDING

1940S PRO MOVING COIL carbon microphone for sale. It's big and it's heavy, £250. ☎ 01379 853782.

ACOUSTIC 3312 monitors, 150+watts, 33Hz-22kHz, 95dB/Watt, 12-inch woofers, 5-inch midrange, three-inch tweeters, protective metal grills, retail £800 each, as new, all offers considered. Email RAM20@HERMES.CAM.AC.UK.

ALESIS 1622 mixer, £395; Studiomaster 8:2 Mixer, £195; Technics 7-channel equaliser/analyser, £95; two DTI-approved Shure lapel radio microphones, £145 with. ☎ Joe 01609 748339 anytime (N. Yorks).

ALESIS 3020 compressor/gate, £150; Behringer Ultrafex II, £150; Alesis Microverb III, £100; Zoom 9001 multi-effects, £100, no offers. ☎ Richard 01757 701010 after 6pm (Selby).

ALESIS 3630 compressor, £225; Akai S3000 2Mb board, £140; Zoom 9120 multi-effects, £300; Roland Experience Expansion board, £60, all new boxed with manuals. ☎ Dave 0181 902 9784 (NW London).

ALESIS ADAT 8-track digital recorder, v4.03, only 140 hours on head drum, good condition, £1500. ☎ 01302 832420.

ALESIS ADAT and Allen & Heath GS1 mixer, only a few hours use, both in mint condition, £2100. ☎ Lee 01302 880975.

ALESIS MICROLIMITER, vgc, £50. ☎ 0141 423 1106.

ALESIS QUADRAVERB PLUS, power supply and manual, boxed, excellent condition, £250. ☎ Jon 01227 462059 (Canterbury).

ALLEN & HEATH SYSTEM 8, £750; Fostex M80, £600; Midex + MIDI expander, £180, wanted. Dance Card for R8, £80 paid. ☎ 01736 68253.

AMPEX 499 half-inch tape, used once, £15 reel; Ampex 456 half-inch, £10 reel; Zonal 700 half-inch alignment tape, ISpls, used once, £50. ☎ John 01822 854389 Devon.

BEHRINGER ULTRAFEX 2, 3 months old, mint, £175. ☎ Mark 01274 611343.

C-DUCER contact mics, six including PSU and DI boxes, superb on instruments, perfect drum separation, fully pro, boxed as new, £250 the lot. ☎ 01482 448767.

CITRONIC SM650 mixer and XF150 X-Fader, broadcast quality, cost over £1300 new, will sell for £450, 1300 7-inch singles, 350 12-inch singles, £200. ☎ John 01895 465368.

DBX 119 stereo compressor/expander, can be used for controlling dynamics when recording or as noise reduction unit, £50. ☎ 01329 238522 (Hampshire).

DIGIDESIGN SMPTE Slave Driver for Mac, Pro Tools, etc, unopened, £650. ☎ Julian 0181 549 5252.

DIGIDESIGN SOUND TOOLS 2 system with SDII 2.7 software, boxed with manuals, four in/outs with Cubase Audio or Logic Audio, etc. ☎ Mark 0181 539 7643 eves.

DIGITECH digital delay, rackmount, 4-second sample trigger and modulation, with manual, £110. ☎ 0171 639 9727.

DIGITECH VOCALIST II, hardly used, boxed, £500 ono. ☎ Mick 01788 543879.

ECHOPLEX echo unit, of type used by Elvis, Brian May, Steve Hillage etc, early 60's model, needs some restoration, £200. ☎ 01379 853982.

ENSONIQ DP2, half a DP4, same quality sound for half the price, two parallel effects, two weeks old, shop wouldn't refund, costs £750, make me an offer. Box, receipt, guarantee. ☎ 0100 538304.

EVENTIDE DSP 4000 effects unit, perfect condition, never gigged, Studio Electronics SE1 Minimoog with memories, boxed. ☎ 0121 352 4011.

FOSTEX 16-track recorder, inc looms, tapes and remote panel, mint condition, £2950 ono, can deliver. ☎ Gary 01603 747842.

FOSTEX 2-TRACK open reel recorder with centre track for timecode, includes remote control, excellent condition, hardly used, £500 ono. ☎ Kelvin 01222 864243 (Gwent).

FOSTEX 280 cassette multitrack plus JL Cooper PPS2 MIDI-tape sync, both excellent condition, £270 the pair. ☎ Ian 0171 739 1459.

FOSTEX 280 4-track tape machine. Comprehensive 8-channel mixer and transport controls, ideal for getting those ideas down £350 ono. ☎ Dustin 01703 557054 or E-mail djb4@soton.ac.uk.

FOSTEX 380S, double speed 4-track with 12 inputs and Dolby S, loads of brilliant features, excellent condition, £380 ono. ☎ 01434 632075.

FOSTEX 812 desk, MIDI mute, cost £1100 new, vgc, £475 for quick sale. ☎ 01223 322442.

FOSTEX 812 12-channel, 8-group mixer, 3-band EQ with sweep, 3 aux, 30 channels on mix, vgc, boxed with manuals. ☎ 01223 894270.

FOSTEX 820 mixer, 20 channels, eight subgroups, 38 inputs on mix, bargain at £795. Bit 99 analogue MIDI synth, £250. Yamaha FB01 module, £70, home use only. ☎ Nottingham 0115 981 6464.

FOSTEX 2412 desk, hardly used, boxed, £995; Atari Falcon with CDP Soft, SDI, 250Mb hard drive, £495. ☎ Tristan 01865 484366.

FOSTEX 4030/4035 sync units, £450. ☎ Gary 01869 810956 (Oxon).

FOSTEX A8, perfect condition, only 20 hours use, just serviced, with Tascam MTS30, £600. ☎ Alex 01752 789454.

FOSTEX B16 and Studiomaster 20:16:2 desk, with 16 monitor channels, giving 32 simultaneous inputs, full looms plus tapes, may split, £1950. ☎ 01724 855095.

FOSTEX B16 with remote and test tape, recent service, home use only, £1100 including shipping to any country in the world. ☎ 00 852 257 66 283 Fax 00 852 250 43 336.

FOSTEX E16 16-track tape recorder, £1800 ono. ☎ 01633 880858 (Gwent).

FOSTEX E16, good heads, well maintained, Sec 12:8:2 with meter bridge and case, Fostex 4050 autolocator/synchroniser for E16, £2550 ono, may split. ☎ Paul 0191 4554681 (Newcastle).

FOSTEX E16, rack mounted, with stand, 32:2:2 Sec mixers, £900 each; Revox B77 quarter-inch open reel, £700. ☎ 0171 372 6428.

FOSTEX E16, £1700; Fostex 4050, £225; Soundtracs 16:8:16 desk. ☎ Dave 01522 778229.

FOSTEX G24S with 8330 sync board, home use only, excellent condition, quick sale needed, £3500 ono; Alesis Quadrasynth 54 rack, £450. ☎ Terry 0181 521 4491.

FOSTEX M80 8-track, home use only, £500. ☎ Terry 0151 931 1657.

FOSTEX R8, very little use, perfect condition, boxed with manual, £750 ono. ☎ Pete 01503 220762.

FOSTEX R8, wiring Loom and tapes included.

dance Village

"NOW READ THIS !"

"Those splendid chaps at Dance Village have done it again.
They have got together with those marvelous people from Crosstrax Recordings and Bagleys Warehouse to bring you a WORKSHOP SPECIAL, which will include, Production, writing, programming, editing, mixing, mastering label management, publishing, sample clearance, licensing, getting paid!, and so much more.
So don't delay pick up the phone today and call Ray for further details."

Dance Production Workshops

Sat 22nd June
BATTLE OF THE SPEAKERS
Featuring, Alesis Monitor 1's, Spirit Absolute 2's, K-Rok etc...

Sat 29th June
CROSSTRAX RECORDINGS
will pick the best demo, remix and release it. Demos can be either sent to Crosstrax A&R Dept, Dance Demo's, Crosstrax Recordings Ltd, Arch 25, Goods Yard, York Way, London, N1 0EZ. Or bring it along on the day

Sat 6th July
ANALOGUE WARS
The Waldorf Pulse, Novation Basstation, Korg Prophecy, Roland 303, Nord etc, go head to head

Sat 13th July
BREAKS 'N' BEATS
Sample editing with Steinberg Recycle

230 High Street, Barnet, Herts, EN5 5TD Tel: 0181 440 3440 Fax: 0181 447 1129
E-mail: dancevillage@channel.co.uk Store Hours: 9.30am - 6pm Sat: 10.00 - 5.30pm

A division of the The Digital Village.

CALL US NOW
01202 395135
EXT. 130

THE LARGEST MUSIC STORE IN THE SOUTH

MASSIVE STOCKS

EMM Ltd

EDDIE MOORS MUSIC LTD
679 CHRISTCHURCH ROAD
BOURNEMOUTH BH7 6AE

THE SOUND INVESTMENT

Professional Service!! Lowest Prices!!

KURZWEIL

Lowest Prices On All Kurzweil Products.
K2000 From £1899
K2000R From £1799
K2500 CALL NOW
PC88 Master Keyboard
K2500X Mega synth

KORG TRINITY

Trinity & Trinity Plus New Low Prices

KORG PROPHECY

Affordable Virtual Accoustic Synthesizer
Call us for a deal!!

Korg X5 £585
Korg X5D £699
Korg X3 £849
Korg X2 £1099

YAMAHA W5

W5 Workstation Exclusive Limited Stock £999

ROLAND XP50

XP10 XP50 XP80 Best UK Prices!!

FATAR STUDIO 900

88 note fully weighted Now only £525

SAMICK KK11

76 note piano action control keyboard with assignable aftertouch. Now Only £379

HAMMOND XB2 CALL

Hammond XB2 Awesome and Portable!!

FATAR STUDIO 49

49 Velocity sensitive MIDI Keyboard. Only £85

TECHNICS WSA1

Technics WSA1. WSA1R. Accoustic modelling synthesizers.
New Low Prices!!

ROLAND A30

76 keys. Pitch Bend. Modulation. Now £299

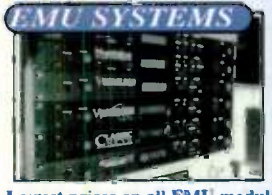
FATAR 2001

2001 Features Include 88 note weighted keyboard. 8 Zones. Aftertouch Pitch and Mod wheels 99 patches transmitting splits and prog changes

Top of The Range Control keyboard. Demo Units at Only £799

SYNTHESIZERS & KEYBOARDS

EMU SYSTEMS



Lowest prices on all EMU modules!!
Orbit The Dance Planet Call Now!!

Roland JV1080

Call us now for the best possible deal on the JV1080.

Stunning Expansion Board Deals!!

Roland MT120S

RRP £899 Now £549

The MT120S combines a 64-voice MIDI sound module, a Standard MIDI file player, a five track sequencer and an integrated amp and speaker system.

Kawai XS1 £129

The XS1 Represents Great Value
96 single + 32 user programmes
4 part multitimbral + drums.

Roland P55 £299

32 dynamic piano and keyboard sounds including stage and concert grands, Rhodes and Roland electric pianos . RRP £495

Waldorf Pulse Call

GMega LX £149

Amazing Value GM Sound module.
160 Sounds. 7 Drum Kits. Serial Interface.

Roland JV880 £469

Powerful synthesiser module. Digital filters with resonance. Four stage envelopes and multiple LFOs.

Our module prices cannot be beaten.
Call us before you buy . Korg O5RW. Korg X5DR. Yamaha MU50. Yamaha MU80. Novation Bass Station Rack. Oberheim OBMX.

Roland SE Series

EXPANDERS & MODULES

BOSS DR5

We have just received a limited quantity of this amazing unit at the unbelievable price of only £259

ROLAND MC50II

SMF compatible
8 Songs. Huge Memory. Step & real time record. Super fast loading time.
The ultimate Dedicated sequencer.

RRP £799 Now Only £499

NEW AND USED EQUIPMENT SALE.

KEYBOARDS					
Roland JX3P	£249	Yamaha W7	£	Rhodes 660	£399
Roland juno 60	£299	Yamaha V50	£499	Rhodes VK1000	£699
Orla C80 commander	£749	Korg O5RW	£399	SEQUENCERS	
GEM S2	£799	Yamaha MU80	£399	Yamaha QY300	£499
Yamaha VL1	£1999	Emu Proteus1	£499	Kawai Q80	£299
Roland D50	£279	YamahaTG55	SAMPLERS		
Roland XP50	£399	Bass Stationn R	£175	EMU ESI 32	£899
Yamaha DX21	£1199	Kawai K4R	£310	Peavey DPM 3	£799
Korg M1	£159	Emu Morpheus	£299	Akai S3000	£1399
Korg 01WFD	£499	Kawai GMega	£799	Roland S760	£999
Yamaha SY85	£999	Roland D110	£379	Akai DR4D	£899
	£699		£199	Roland JS 30	£399

RECORDING	
Tascam DA20	£599
Yamaha MT8X	£799
Folio Rackpack	£649
Tascam Porta 07	£339
Tascam 488	£699
Sansui MR6	£349
Tascam 464	£499
Studiomaster P7	£1499
Digitech Voc II	£379
Fostex XR5	£299
Yamaha MT50	£299

ROLAND VS880

NOW IN STOCK

EMU DARWIN

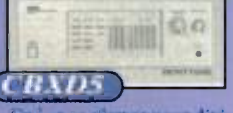
AKAI DR8

AKAI DR4

AKAI DR16

FOSTEX DMT8

CBXD5



Call us to discuss your digital audio requirements. Our Software & Hardware deals are unbeatable!!

ZIP DRIVES £199

JAZZ DRIVES £499

FOSTEX D80

SOUNDSCAPE

SSHDR1

MACKINTOSH

DIRECT TO DISK SYSTEMS

ACCESS. VISA. CREDIT FACILITIES. FAST EFFICIENT SERVICE. OVERNIGHT DELIVERY.

DIGITAL MULTITRACK

ADAT
Lowest Ever Price

ADAT XT EXCLUSIVE New Low Price!!

8 TRACKS OF CD QUALITY RECORDING !!
At this price, NOW is the time to go for your first ADAT or to expand your existing system.

OUR ADAT XT PACKAGES ARE UNBEATABLE

TASCAM DA88

TASCAM

We Always Have The **TASCAM DA88** Available From Stock. Contact Us Now To Discuss Your Single or Multiple System Requirements.

ALLEN & HEATH EXCLUSIVE

We have just obtained a quantity of **GS1 8 Buss Mixing Consoles** at a **Massively Reduced Price.** The GS1 is the only true 8 buss recording console at this price level.It is sonically transparent and specifically designed for digital multitracking. The GS1 features 32 inputs, 5 Aux sends, MIDI muting and MIDI tape transport control.Our Exclusive deal **Includes the optional Meterbridge at £699.**

GS1 Package.
GS1+Fostex 1080 Eight Track Digital Recorder £1999!!
Price includes 850 Mb Hard Drive

Other Allen & Heath Exclusives
GS3V 16 £1999. GS3V 24 £2799.
GS3 16 £1599

AKAI SAMPLERS

S3200XL

New Low Price !!

This new top of the range pro sampler is now fast becoming the industry standard. Loaded with features at an incredibly low price. Call for details.

S2000

The S2000 is a32 note polyphonic sampler, expandable up to 32Mb .
The basic model costs well under £1000.

MESA Editing Software now included with S2000, S3000XL & S3200XL.
Ask about our free memory upgrades!!

S3000XL Best Ever Deal Call Now!!

digidesign

We are now able to offer the entire range of Digidesign Audio Products. Call our Digidesign specialist NOW for information and a quote.

PRO TOOLS
EXPANSION CHASSIS
DINR
SESSION 8
TDM

SAMPLERS

JS30 £449

CD-Quality Sampling Workstation.

EMU SYSTEMS

E4K Call

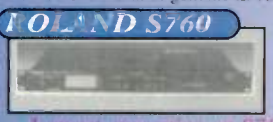
Lowest Possible Prices On All EMU Samplers.

E64 PRO PACKAGE

Our E64's are equipped with 8Mb RAM and a 270Mb Internal Hard Drive pre-loaded with over £200 worth of genuine EMU library.

Features include:-
44.1/22.05KHz Sampling Rates
UP to 90 Seconds Sampling Time
Crossfade Mixing
12 Sample Trigger Pads
SCSI Interface
Reads Roland and Akai Libraries over SCSI

ROLAND S760



S760 with 32Mb RAM Only £1599

Lowest ever price on S760
DA400 & OP760 Option boards in stock!!

ROLAND JS30
EXCLUSIVE DEAL £449
Including zip drive £599

DAT RECORDERS

TASCAM DA20

TASCAM DA20 NEW LOW PRICE

TASCAM DAP-1

DAP-1
Pro Spec
Portable DAT
Recorder

TASCAM DA30MKII

Lowest ever DA30MKII Price
Limited stocks of the UK'S Best selling Pro spec DAT Recorder at an unrepeatable deal!!

Our DAT Prices are The Lowest You Will Find. Call Us for a Quote

PANASONIC

SV-3800. SV-4100

SONY

PCM 2600. PCM - 2800. DTCA 8 . DTCA 9. TCD10 Pro. BEST UK PRICES.

FOSTEX

D5. D10. D25. D30.
BEST UK PRICES.

LEXICON

PCM-80

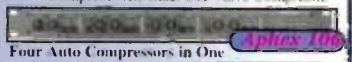
As a Pro Studio Main Dealer We offer the best advice and the lowest prices on all Lexicon and Aphex equipment.

APHEX

Aphex C2 Exciter 107 Mic Preamp 106 4ch Comp 105 4ch Gate. 661 Valve Comp/Lim.

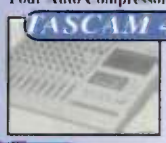
DFT Dual MP

Two channel Tube Microphone Preamplifier The Dual MP Retails at £389. We have limited stocks available at only £269



Four Auto Compressors in One

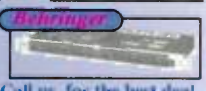
TASCAM 483 II £899



This has to be The Eight Track Deal of the year.
Dont miss out !!

Lowest possible Mic prices AKG, AUDIO TECHNICA, SHURE, BEYER NEUMANN, RODE.

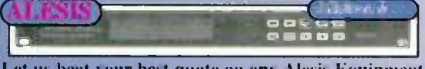
BEHRINGER



Call us for the best deal on all Behringer products

Digitech TSR12	£279
Digitech Vocalist 2	£389
Alesis Midiverb 4	£325
Lexicon Alex	£299
AKG C1000S	£189
AKG C3000S	£279

ALESIS



Let us beat your best quote on any Alesis Equipment
Quadraverb 2. Midiverb 4. Microverb 4. 3631 Compressor. M-EQ 230. DM5. SR16. RA100.

KAWAI RV4 £449

4 INDEPENDENT STEREO EFFECTS UNITS IN ONE. 8 INPUTS & 8 OUTPUTS. 99 PRESETS. Now Only £449

JBL 4208

£279

The JBL 4208 are professional studio monitors that retail at £400 We have limited stocks at only 3279

RACK PACK

We offer the very best deals on al soundcraft mixers and studio products. Call us now

SPIRIT STUDIO

£269

SPIRIT LITE

YAMAHA TMX

£199

TMX Drum sample module with 211 Sampled Sounds , midi and12 analogue trigger inputs. Brilliant!!

DBX 266 COMPRESSOR

£229

Dual compressor Limiter and gate. Stereo or dual channel Operation ***Now Only £229***

behringer Eurorack

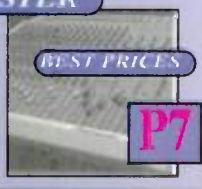
Behringer Eurodesk and Euro rack at new low prices!!

MACKIE

BEST PRICES

STUDIOMASTER

Diamond Club Graded Factory Stock.
16-2 £299
12-2 £259
8-2 £199
2 Auxs.
3 Band EQ.
Balanced Inputs



BEST PRICES

P7

DIAMOND

SOUNDTRACS

TOPAZ

Free Topaz Meter Bridge Offer with 24 & 32 channel consoles

Check out our prices on KRK studio monitors. Let us quote you the best prices on Absolute 2s, Monitor one & NS10Ms!

YAMAHA 02

ACCESS. VISA. CREDIT FACILITIES. FAST EFFICIENT SERVICE. OVERNIGHT DELIVERY.

WRH

£850 ono. ☎ 01295 710130.

FOSTEX R8 with MTC1, very good condition, recent service, £900 ono. ☎ Blair 01225 763235, eves.

FOSTEX R8 plus 812 mixing desk, mint condition, plus looms and extension lead, £1400. ☎ Colin 01342 850507.

FOSTEX R8 plus Seck 12 8.2, vgc, including loom and manuals, £1000, might split; Korg DDD1 drum machine with manual, £100 ☎ Adam 01304 212520 after 6pm.

FOSTEX R8, immaculate condition, £750. ☎ Lee 01226 283487.

FOSTEX R8, approx 10 hours use. ☎ Nick 01273 601648 12-6pm (Brighton).

FOSTEX R8 recorder, Studiomaster Mixdown 16 8 16 desk, Quad 405 amplifier, Celestion 3 monitors, looms, manuals and boxes, £1700. ☎ Paul 01422 839631 (Halifax).

FOSTEX R8 multitrack, MTC1 and remote extension lead, excellent condition, £750. ☎ Steve 0115 962 6795 (Nottingham).

FOSTEX R8, £700; Fostex 2016 line mixer, £175, Yamaha RBX 350 bass guitar, £180, Yamaha SY35, £300; Yamaha RY30 drums, £180, all good condition with manuals. ☎ Roger 01450 870225.

FOSTEX R8 8-track with MTC1 sync box, home use only, with three reels of Ampex tape, boxed, manuals, vgc, £800; Roland MT32, £110. ☎ 0113 282 2239.

FOSTEX R8, virtually unused, perfect condition, boxed with manuals, £800. ☎ 0973 733843.

FOSTEX R8 reel to reel, immaculate condition, remote extension, manual, leads, quick sale required, hence £650. ☎ Luca 0171 207 9726 anytime.

FOSTEX X26, brilliant 4-track, 6 inputs, aux send and return, equalizer, Dolby B, £150; Yamaha RX8, great drum machine, no manual but easy to use, hence £120. ☎ Robin 01305 785675 after 6pm.

FOSTEX X28H high-speed cassette 4-track, mint, boxed, manual, PSU, £265; Akai 4000DS quarter-inch stereo reel to reel, £96. ☎ John 01604 767051 (Northampton).

FOSTEX X28M 4-track, mint condition, hardly used, £250 ono; Midiman Smartsync unit, never used, brand new, £60. ☎ Steve 0121 588 2350 (West Midlands).

JBL CONTROL 1 monitors, perfect condition, still in box, hardly used, £60. ☎ 0191 2711 456.

JBL CONTROL 10 mid-field monitors, titanium tweeters, 12-inch woofers, 40Hz-20kHz frequency response, 300W, under four months old, too powerful for room, £700. ☎ Mark 01274 611343.

JL COOPER PPS100 MIDI/SMPTE sychroniser, £130. ☎ Andrew 0181 678 1729.

LEXICON LXP1S MKII, bought in error, days old, shop wouldn't refund, cost £795, sell for £679 ono, transferable warranty. ☎ 01302 538304.

MACKIE CR1604 VLZ 16-channel mixer, latest model, including gooseneck, £799; Alesis RA100 power amplifier, £250. Both immaculate, only 3 months old, original warranties, £999 for both. ☎ 01952 260064.

MM MP175 8:2 mixer, good for PA or recording, 4-band EQ, FX loop, analogue metering, stage box with 25m multicore, good condition, £175. ☎ Stewart 01353 669854.

OMNICRAFT QUAD GATE, £50; Akai ME35T MIDI trigger, £175; Akai XE8 MIDI drum expander, £125; Akai S612 sampler, £125, all as new. ☎ Dave 01522 778229.

PEAVEY LINEMIX 8 rack mixer, £160; Peavey Classic 6060 tube rack power amp, £350; Digitech DSP16 rack delay/reverb, £160. ☎ Tony 0171 207 0059.

REVOX B77 2-track recorder, plus manual, remote, speed control, dust cover, NAB adaptors, excellent condition, £850. ☎ Vic 01889 582652.

ROLAND M240 24-input line mixer, £350. ☎ 01426 209138 (pager).

ROLAND VS880 8-track hard disk workstation, with Iomega Zip drive, as new, with manuals, £1320, or VS880 on its own, £1200. ☎ 01933 678608 (Northants).

SANSUI WSX1 6-track Dolby C portastudio with 8-channel mixer and integral mastering deck, plus Sansui MDR6 smart FSK sync and remote unit, £475. ☎ Paul 01527 550135/541511.

SECK 12:8:2 MIXER, 12 mic/line inputs, 8 group outputs, £395; Drawmer LX20 stereo compressor/limiter, £175, both in excellent condition. ☎ 0181 924 1101.

SECK 18:8:2 mixer, low-noise power supply, switchable metering, good condition, £5[illegible] complete. ☎ 0181 9309413.

SHURE headset mic, £110; Ultra metal foot pedal, £25. ☎ Carl 01507 606956.

SONY 377 reel to reel recorder, little used, pristine, £400 ono. ☎ 0113 262 9160.

SONY OPTICAL in/out lead, very rare lead for Sony portable DAT machines, never used, still under guarantee, £100. ☎ 0191 271 1456.

SONY DTC D7 DAT machine (portable), excellent condition, hardly used, £325 ono; Casio CZ5000 with good flight case, £90, no offers, 2x1Mb SIMMs chips, 72pin, £20. ☎ Myles 01980 553719.

SONY DTC D7 portable DAT, used twice only, boxed as new, with Sony 909 stereo mix, cost £595, sell £395. ☎ 0113 268 0331.

SONY DTC77 ES DAT machine with flightcase, perfect, offers; Drawmer DS210 noise gate, perfect condition, offers. ☎ Keith 01444 831504.

SOUNDCRAFT 24:8:16 mixing desk, 42 channels on mixdown, includes meter bridge. Nice looking! ☎ Brad 01633 865758 eves, 01633 873118 office hours.

SOUNDCRAFT SPIRIT 12:2 rack mixer, Spirit Absolute 2 monitors, both nearly new, home use, boxed, £450. ☎ Eileen 01744 758883.

SOUNDCRAFT SPIRIT Live 8.3, excellent condition, in expensive aluminium flightcase, cost, £900, accept £425 ono; Tascam MM1 keyboard mixer, 20:2, MIDI muting, excellent condition, £350 ono. ☎ 01226 714740.

SOUNDCRAFT SPIRIT Studio, 16 8 16, immaculate, £1000; Fostex R8 8-track, plus remote and loom, £850 ono; JL Cooper PPS100 SMPTE, £75; LA Audio 32 channel mutes plus loom, £300. All boxed. ☎ Steven 01273 565754/453671.

SOUNDCRAFT SPIRIT ABSOLUTE 2 100W monitor loudspeakers, £225. ☎ Sam 0121 778 3986.

SOUNDCRAFT SPIRIT FOLIO 10.2 with hard case, one year old, with PSU, box, manual, mint, £279. ☎ Andy 01296 770259 eves.

SOUNDCRAFT SPIRIT FOLIO RacPac mixer, ideal for live or studio, 28 inputs at mix, phantom power, 4-band EQ, direct outs on each channel, home use, excellent condition, £500 ono. ☎ 01268 511687.

SOUNDCRAFT SPIRIT FOLIO 12:2 mixer, excellent, £275; Frontline 8:2 rack mixer, £75; Casio VZ10M synth, £250. All boxed with manuals, vgc. ☎ Harvey 01424 732599.

SOUNDCRAFT SPIRIT FOLIO 12:2 mixing desk, as new, boxed, less than a year old, £225. ☎ Richard 0171 250 3325.

STUDIO UPGRADE, many items for sale, including Kurzweil K2000 keyboard, Allen & Heath GS3 mixer, Sony DAT machine, effects and modules. Phone for prices and details ☎ 0113 268 0331 (Sheffield).

STUDIOMASTER 16:2 Sessionmix Desk, flightcased, line/mic inputs, direct outs, mid sweep EQ, 4 aux, mint with manual, £350. ☎ Kevin 01773 606545.

STUDIOMASTER MIXDOWN 16 4 8 2, £750; Alesis 1622, £420; Fostex DCM100 plus MixTab MIDI mixer, £450. ☎ Andrew 0181 678 1729.

STUDIOMASTER PROLINE 16 8 16 2 mixer, excellent condition, home use, £600; Studiomaster Series 5 16 16 2 mixer, vgc, full working order, £450. ☎ 0191 384 5389.

STUDIO RESEARCH 16 2 mixer, 3-band EQ, 2 aux, phantom powering, immaculate condition, £300 ono. ☎ Sean 01371 876625 (Essex).

SWAP 3 Guitar FX, 2 Vestax Micro FX, Kawai S100F (not PI) monosynth, for Atari STacy plus Midex +, or something interesting, or sell. ☎ Chris 01235 534152 (Oxon).

TASCAM 38 half-inch 8-track, excellent condition, £750; Seck 16:8:2 mixing desk, old, needs a service, hence, £200, or £875 for both. ☎ Rob 01442 391363.

TASCAM 38 8-track, superb condition, £800, 2 Tascam DX4D noise reduction units, £175 each; Bose 802 Professional PA speakers, £825, Bose Controller, latest rackmountable version, £275; Tascam 22-2 reel to reel recorder, as new, £375, Sony DAT machine, £345, Peavey XR 600C 400-watt PA Amp, £285; Roland W30 workstation/sampler, £800; Roland DEP5 digital effects processor, £250. ☎ Paul 01603 487580 (Norfolk).

TASCAM 85/16B 16-track, 1-inch, fully pro machine, inc remote, balanced line adaptor kit, trolley houses, dbx, deck, amps, etc, immaculate, superb sound, £2250. ☎ 0117 951 4035.

TASCAM 234 4-track, Yamaha FB01 module, TEAC model 2A mixer. Offers? ☎ David 0171 209 5822.

TASCAM 244 Portastudio with Tascam flightcase, good condition, £295. ☎ Peter 01273 564286.

TASCAM 464 4-track Portastudio with dbx, double and normal speed, 8-channel mixer, vgc, home use only, £390. ☎ Tony 01222 236036.

TASCAM 488 Portastudio, good condition with manual, £600; Kawai KC20 synth, velocity and MIDI, great sounds, £300. ☎ 0171 438 0141.

TASCAM 488 8-track, brand new, genuine reason for sale, £800 ono. ☎ 0121 745 4280.

TASCAM 488 Portastudio, excellent condition, £600, no offers. ☎ Wayne 01254 202032 (Blackburn).

TASCAM 488 MKII and Philip Rees TS1, £750 for quick sale. ☎ Graham 0181 248 3424.

TASCAM 488 MKII, 1 week old, brand new, in box, £800 ono. Selling because I bought a Fostex DMT. ☎ 0131 334 1577.

TASCAM 644 Midistudio, boxed, vgc, £399; Akai SO1, 2Mb, 100 disks, £449; Yamaha DX7, ROMs, pedal, case, £249. ☎ 0181 995 1977.

TASCAM 688 8-track Midistudio, 20 inputs and meter bridge, MIDI muting, electronic scenes and routing, built-in sync, dbx noise reduction, mint condition, £795. ☎ 01302 880975.

TASCAM 688 8-track Midistudio, very little used, mint condition, any trial, £900 ono. ☎ Geoff 0115 933 5656 (Nottingham).

TASCAM 688 8-track Midistudio, pristine condition, boxed with manual, £1200; Shure SM58, £50; Alesis Quadraverb, £150; Yamaha FX500, £125. All perfect condition and boxed with manuals. ☎ Paul 0181 518 8826.

TASCAM 688 8-track Midistudio, full MIDI, two effects sends, 3-band EQ, built-in sync, electronic patchbay, excellent condition, boxed with manual. ☎ Matt 01423 536530.

TASCAM DA88 digital 8-track, flightcased mixer, 8-channel output mixer, timecode, remote control, 24-way jackfield, hardly used, £3250; A&H GS3V 16-channel fully automated mixer, £2500. ☎ 01428 656178 (Haslemere).

TASCAM M2600 32 8 32 mixing desk, 8 aux, totally switchable EQ, 16 months old, boxed, immaculate, for quick sale £2700 ono. ☎ Nick 0181 330 1249 (Worcester Park).

TASCAM M3700 mixing desk, 24 8, fully automated, onboard disk drive, mint condition, leads included, cost £11,000 new, will reluctantly sell for £4500 ono. ☎ 0131 663 3248.

TASCAM MM1 20:2 mixer, boxed, £345; Sony DTC55ES DAT with remote, £295. ☎ 01903 755840.

TASCAM MM1 20-channel keyboard mixer with MIDI muting, perfect condition, in box, £400 ono; JBL Control 1 monitors, Alesis Microverb II, perfect condition, in box. £120 both. ☎ 0191 271 1456.

TASCAM MSR24 1-inch 24-track recorder, excellent condition, dbx noise reduction, less than 100 hours use, perfect heads, cleaned regularly, calibrated for Ampex 456, £2995 ono. ☎ Andy 01422 310879.

TASCAM MSR24S with remote and trolley, very good condition, well maintained and cleaned, £3800. ☎ Luke 01252 710244 (Surrey).

TASCAM MTS30 SMPTE box, MIDI-tape sync device, boxed, mint, no power adaptor, hence £90. ☎ Sacha 01733 237748.

TASCAM PORTA 07 plus mic, as new, £300. ☎ Felix 0191 261 1255 before 6.30pm, 0191 226 1498 after (N. East).

TASCAM PORTA 07 4-track recorder, manuals, box, etc, mint condition, £275. Buyer must collect. ☎ Bobby 0121 681 2662 (Birmingham).

TASCAM PORTA 07 4-track, mint condition, £260. ☎ Henry 01695 570378 (Yorks).

TASCAM TSR8 8-track half-inch tape machine and reel of Ampex 456, both unused, genuine reason for sale, boxed, manuals, immaculate condition, hence £1475 ono. ☎ Matt 01629 636572.

TASCAM TSR8 half-inch 8-track recorder with remote control, very little home use, mint condition, £1000. ☎ Michael 0161 798 0581.

TASCAM TSR8, home use only, low mileage, box, manual and unused Ampex tapes, £875. ☎ 01904 782350 (York).

TASCAM TSR8, used once only! Three reels tape, adjustable trolley stand, remote control, ATS500 SMPTE synchroniser and interface cable, £1600 the lot, may split. ☎ 0113 278 5446.

TASCAM TSR8, very good condition with manual, £900, no offers, M1/D50/D10 hard case, mint condition, £60. ☎ Karim 0171 622 2760 after 12pm.

TC 2240 parametric EQ/preamp, £350; Yamaha REV7, £350; Urei 7110 limiter/compressor, £200; Quadraverb +, £250. ☎ Neil 0121 753 0171.

TASCAM TSR8 half-inch pro multitrack, dbx, full logic control, serial and dedicated ports, 8 in/out, varispeed, pristine, boxed, manual, leads, £1300. ☎ Rob 01925 762541.

TASCAM TSR8 half-inch 8-track tape machine with remote, mint, very little home use, boxed, manuals, £1000. ☎ Michael 0161 798 0581.

TEAC 80-8 pro half-inch 8-track recorder, dbx, pristine, recently aligned and serviced, £950. ☎ Tim 01865 750878 (Oxford).

TEAC 144 4-track Portastudio, multitrack recorder with built-in mixer, manual, excellent condition and sound, £150. ☎ John 01227 462059 (Canterbury).

TEAC A3300SX quarter-track reel to reel, twin speed, 10.5-inch reels, good condition but requires azimuth adjustment, £150 including tape. ☎ 01702 437777 (Southend).

TEAC A3340 4-track reel-to-reel with dbx-type noise reduction and remote contro, excellent condition, top quality machine, £295. ☎ 0171 254 5638.

TEAC X-2000M 2-track quarter-inch master recorder, immaculate condition, little home use, cost £1750 new, will accept, £1000 ono. Will deliver. ☎ Andy 0151 336 6657.

TECHNICS RS DC10 DCC deck, digital and analogue ins/outs, top spec, cost £750 new, accept £175. ☎ Tim 0191 384 8360.

XRI XR300 SMPTE synchroniser, very little use, £130. ☎ Tony 01709 556274.

YAMAHA MT3X 4-track cassette recorder, dual speed, £220; ART Multiverb LT effects unit, £90. ☎ Richard 01793 611017 (Swindon).

YAMAHA MT120S 4-track, boxed, manual, mint condition, 40Hz-18kHz, simultaneous 4-track recording, dbx, double or standard speed, graphic EQ, £265. ☎ Dave 0191 372 2621 eves (Durham).

YAMAHA PROMIX 01 digital console, two available, as new, boxed with manuals, upgrading, £1375 each. ☎ Darren 0181 959 4659.

YAMAHA SPX90, £180; Simmons 8.2, £150; MIDI Temp PMM88 8x8 MIDI Function function, £175; Roland D110 with Steinberg Editor, £200; selection of flightcases. ☎ Louis 0385 790997.

ZOOM 9121, £250; Hammond organ, £50; Ibanez delay, £80; 20U rack, £30; AKG C253 mic, £80; Studiomaster Proline Gold 16 8 16, £600. Everything must go. ☎ John 01438 310139.

SAMPLERS

AKAI DIGITAL IN/OUT board for S3000, record from CD, DAT, back-up, etc, £250 ono. ☎ 0171 351 5639.

AKAI S950, perfect condition, fully expanded, manual, £750, no offers; Pair Yamaha NS10M monitors, need new tweeters, £80. ☎ 0181 594 7298 after 6pm.

AKAI S1100, 10Mb, SCSI digital in-out, home use only, mint condition, £1495. ☎ Bernard 01844 353904.

AKAI S2000, 2Mb, disk library, as new, boxed, less than a year old, £650. ☎ Richard 0171 250 3325.

AKAI S2000, 6Mb, 6 months old, still guaranteed, home use only, £800, no offers. ☎ Adam 01993 850755.

AKAI S3000XL plus effects, 3 months old, £2000; Apple PowerBook 5300 plus software, £1100. ☎ James 0181 980 9262.

AKAI S3000XL, 18Mb, EB16 effects, Syquest EZ135 removable hard disk, plus 13 cartridges loaded with library, three months old. ☎ 0181 980 9262.

AKAI S01, fully expanded, 32 seconds, 8 banks, as new, £450 ono. ☎ 01480 433488.

CASIO FZ1 keyboard sampler, with memory expansion, box, manuals, library, £700. ☎ Stephen 0181 549 6975.

CASIO FZ1 with brand new disk drive, memory fully expanded, £575; Atari ST with 2Mb RAM but no monitor, only £100. ☎ Guy 01903 700714, office hours.

CASIO FZ1, flightcase, £550; Roland D110, £185; Yamaha FB01, £85; Anatek MIDI Merge, £30. ☎ 0121 603 7834.

CASIO FZ10M, manuals, library, DOS editor, £650; Roland Juno 6, recently serviced by Roland, £160. ☎ John 01269 831592.

EMU EMAX II sampling keyboard, with SCSI, internal 420Mb hard disk, triple-speed CD-ROM, and entire Emu library on four CD-ROMs, 8 outs, FX returns, 16 track sequencer. ☎ 01484 865137.

EMU EMAX II stereo sampler, 8Mb RAM, 350Mb hard drive, SCSI, 8 outs, £1300; Yamaha GC2020 stereo compressor £140; JBL Control 5 monitors, £250; Korg Wavestation SR, offers. ☎ Eddie 0181 248 3391.

EMU EMAX II TURBO 16-bit stereo sampling keyboard, 8Mb RAM, 210Mb hard disk, resonant filters, excellent condition, £1475 ono. ☎ Paul 01527 550135/541511.

EMU EMULATOR 3 keyboard, immaculate condition, Emu-approved service, custom flightcase, full system including optical drive and 1800Mb library, offers. ☎ Keith 01444 831504.

EMU ESI32 stereo sampler with SCSI and 730Mb hardrive, £1150; Akai S01 Sampler, £360. ☎ Richard 0973 763925 (Leeds).

EMU ESI32, new software, 2Mb RAM, box, manual, sound disks, excellent condition, £900. ☎ 01235 768466.

ENSONIQ EPS sampler, full memory, 10 outputs, £600, Korg Poly 6 analogue, true VCOs, good condition, £250; Alesis ADAT, 760 hours, V4.03, £1300. ☎ Nick 01942 494551.

ENSONIQ EPS16+ sampling workstation, 16-bit sampler, 24-bit effects, 16-track sequencer, advanced synthesis, automated mixdown, fully serviced by Sound Technology Nov '95, large library, £750. ☎ 01908 583621.

ENSONIQ EPS16+ rack sampler with 50-disk library, £750; Kawai K1 rack module, £165; Roland D10 keyboard, £235. All boxed, as new. ☎ 01624 627213.

ENSONIQ EPS 16+ with 100 disks, good condition, £700; Korg M1, £300. ☎ Colin 01207 509258.

ENSONIQ ASR10 stereo sampler workstation, excellent condition, under guarantee, 50+ disks, manuals, keyboard, 24-bit DSP as used by Prodigy, Sharman, LTJ Bukem, etc, £1400. ☎ Ben 01280 814385.

ENSONIQ ASR10 keyboard sampler, 16-track sequencer, superb effects, 8 outputs, good condition, manuals and library, £1450 ono. ☎ Andrew 0161 286 6585.

ENSONIQ ASR10 stereo sampling keyboard, with manuals and sound disks, boxed, as new, two months old, £1600. ☎ Toby 01608 682224.

ENSONIQ ASR10 sampler keyboard. 16Mb, 273.93 seconds sample time, 50 effects, 16-track sequencer, as new, boxed with manuals, £1800 ono. ☎ 01524 844394.

ENSONIQ ASR10 sampler keyboard, sample disks, manuals, pedal, on-board sequencer, mint condition, £1300 ono. ☎ Luke 01707 336370/335686.

KURZWEIL K2000 version 3.16J, SMP-K sample option, FK-1 fan kit, 16Mb RAM, 290Mb hard disk, RMB-K daughter board, ROM 1 orchestral soundblock, P-RAM expansion, mint, boxed, offers. ☎ Chris 01563 533965.

PEAVEY DPM-SP 16-bit sample player, £275. ☎ Brian 01752 550199 afternoons (Plymouth).

PEAVEY SP + SX SAMPLER, 16-bit, 2 SCSI ports on each, good condition with manual, disks, £450, SP alone, £300. ☎ 01933 678608.

PEAVEY SP/SX sampler, SCSI, filter, 16-note polyphonic, 2Mb, easily expandable to 32Mb with SIMMs (30-pin), manual, power supplies, bargain at £399. ☎ 01933 678608.

ROLAND DJ70, fully expanded to 4Mb, £800; Boss DR660, £250, MC202, offers, Yamaha CS70M, offers; Mackie 1202, offers. ☎ Paul 01865 775073 after 6pm.

ROLAND MKS100 sampler, DX200, swap both for one of these: Korg EX8000, EX800, Roland D110, Roland CP40, K4R, or swap just DX100 for triple tier A-frame or R2D2. ☎ 01733 349882.

ROLAND MS1 sampler, £300. ☎ Dave 0171 624 1816.

ROLAND MS1, power supply and MS1 video, £240; Yamaha QY20, power supply, QY20 video and carrying case, boxed, £250. ☎ 0171 843 4410.

ROLAND MS1 groove sampler with CD, excellent condition, hardly used. ☎ Steve 0121 458 3183 weekends, 0976 249437 anytime.

ROLAND MS1 digital sampler, manual, boxed, £250. ☎ 01782 322869.

ROLAND S10 keyboard sampler, good condition, manual & footswitch, £225. ☎ Simon 0151 426 7326.

ROLAND S10 digital sampling keyboard, good condition, £180, Studio console desk with rackmount section, etc, grey/black metal, padded front, suit 8-track setup, offers; Charvel model 2, £150. ☎ 01892 543633.

ROLAND S10 sampling keyboard, touch-sensitive, 8 seconds, 4 parts, disk drive, A1 condition, case and instructions, £220 ono. ☎ 01932 761988.

ROLAND S10 keyboard sampler, very good condition, complete with sound library, £240; Samson Mix Pad 9 mixer, only 3 months old, still boxed and under guarantee, £160. ☎ Paul 0956432965.

ROLAND S550 sampler, plus monitor, £650 ono. ☎ 01633 880858 (Gwent).

ROLAND S750, 10Mb, with 44Mb hard drive, 8 outputs, best filter sound on any sampler, £2500 ono. ☎ Tony 01280 822763 (Bucks).

ROLAND S760 with 16Mb memory expansion, manuals, box, etc, £1399. ☎ Andrew 0116 282 4616 (Leicester).

ROLAND S760 sampler, 32Mb, OP760 board, manuals, SCSI, PSU, as new, boxed, excellent condition, hardly used, £2500 ono. Contact Andrew Slegt, 2 Spring Crescent, Widcombe, Bath, BA2 4HZ.

ROLAND S760 sampler, OP1 expanded, CD-ROM, as new, £1350 ono. ☎ 0802 428939.

ROLAND W30 with flightcase, mint condition. ☎ Colin 01342 850507.

ROLAND W30 sampling workstation, 16-track sequencer, large library, manual, home use only, vgc, £650. ☎ Martyn 0191 537 3473 (Tyne & Wear).

ROLAND W30, excellent condition, 16-track sequencer, very easy to sample, loads of filters and edit functions, good sample library, manuals and leads, £825 ono. ☎ Lewis 0116 291 3995 (Leicestershire).

ROLAND W30 plus library, £750; Roland JV880, £450; Yamaha SY35, £350; Alesis D4, £250; Studio Research 12.2 desk, £150, all A1 condition. ☎ Simon 01803 732199 evenings (Totnes).

ROLAND W30 sample workstation with 80-disk library (dance), £750; Boss DR660 drum machine, 808/909 sounds, £250, no offers. ☎ Richard 01757 701010 after 6pm (Selby).

SAMPLING OPTION for K2000 keyboard, £450. ☎ 0161 795 0989.

SEQUENTIAL PROPHET 2002 sampler, £450, Boss SE70, £350; SH101 + MIDI-CV, £350. No time wasters! ☎ 01470 824196.

COMPUTERS & SOFTWARE

AMIGA A500 plus colour monitor, mouse, joystick, games, disks, £170. ☎ Dan 01273 697572.

APPLE MAC CENTRIS 660AV 12/230, with double-speed CD-ROM and 16-bit sound and video, plus Apple 14-inch Trinitron display, keyboard and mouse, £1100. ☎ 01844 344112 (Bucks).

APPLE POWER MAC 7500/100, 24Mb, X4 CD-ROM, keyboard, 3 PCI slots, upgradable, etc, £1750, or £1850 with slightly damaged Duplovision monitor. All perfect/boxed. ☎ 0191 273 6687.

APPLE POWERBOOK 530032/500 including 24Mb RAM card, colour monitor support to 17-inch, 16-bit stereo I/O, original packaging, manuals, etc, £1595. ☎ Tim 0191 384 8360.

ATARI medium-resolution colour monitor, £45 ono. ☎ 0181 428 5360.

ATARI FALCON, 16Mb, with 32MHz CPU upgrade, *Cubase Audio*, dongle, manual, SMP24 6-way MIDI interface and SMPTE sync box, whole package £1100, will split. ☎ Ben 0181 748 3624.

ATARI FALCON 030, 4Mb, 120Mb hard drive, as new, direct to disk, digital recording £420 ono; Atari ST sequencing setup including monitor, £220 ono. ☎ 01882 57487.

ATARI FALCON 030, 4Mb, 65Mb hard drive, SM124 Monitor, D-to-D hard disk recording software and dongle, 160 disks, computer desk, boxed, manuals, £520 ono. ☎ 01709 896160.

ATARI FALCON, 14Mb, £550, *Cubase Audio*, 16-track version, £475, Syquest 270Mb removeable drive plus two cartridges, £300. ☎ 0191 271 1456.

Atari 1040ST with Cubase v3.1, Novation Bass Station, EVS1 keyboard module, Yamaha SPX50D, Alesis MidiVerb 4, Alesis dual compressor with gate, Yamaha 8-track desk, 48-plug patchbay, Alesis RA100 amp, all in smart rackmount box, £2000 ono. ☎ Matt 01908 568850 (Bucks).

ATARI STE with hi-res mono monitor, excellent for sequencing, £250. ☎ Bedford 01234 363339.

ATARI STF, 4Mb, plus monitor, Emagic Notator, recent power supply fitted, misc software, £400 ono. ☎ Jamie 01628 526562 (Maidenhead).

ATARI STFM, 4Mb, hi-res monitor, additional serial port MIDI adaptor, over 100 disks MIDI software, many extras, £250. ☎ 01635 871269.

ATARI STFM, 2.5Mb 520, with SM144 hi-res monitor, Notator SL 3.1 and many games, original manuals and packaging, two joysticks, £350 ono. ☎ 0181 980 1521.

ATARI STFM, 1Mb, hi-res monitor, Cubase

"These guys are good and made what could have been a minefield into an enjoyable experience"

THE ABC music COMPANY

Go on, enjoy yourself
Visit an ABC Store now.

Where Performance really does come First

Kingston	Windsor	Oxford	Bristol	Exeter	Education
56-58 Surbiton Rd Kingston Surrey	196 St Leonards Rd Windsor Berkshire	44 St Clements Oxford Oxon	32 Alma Vale Road Clifton Bristol	68 Bartholomew St West Exeter Devon	Education House Yate BS17 4DZ
Tel: 0181 546 9877	Tel: 01753 773773	Tel: 01865 725221	Tel: 0117 923 8200	Tel: 01392 425125	Tel: 01454 310300

ROCKBOTTOM

est. 1974 London • Los Angeles e-mail: mailbox@rockbott.demon.co.uk

68-70 London Road, West Croydon, Surrey CR02TB. Tel: 0181 681 0328 Fax: 0181 686 7259

FREE NEXT DAY DELIVERY ON GOODS OVER £50 (UK Mainland Only)

Some parts of Scotland & Wales will incorporate a surcharge. Phone for delivery details on Ireland and goods under £50

STUDIOMASTER	Deposit	Payment
Powerhouse Vision 8:2 350wx2	£113.40	£42.52
Powerhouse Horizon 600wx2	£163.80	£61.42
KMX Vision 350w 5PK pair	£69.80	£26.17
KMX Vision Bass SPK pair	£50.70	£19.01
Diamond Club 8:2 Mixer	£31.50	£11.81
AC EURO		
AC112 12" 100 WATT Pair	£23.40	£8.77
AC153 15" 3 way 350w pair	£50.00	£18.75
AC112 PW Powered Wedge 100w	£P.O.A.	
AC 112W unpowered wedge 100w	£P.O.A.	

YAMAHA	Deposit	Payment
QS 300 Dance Workstation	£119.90	£44.96
W7 Worksiation Inc. Vint Board	£139.90	£52.46
P100 Digital Piano	£149.90	£56.21
MU50 Tone Module	£42.90	£16.08
QY300 Sequencer	£94.90	£35.58
QY22 Sequencer	£47.90	£17.96
FX550 Guitar FX/Studio	£34.90	£13.08
Promix 01	£119.90	£74.96

PA CITY

PEAVEY	Deposit	Payment
Eurosys 1 pair	P.O.A	
Eurosys 2 pair	£28.90	£10.83
Eurosys 3 pair	£33.90	£12.46
Eurosys 4 pair	£53.90	£20.21
Eurosys 6 pair	£67.90	£25.46
HI-SYS 1 pair	£65.00	£24.37
HI-SYS 2 pair	£69.80	£26.17
HI-SYS 3 pair	£113.80	£42.67
Eurosys 1 powered monitor	£29.45	£11.04
Eurosys 1 unpowered monitor	£POA	

POWER AMPS

PV4C 250W x 2	£42.90	£16.08
pV8.5C 550Wx2	£49.90	£18.71
PV1.3K 1000w x2	£64.90	£24.33
CS800x 400Wx2	£64.90	£24.33
CS1000x 500Wx2	£79.90	£29.96
CS120x 600Wx2	£114.90	£43.08
DPC-750 375Wx2	£76.90	£28.83
DPC-1000 500Wx2	£94.90	£35.58

MIXERS

Unity 8:2	£33.90	£12.71
Unity 12:2	£51.90	£19.46
6805 150w+150w 8:2 Mixer	£62.90	£23.58

24 Months Interest Free Credit available.

Subject to status written details available on request

CARLSBRO	Deposit	Payment
Mixer Amp 150/6 Marlin	£36.90	£13.83
Mixer Amp 100/4 Cobra	£29.90	£11.21
Power Amp 600wx2	£68.90	£25.83
SPEAKERS		
Alpha 12 100w pair	£27.80	£10.42
Alpha 15 150w pair	£33.80	£12.67
Beta 112 300w pair	£49.80	£18.67
Delta Professional 300w pair	£91.80	£34.42

KORG	Deposit	Payment
Trinity	£239.50	£89.81
Trinity Plus	£279.50	£104.93
Prophecy	£99.90	£37.46
X3 Workstation	£129.90	£48.71
X5 Synth	£79.90	£29.96
X5D New	£89.90	£33.71
X5DR Synth Module	£67.50	£25.31

Please call for best cash prices

MULTITRACKS

YAMAHA	Deposit	Payment
MT50 4 Track	£39.90	£14.96
MT4X 4 Track	£55.90	£20.79
MT8X 8 Track	£127.50	£47.81
DIGITAL		
Roland VS-830 inc HD FX Expansion	£210	£78.75
Fostex DMT8	£*59.90	£59.96

ROLAND

	Deposit	Payment
XP-50 61-Key Synth Workstation	£149.90	£56.20
XP-10 Multi Timberal Synth (arpeggiator)	£59.90	£22.40
JV-1080 + Dance exp Board	£120.00	£45.00
A-90 88 Weighted Master Keyboard	£169.90	£63.70
MS-1 Micro Digital Sampler	£49.50	£18.50

Lots of secondhand goods available

V2.1, £225, no Offers. Akai SGO1V Vintage module, £245. Yamaha DX21 synth, £175. Yamaha PSS51 keyboard, £125. ☎ Steve 01553 674076 (Norfolk).

ATARI STACY 4/40, excellent condition, £700. ☎ Paul 01527 500873.

BAND IN A BOX, Atari version 5, genuine disks and manual, £45. ☎ Rod 01228 710001.

CAKEWALK home studio, PC sequencer, £55. Powertracks Pro PC sequencer, £25. Soundblaster 16 soundcard, £45, all unregistered, boxed with manuals, price includes postage. ☎ 01706 250846.

C-LAB EXPORT MIDI expander for Atari, £50, also arranger and improviser software for Atari, offers. ☎ Chris 0181 748 4631.

COMPAQ DESKPRO 386/25 DX, 4Mb RAM, 120Mb HDD, 1.2Mb FDD, keyboard, mouse, VGA colour, ex cond, £300. Replay MIDI sound card, £65, Vidi-PC capture, £75. ☎ 01480 406415 (evenings).

COMPAQ PRESARIO 486 DX266, 8Mb RAM, 270Mb hard drive, full multimedia with MIDI interface, Cubase, Windows, DOS installed, interested in swaps or £750. ☎ Chris Ross 01703 491321.

DESKTOP MUSIC SYSTEM: Korg AG10 GM module, Master Tracks Pro for IBM PC, boxed as new, manuals, cables, £450. ☎ Peter 0181 679 7993.

DESKTOP PC, 50MHz Multimedia Packard Bell, 4Mb, 340Mb hard drive, CD-ROM, 16-bit stc, 1Mb Video Ram, 14-inch SVGA, Windows 3.11, Windows '95 with bundled software, boxed, excellent condition, £500 ono. ☎ 0115 9230 710.

DIGIDESIGN AUDIOMEDIA II for Nubus Mac, with software, £375. Korg Z3 Guitar synth, £220. Roland CM32 module, £70. ☎ Mark 01224 712174.

DIGIDESIGN AUDIOMEDIA II for Mac, £550. Cubase (Mac) v2.05, £450. Apple Mac IIx, 12Mb RAM/270Mb HD, CPU, only £550. ☎ Norman 01326 316829 (Cornwall).

DIGIDESIGN AUDIOMEDIA LC for Mac with Sound Designer II software, boxed, as new, cost £750, bargain, £400. ☎ Graham 01483 751883 (Surrey).

DIGIDESIGN SESSION 8, Cubase Audio V3 PC, unopened, £1700. Midimation 16 ULAs, £350. Roland S750, 18Mb, colour monitor, £1450. Jupiter 6, immaculate, flightcased, £800. Atari 1040 + monitor, £200. Wanted PC1600, analogue bits 'n' bobs, MMT8, FX, etc. ☎ Brian 01268 559284.

DIGITAL ONLY CARD D PC card for direct digital transfer to and from DAT, £280, MXQ32M MIDI card, £120, both boxed, as new. ☎ George 0181 868 8187.

EMAGIC LOGIC sequencer for Atari, mint condition, complete package, dongle, MIDI ports, manuals, case and unused registration card, £200 ono. ☎ Matthew 0161 483 9551 (Manchester).

EMAGIC NOTATOR v3.21 for Atari, boxed with dongle, perfect, £75 ono. ☎ Matt 01932 765253 or 0385 223491 (SW London).

ENSONIQ EPS Atari ST sample editor, Eze by Gelva software, requires 1Mb Atari, onscreen sample waveform and synth parameter editing, cost £150, sell for £95 ono. ☎ Chris 0421 907144.

EMAGIC LOGIC 2.0, complete, £150. ☎ 01829 732427.

EMAGIC LOGIC AUDIO/AV for Mac, £550 ono. D2 44MB Syquest drive with four cartridges, £75 ono. ☎ Steve 0171 594 7523.

FEELING PARTNER, unique software (Atari), Peavey Spectrum Bass, Yamaha RX5, Sony 909 stereo mic, Sony camcorder outfit, Sony PCM701 with/without Betamax Hi-fi VCR, mint. ☎ 0113 268 0331.

GREYSCALE 520 STFM medium-res monitor, sequencing, sampling, decent word processing software, mouse, leads, games. Swap for £150, drumpads (SPD-8, Simmons portakit, Drum Station, multi-effects, synth module, 'W.H.Y. ☎ Daniel 01889 583347.

HI-SOFT AURA 12-bit sampler cartridge for Amiga 600/1200, boxed with manuals, vgc, £50 ono. ☎ 01684 893698 after 6pm, or 0402 181543 mobile.

HOLLIS TRACKMAN II 32-track sequencer for Atari, dongle, footswitch, manual, £30. ☎ Chris 0121 308 0769 (Birmingham).

HP DESKJET 520 printer, £190 ono. ☎ Jamie 01628 526562 (Maidenhead).

LBM/AST brand-new multimedia 486, 66MHz, 8Mb, 540HD, bundled software, Soundblaster card, SVGA monitor, Pentium upgradable, full 1-year on-site warranty, £675. ☎ 01484 647131.

MICRODEAL CONCERTO sequencing software for Atari ST, original, boxed, master disks hardly touched, loads of editing features, runs in hi or medium res, a bargain at £25. ☎ 01354 695239.

MICRODEAL STEREO REPLAY cartridge and Quartet, plus samples, editors, drums, sequencer, MIDI Studio Master, other utilities and stuff for Atari ST/ME, reasonable prices. ☎ 01480 406415, evenings.

MICRODEAL REPLAY 16 sampler for the Atari, £70. ☎ Stephen 0114 268 3208.

OPCODE MIDI TRANSLATOR II Mac interface, boxed, as new, £35. Studio monitors, Systomper 931, crystal clear sound, £180. ☎ 0191 273 8687.

OPCODE STUDIO VISION PRO Version 3.1, brand new, hard disk recording, powerful sequencer, £300 off retail price, yours for £900. ☎ 01825 724093.

OPCODE STUDIO VISION Pro 3.0.1, for Mac, latest version, offers. ☎ Sean 0171 424 0194.

PINNACLE RCD1000 recordable CD, Macintosh software, warranty until October, supports most CD formats including Andro, but not Masterlist 1.2, hence sale at £650. ☎ Richard 0117 974 1153.

RESAMPLE PROFESSIONAL for Windows, ultimate digital sample editor/audio files converter between virtually all formats of samples by major manufacturers. In original pack with manual, £70. ☎ 01438 715892 anytime (Herts).

SONY MAGNETO-OPTICAL drive, removable 600Mb cartridges, 6 available, £1500 the lot, flightcase for K2000, £50. Philips green monitor, £50. ☎ 01453 731933.

SOUNDSCAPE for PC plus CD Writer, Tascam DA30 II DAT, Yamaha Promix 01 desk, patchbays, mics, stands, stagebows, software, many extras, complete digital studio, £8000 ono. May split. ☎ 01823 642089.

STEINBERG AVALON 16-bit D/A stereo converter plus Avalon universal sample editor for Atari ST computers, with key and manual, cost £700, sell for £295. ☎ 0956 339577.

STEINBERG CUBASE v3.0 for Atari, £100. Zoom 9001 Fx, £75. ☎ 01703 346855.

STEINBERG CUBASE LITE for Apple Macintosh, manual and song disk, £40. ☎ Danny 0113 274 3849.

STEINBERG CUBASE SCORE, new version 2.0, Windows, sound module, manuals, disks, still boxed, unwanted gift. Had the good luck to win same in competition, £300. ☎ 01332 512228.

STEINBERG CUBASE SCORE, latest version for Atari or Falcon, also Cubase v3.0, manuals and dongles for both. ☎ 0161 232 9300.

STEINBERG CUBASIS for PC, registered and guaranteed, cost £275, sell for £195. ☎ Robin 0171 737 6233.

STEINBERG CUBASIS v1.11, boxed with manuals, unregistered, offers. Must go. ☎ 01426 218014 (Warwickshire).

STEINBERG CUBASIS for PC v1.13, educational edition, includes full program, tutorials, teachers' notes, £85 ono, inc postage. ☎ Jeremy 01904 700329 or email downing@easynet.co.uk.

STEINBERG CUBASIS AUDIO for PC, as new, boxed with manual and dongle, £140. ☎ Chris 01423 540395 (eves).

STEINBERG CUBASIS AUDIO for PC, unregistered, £150. AMIE32 with 8Mb sample RAM, £200. ☎ 01638 743052 (Cambs).

STEINBERG CUBASIS PC, unwanted gift, cost £139, sell for £90. ☎ Adrian 01604 37077.

SEQUENCERS

BROTHER PDC100 pro disk composer, 32 tracks, disk drive, MIDI data filer, MIDI bulk data, £140. ☎ Frank 01708 553873.

ROLAND MC50 MKII, brand new, boxed with manuals, £475. ☎ Mike 01367 240799.

ROLAND MSQ700 8-track MIDI DCB sequencer, £125 ono. ☎ Steve 01691 655019.

ROLAND TB303, original carry case, recently serviced, mint, £750 ono, Sequential Pro 1, recently serviced, boxed, excellent condition, £400 ono. ☎ Keith 01245 264417 daytime, 01376 513993 evening.

SEQUENTIAL MODEL 800 analogue sequencer, £300. Roland CSQ100 analogue sequencer, £100. ☎ Sean 0171 221 7274.

YAMAHA QX5FD sequencer, vgc, with 3.5-inch disk drive and manual, £130; Casio CS10P piano module, perfect, £60; Shure SM58 mic, perfect, with case, £75. ☎ 01256 468208.

YAMAHA QX21 sequencer, good condition, original manual, excellent ideas machine, £75 ono. ☎ Alan 01705 295289.

YAMAHA QY20 with padded case, power supply, boxed, with manuals, £230. ☎ Wayne 01254 202032 (Blackburn).

YAMAHA QY20, £310; Yamaha QY8, £120; Tascam Porta 07 4-track, boxed, £350; Yamaha DX7, £320; Korg M1, £740. Wanted: Roland MT120S. ☎ 01973 325822.

YAMAHA EMQ1 disk recorder, records sequences to 3-inch floppies, manual, £75. ☎ Tony 01579 382850 (Callington).

DRUM MACHINES

BOSS DR660 drum machine, as new, boxed, less than a year old, £245. ☎ 0171 250 3325.

ROLAND R8 drum machine with case and cards, immaculate, £300. ☎ 0117 924 9891.

ROLAND TR505, £45; Roland JSQ60 Sequencer (for Juno 60, Jupiter 6), £35. Both boxed, manuals, excellent condition, prices include p&p. M. Sanders, Villa Nova, High Street, Godshill, I.O.W. PO38 3HZ.

ROLAND TR606 Drumatrix, vgc, with manual, easy to use, will deliver, £90 ono. ☎ Darren 01270 766451, after 6pm.

ROLAND R8 drum machine, vgc, with manual, £280 ono. ☎ Darren 01270 766451, after 6pm.

YAMAHA RX8 MIDI drum machine, many sounds, RAM card, £170 ono. ☎ Dan 01273 386672.

YAMAHA RX17 drum machine, manual, song book, £75. ☎ Dot 01562 825267 (Midlands).

YAMAHA RX17 drums, £250; Hughes & Kettner Crunch Master value guitar preamp, £50. ☎ Carl 01203 394737 (Midlands).

MISCELLANEOUS

1KW PA SYSTEM, includes mixing desk, reverb unit, 2 amps, 2 speakers, flight case, £900 ono. ☎ Ian or Maria 01344 412358.

JL COOPER FPS100 synchroniser, excellent condition, £110 ono. Roland D110 multitimbral sound module, good condition, £180 ono. ☎ 01292 267532 (Ayr).

KORG WAVESTATION Drums & Percussion cards, WPC-02 and WSC-02, both for £25. Roland M16-C memory cartridges for JX8P (3), £10 each or all for £25. ☎ 01274 620004 (Bradford).

LANEY KD100 keyboard combo, 3 inputs, reverb, FX loop, line in/out, £200 ono. ☎ Andy 01203 683385.

PEAVEY ES15 speakers with Peavey stage stands, speakers contain 15-inch units plus horn, stands are strong tubular aluminium and height adjustable, brand new condition, £325. ☎ 01952 260064 (Telford).

PEAVEY KB100 keyboard combo, £140. Phonic 31-band mono graphic equaliser, £65. ☎ John 01273 208992 (Brighton).

PHILIP REES MIDI sync converter, £30; Alesis Microgate, £40. ☎ 01902 20381.

RACKS, brand new, 12U high with locking doors, very sturdy, £40 each. ☎ Justin 01784 432385.

RAMSA SUBWOOFERS, 2 pairs, £325; PP System controller, £100. ☎ 01226 283487.

ROLAND GR707 guitar synth and GR300 synth unit, both excellent condition, £350; Quad valve mono blocks and preamp and tuner, £300. ☎ Andy 01222 493528.

ROLAND MIDI MIXER: 10 channels for controlling volume and pan via MIDI, like a desktop version of Cubase MIDI manager, ideal for live MIDI mixing, boxed, as new, £80. ☎ Ian 0161 232 1707 (Manchester).

SESSION ROCKETTE 30 guitar combo with reverb, overdrive and MOSFET valve sound circuitry, £100. ☎ Paul 01422 839631 (Halifax).

STOLEN: Akai CD3000, 10Mb, registration A944515366. Reward for information. ☎ 01372 468783 or 0956 910137.

YAMAHA EMX2300 powered desk, 12 channels, 2 aux, 15 internal effects, 9-band EQ, phantom power, 500 watts stereo, 4 outputs, portable, bought for £1700, sell £700 ono. ☎ 0181 300 5334 eves/0171 939 4858 days.

PERSONNEL

ATMOSPHERIC, original, melodic, imaginative, instrumental albums or tracks wanted for new age releases, all tapes listened to, SAE for return. Dream Machine Music, PO Box 84, Waterlooville, Hants PO8 0FX.

A&R AGENCY representing a wide range of dance labels require artists with good quality demos, all dance/electronic genres welcome, send En-Phonic, PO Box 10503, London N22 6TQ. Replies guaranteed.

DANCE MUSIC required for newly forming record label. Send demos to Rabid Records, Flat 4, 89 Cathedral Road, Pontcanna, Cardiff CF1 9PG.

DANCE PRODUCER/programmer, able to remix soul, house, drum 'n' bass, jungle, looking for work and other people with home studios. ☎ Damion 0956 139029.

DRUM 'N' BASS engineer/producer wants to hear from artists with good ideas to develop, produce and release projects. ☎ Kia 0973 563888.

ENGINEER seeks studio work in Britain or Europe (preferably Netherlands). HND qualified with good studio experience, speaks proficient Dutch, major studios only please. ☎ Kevan 01738 635554.

EXPANDING DANCE LABEL seeks new artists. Interested in most kinds of dance music. Send tape to: Homers House Records, 10 Moorwod Avenue, Housley Park S30 4WA.

EXPERIENCED ENGINEER/ PROGRAMMER wanted for top North London studio for major remix work. Must be expert with Notator. Send CV to Andrew. ☎ 0171 722 9151.

EXPERIENCED SINGER songwriter in pop/dance, seeks programmer songwriter anywhere, to collaborate on songs. Influences: M People to Erasure. ☎ Mark 01904 794183 (Manchester).

EXPLOSIVE RECORDINGS are currently seeking demos from artists, singers and producers in the fields of house and garage. Send to: Explosive Recordings, PO Box 1032, Sheffield S6 6YR.

FEMALE SINGER required for dance group. Must be keen and dedicated. We have songs written, so songwriting is not important. ☎ Mark 0161 969 4529.

FEMALE SINGER/SONGWRITER needed for East London production team, currently producing with Japanese major label. All aspects of dance music. Only serious vocalists please. ☎ Geoff 0181 520 5646.

FEMALE VOCALIST required for various dance projects, must have attitude and some musical ability to sing and collaborate on future chart/club hits. ☎ Leeds 0113 294 5649.

FLYTRAPP RECORDS need fantastic dance music. If you have some, please send it to us: Flytrapp Records, 20 Churchward Drive, Frome, Somerset BA11 2XL.

KEYBOARDIST with gear seeks DJ/programmers/collaborators with view to live sets in clubs/house/dance, Cambs/Essex area. Don't waste time, let's have some fun! ☎ 01799 527352.

KEYBOARDIST/PROGRAMMER wanted for forward-looking dance act, loads of ideas, strong material, many influences. ☎ Pete 0181 299 6009.

MANAGER/PROMOTER wanted for a songwriter/performer who has a range of killer tunes from garage, house, R 'n' B, lovers, ragga, jungle. Must have contacts and resources, no timewasters. ☎ Keny 0973 128347 or 0956 189284.

NEW LABEL requires the deepest of house demos, Carry Heard-style beats required. Send demos to Dispatch, 38 Willow Dene Close, Ashley, New Milton, Hants, BH25 5BX.

PRODUCER WITH STUDIO seeks vocalists/groups for UK/US collaborations in R+B dance. Must travel to Salisbury. Yank with industry contacts needs acts. ☎ Steve 01722 500 855.

PRODUCER WITH CHART SUCCESS seeks songwriters with commercial material to set up chart-storming company. Good technical knowledge and ability to work under pressure essential. ☎ 01379 853982.

RECORD LABEL requires hot house/dance tracks, vocal and instrumental. Send tapes and SAE to Bang Records, PO Box 8999, London, N7 0DF.

SUCCESSFUL dance production team based in Crouch End, North London, require talented female singers for session work or collaborations. Various major and unlabelled projects. ☎ Simon or Tom 0181 342 9014.

TRANCEMISSION recordings requires innovative talent, trance/techno/house, etc. Send demo and info to: Trancemission Recordings, PO Box 4314 6202 VA Maastricht (The Netherlands). Enclose IRC for sure reply.

VOCALIST WANTED by keyboard player/arranger, influences must include Ferry, Bowie, Sylvian. ☎ Chris 0181 998 4249.

WANTED

BAND IN A BOX STYLES DISK version 6, especially Jazz styles. ☎ Simon 01792 422116 (Swansea).

BOSS MICRORACK RAD10 19-inch rack shell (2 required) or BMR5 micro rack unit. Cash waiting for right price. ☎ 01354 695239.

BOSS DE200 rack ears wanted: are there any left anywhere? Cash waiting for right price. ☎ 01354 695239.

BSS DPR 502 noisegate wanted, cash waiting. ☎ 0181 883 4329 or 0956 339577.

BIT 99, White Cheetah MS800, PG800. ☎ Gordon 01670 523363.

CAKEWALK PROFESSIONAL version 3, original disks and manual. ☎ Jim 01563 527786.

CASIO MG510 MIDI pickup wanted, cash waiting. ☎ David 0141 954 0802 (Glasgow).

CIRCUIT DIAGRAMS, etc, for home construction of modular analogue synths (with components that are still available?). ☎ 0131 6613383.

CUBASE V3.01 for Atari 1040 STE, original copy, must have manuals. ☎ Steve 0181 886 6357 after 7pm.

DBX NOISE REDUCTION, two or four track, prefer TEAC DX28 or RX9. Cash paid. ☎ John 01297 489259.

DEEP BASS 9, will pay about £200. ☎ Steve 01293 510946.

DIGITECH VOCALIST 2, cash waiting. Also wanted expansion boards for K2500. ☎ Paul 01302 538304 (Doncaster).

DRAWMER DS201 gates, DL2LH compressors, SM58s, remote + autolocate suitable for Tascam MS16, AKG C3000, NS10Ms, Digitech Vocalist II, any half-decent reverb/multi-effects, cash waiting. ☎ 01270 663405 eves.

EMS DK1 CRICKLEWOOD keyboard for VCS3. Must be excellent condition. ☎ 01274 620004 (Bradford).

EMU ESI SAMPLER, Kenton Pro2 MIDI-CV converter, Roland System 100M modules. ☎ James 01484 865137 (W. Yorks).

ENSONIQ EPS/EPS16+ keyboard, upgraded memory, separate outputs and service history if possible, also Casio VZ10M, cash waiting, sensible prices please. ☎ Enrico 01702 341755.

EPS 4X MEMORY expansion with SCSI. Cash waiting. ☎ Alvin 01926 435056.

EVENTIDE Phaser/Omnipressor/Harmoniser, working or not, but must be cheap. Also manuals for Phaser/Omnipressor, Boss DC2 pedal, X-or (Mac)/Unisyn software. ☎ 0181 692 8129.

FOSTEX X15 remote foot control required, model 9060, two needed. ☎ 01255 221576 (Answerphone).

GERMAN MUSICIAN pays for TB303, £500; TR808, £250; TR808 MIDI, £350; TR909, £500; SH101, £150; MC202, £150; call or fax me. ☎ 0049 5152 61676/ 0049 5152 8179 fax.

HAMMOND B3 for enthusiast, cash waiting, can collect anywhere, any condition considered. ☎ 01977 557560.

HELP! I need a copy of MIDI Sequencing in C, by Jim Conger (out of print book)? Buy or borrow? Good price/all costs paid. ☎ Pete 0161 248 6616.

JL COOPER DATASYNC for ADAT, also Atari editor/librarians for Proteus 2 and Quadraverb GT. ☎ Paul 01905 610794.

KORG PROPHECY, MIDI data filer. ☎ Jonny 0171 740 6220.

MAGAZINES WANTED for research: USA Keyboard, Electronic Musician, music and computers. UK/GB: Audiomedia, EMM/MT, IMRW, Sound International, other similar publications, including European. ☎ Noel 0191 528 2813 (Sunderland).

MANUALS: YAMAHA REX50 and Cheetah MS50 controller keyboard, photocopies will do, cash waiting for Breaktrax sequencer 2 Plus, Atari version wanted, Akai S950 sampler. ☎ Paul 01604 646173.

MANUAL FOR EMU ESI32 V2.1 software upgrade. ☎ Richard 01305 782554, after 5.30.

M64C CART for 707, realistic price paid. ☎ Leo 0161 445 5975.

MIDI PROGRAMMING IN C book by Jim Conger. ☎ Steve 0121 458 3183 weekends, 0976 249437 anytime.

PEAVEY control voltage volume pedal or equivalent for DPM3SE+. ☎ 0161 724 7995.

ROLAND CM64 module. ☎ Paul 01905 610794.

ROLAND D70 Sound cards: PCM, ROM, RAM, prefer Roland original including M256E, SN-SPLA, SN-U110, PN-D70. ☎ Malcolm 01242 528241.

ROLAND JUPITER 8, swap for TB303 Bassline with manual and PSU, must be mint condition as mine is, no other offers accepted. ☎ Mark 01734 869700.

ROLAND JV1080. ☎ Dale 0161 872 9064.

ROLAND JV1080, Korg Wavestation keyboard. ☎ Rob 01273 555772 (Brighton).

ROLAND JV1080 EXPANSION board, 'World', wanted. ☎ Kev 01208 873649 anytime.

ROLAND JV90 expansion boards wanted. ☎ Eddy 01928 565616.

ROLAND JX8P with PG800 programmer, cash waiting for right price. ☎ 01843 587098.

ROLAND MKS50 synth rack and PG300 programmer, Quasar synth rack. Contact Andrew Slegt, Paramex, No. 2 Spring Crescent, Widcombe, Bath BA2 4HZ.

ROLAND R8 MkII drum machine, also Roland TR808, Juno 106, Ensoniq SQ80, all must be in good condition. ☎ Delroy 0181 885 4372 after 6pm.

ROLAND R8 ROM Cards urgently wanted: Dance 10, Electronic 4, Ethnic Percussion 6 + Contemporary Percussion 1. Also required: Roland System 100 monosynth, £200 ono. ☎ 01560 484787 after 6.30pm.

ROLAND R8 909 dance card urgently wanted. ☎ John 01224 697287.

ROLAND R8 CARDS: Dance, Electronic and Contemporary Percussion, top price paid. ☎ 01909 722908.

ROLAND R8 cards, Dance, Electronic, Wavedrum RAM for TG500. Top price paid for all items. ☎ 01909 722908.

ROLAND S330, preferably with manuals, library and monitor. Also consider Roland S550. ☎ Simon 0171 792 1512.

ROLAND TR808 can pay, £250; TR606, £65; SH101, £160. Oberheim DMX, £100 for sale. D70 Sampler, Easy to use, VGC boxed manual etc. ☎ 01432 266752.

ROLAND SH101, £160; MC202, £175; Sequential Drumtrax, £100; MSQ700, £100; TR606, £65; Juno 106, £250; SH09, £100; Jupiter 6, £550; Jupiter 8, £650. ☎ Ian 01432 266752 (Anytime).

ROLAND TR707, full working order and good condition, up to £100. ☎ Jonathan 01952 260064 (Telford).

ROLAND TR808 drum Machine, 727 drum machine, Roland SH101, Ensoniq SQ80 keyboard, Roland R8 MkII. ☎ Herman 01444 871260 (West Sussex).

ROLAND TR909 drum machine wanted, will pay £600; TB303, will pay £450; Jupiter 8, will pay £600; Casio FZ10M sampler, will pay £450; Wasp, will pay £100. ☎ 0114 248 2760, eves.

SIMMS: 2MB 30-PIN for Roland S750 sampler, Mac or Kurzweil memory will do. ☎ Jaxen 0116 285 4547.

SWAP YOUR JUPITER 6 for a TB303 plus £50? Must be in good condition. ☎ Ian 01432 266752 (Hereford).

SPL VITALISER, cash waiting. ☎ 0181 883 4329 or 0860 482822.

SPL VITALISER wanted, will also consider Behringer Ultrafex 2 or Aphex C2, also jack patchbays and quality patch leads wanted. ☎ Ricky 01482 448767.

STILL LOOKING for Simmons SDS kit with or without brain, Simmons 'suitcase' considered, must be in working condition. ☎ Steve 01526 323468.

SWAP BRAND NEW Bass Station rack for either a TB303, SH101, or TR808. ☎ 0181 974 1680 after 5.30pm.

TECHNICS DAT SV-DA10 in gold/black with remote, manual if possible, must be in mint working condition, top price paid. ☎ Clive 01752 674205, after 6pm.

TASCAM REELS: spare 10.5-inch reels with Tascam logo. ☎ Tony 01224 899524.

WORLD EXPANSION BOARD wanted for Roland JV1080. ☎ Kez 01208 873649 anytime.

YAMAHA 2.8-INCH quick disks, new or used, quantity 10-20 according to price. ☎ 01684 565962.

YAMAHA QY20: I've got £150 waiting so I can buy one! Cubase mixer maps for Casio CZ1, Yamaha DX100 and FB01 also wanted. ☎ Robin 01305 785675, after 6pm.

YAMAHA SY85 wanted for cash. Leave message for Mal. ☎ 01359 271019 (Suffolk).

YAMAHA TG500 expander, Yamaha RM50 drum module, Philip Rees 2M MIDI merge unit. ☎ 01268 777023 (Essex).

YAMAHA MT8X multitrack recorder in good condition. Will pay £500. ☎ Tim 01732 741382.

AKAI MACKIE EMU YAMAHA TANNOY DENON AKG DigiTech EMAGIC

EUROPE'S LOWEST PRICES GUARANTEED*

2 Tracks

SONY TCDD8 LIMITED STOCKS

Turnkey bring you the first stocks of Sony's brand new portable, the TCD-D8 Sturdily built with a back-lit display, the unit features 48 and 44.1 kHz recording. Initial supplies will be very limited, phone now to reserve yours The ultimate Walkman !

NEW PRODUCT **£599** NEW BOXED

SONY DTC790 DAT PRICE CRASH

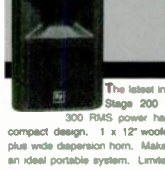
We have exclusively secured a small supply of the Sony DTC790 to bring you the cheapest full size DAT machine on the market, but this is not at the expense of features' SPDIF coaxial input and optical in and out, digital and analog recording at all three sampling rates (32 kHz, 44.1 kHz, 48 kHz), as well as all the usual ID functions and a full function infra red remote control. Also available with Digicon SCMS stripper for only £599 Another DAT exclusive from Turnkey.

SCOOP RRP £899 **£499** NEW BOXED

NEW, USED & EX DEMO

Arbiter karaoke	£ 49	Sony DTC690	£ 469
Denon DCD315	£ 149	Sony DTC690	£ 469
Denon DCD625	£ 199	Sony DTC790	£ 499
Denon DCD715	£ 234	Sony DTCA8	£ 849
Denon DN770R	£ 530	Sony MDS302	£ 479
Denon RMK	£ 47	Sony MZR3	£ 399
Fostex D10	£ 2,697	Sony TCDD10 PRO(	£ 2,899
Fostex D5	£ 875	Sony TCDD7	£ 439
Marantz PMD320	£ 434	Sony WMD6C	£ 299
Marantz PMD321	£ 511	Tascam 102MKII	£ 279
Marantz PMD502	£ 499	Tascam 112MK2	£ 599
Marantz PMD510	£ 704	Tascam 202MK2	£ 349
Panasonic SV3700	£ 1,644	Tascam CD401MKII	£ 739
Panasonic SV4100	£ 2,579	Tascam DA20	£ 599
Philips DCC170	£ 249	Tascam DA30MKII	£ 999
Philips DCC951	£ 280	Tascam DA60	£ 4,463
Revox B77	£ 2,499	Tascam DAP1	£ 1,349
Sony DTC1000ES	£ 549	Tascam SYD6	£ 504
Sony DTC60 ES	£ 569	TEAC V375	£ 90
Sony DTC60ES	£ 599	TEAC W416	£ 90

P. A.



ELECTRO VOICE SX200 300 watts

The latest incarnation of the classic Stage 200 full range PA speaker 300 RMS power handling in an incredibly compact design. 1 x 12" woofer plus wide dispersion horn. Makes an ideal portable system. Limited stocks available (bundled with Powerstation £2149)

RRP £1399 **POA** NEW BOXED

Multitracks

EMU "DARWIN" INC. 1GIG HD

8-track stand-along random access recorder that features jog/shuttle, MIDI Machine Control and MIDI Time Code, S/PDIF as standard as well as 4-in, 8-out balanced connectors. Options include ADAT digital interface, SCSI port for computer hook-up, sync card for additional units, 4 extra analog ins etc

NEW "DARWIN" **£3199** INC. 1GIG HD

DIGITAL 8 TRACKS LARGE STOCKS

We will not be beaten on price or service. Akai, Fostex, Tascam, Sony and Alesis all in stock and on demonstration.

FROM ONLY **£2195** NEW BOXED

NEW, USED & EX DEMO

Akai DR16	£ 3,499	Alesis A1	£ 999
Akai DR4D	£ 750	Alesis A12	£ 1,099
Akai DR8	£ 2,499	Alesis BRC	£ 1,299
Akai DR8	£ 2,295	EMU DARWIN	£ 2,375
Akai MB10D	£ 199	Fostex R8	£ 699
Akai MB115	£ 159	Fostex RD8	£ 1,999
Akai MB12TV3.0	£ 169	JLC DATAMASTER	£ 599
Akai MB13MV3.0	£ 169	JLC DATASYNC	£ 299
Alesis ADAT	£ 1,799	Sony PCM800	£ 3,499
Alesis ADATXT	£ 2,699	Tascam DA88	£ 3,200

PRICES INCLUDE 17.5% VAT
Uk mainland carriage £9.99

We will beat any genuine quote from a UK or European dealer. We must be able to substantiate the quote and the goods must be available and in stock

PHILLIPS DCC951 18 BIT

DCC now has 18 bit sampling at 48 kHz with advanced data reduction techniques The DCC951 is a full-size machine in a sturdily built case. It features Philips new Turbo drive high speed mechanism, title recording, full indexing & location facilities, SP/DIF ins and outs, full remote, plays analog cassettes with Dolby B & C noise reduction, auto-level optimisation and microphone input. Portable DCC170 also available at £249 Unbelievable deals exclusive to Turnkey. Sound-on-Sound say

"Digital compression makes little or no subjective difference to the recorded result. In fact recordings sound frighteningly similar to DAT" .... Check one out today!

RRP £349 **£249** NEW BOXED

FOSTEX D5 DAT PRICE CRASH

Exclusive scoop purchase on a genuine professional machine brings quality within reach of the rest of us Now that Sony's domestic machines are discontinued, this is one of the cheapest DATs around, but just look at the spec list. 19" rackmount, 44.1 kHz analog recording SCMS-free operation, error detection indicators, balanced ins and outs on XLRs, AES/EBu professional digital connections as well as all the usual DAT features from the makers of the industry standard D208 timecode machine. Huge reduction

RRP £1499 **£1189** NEW BOXED

RRP £1999 **£1589** NEW BOXED

TASCAM DA20 19" RACK DAT

If you need a 19" rack mount DAT machine, they don't come any cheaper than this! But that's not at the expense of a quality machine: reliable tray-loading mechanism, The SCMS is switchable in or out. Both analog and digital recording at all 3 sample rates and coaxial SPDIF in and out. High sound quality is guaranteed by 1-bit DAC playback Special 'Table-of-Contents' feature.

RRP £1299 **£869** NEW BOXED

RRP £799 **£679** NEW BOXED

SPIRIT Powerstation PA mixer R.R.P. £1299, ECALL

Another winner from Soundcraft, their first entry into the powered mixer market is sure to be a success Based around the well-known Folio 12, and also featuring a 2x300w amplifier, dual 7-band graphic and a built-in Lexicon Alex! Check out these amazing package deals :

Powerstation + 2 x JBL MR825	£1749
Powerstation + 2 x Peavey Hisys2	£1899
Powerstation + 2 x JBL M330	£1999
Powerstation + 2 x Bose 802	£2299

Add 4 SM58s + stands, spkar stands and cables for £499 !

SONY PCM-800 PRO 8 TRK DIGITAL

The definitive statement in 8 track digital machines ! The Sony PCM800 is based on Tascam's DA88 but has the added advantages of balanced XLR connecions and AES / EBU Buying power makes our offer cheaper than the DA88 ! Limited quantities only available at this price. Buy now before stocks are exhausted !

RRP £8349 **£3499** NEW BOXED

XRI SYSTEMS XR300 EXCLUSIVE

Long the synchroniser of choice in professional studios, we now exclusively bring you this industry standard unit at an unheard-of price Features include true SMPTE at all standard stripe-rates, MIDI clocks / Song Pointers or MTC for compatibility with all MIDI sequencers. Large LED time-code display Merged MIDI input, Straight-forward operating system. Full 19" rack unit.

RRP £299 **£159** NEW BOXED

See the rest of our ad on pages 22 - 30

NEW, USED & EX DEMO

AKG B9	£ 53	AKG C408PP	£ 159
AKG C1000S	£ 170	AKG C409B	£ 135
AKG C12VR	£ 2,575	AKG C409PP	£ 159
AKG C3000	£ 245	AKG C410B	£ 175
AKG C401B	£ 76	AKG C410PP	£ 234
AKG C401PP	£ 112	AKG C414BULS	£ 849
AKG C402B	£ 93	AKG C747	£ 370
AKG C402PP	£ 116	AKG CK91	£ 139
AKG C407B	£ 78	AKG D112	£ 217
AKG C407PP	£ 118	AKG D130	£ 134
AKG C408B	£ 116	AKG D3700	£ 123

Mixers

SOUNDCRAFT SPIRIT STUDIO OUTSTANDING OFFER on 16 or 24 CHANNEL DESKS

Almost everyone involved in music production at some stage dreams of owning a Soundcraft console - The legendary sound quality, reliability and ease-of-use, means that a Soundcraft equipped studio must be taken seriously. The SPIRIT Studio range represents a minor miracle, produced in Britain using the world's most advanced production technology and revolutionary manufacturing techniques to bring you Soundcraft quality at a previously unimaginable price!

Just take a look at the spec - 16 or 24 channels (inline providing 40 or 56 inputs at mixdown), legendary EQ, (4 bands with 2 sweepable mids and shelving high and low band), patented IC pre-amps with individually switchable phantom powering, 6 true auxiliaries etc. etc.

With top artists like M people and Portishead joining the impressive list of users, there's no reason to miss this unrepeatable opportunity to invest in on one of the few pieces of music technology that has really made a difference.

SPIRIT FOLIO Small mixers by Soundcraft AVAILABLE IN 10 or 12 CHANNELS

3 band mid-sweep EQ, 2 auxiliaries (1 switchable pre/post fade) professional grade Neutrik connectors, superb clean signal path and compactness make them unbeatable value for money, phone for unbeatable price!

NEW, USED & EX DEMO

Alesis MATICA500	£ 499	JBL M330MKII EACH(	704
Alesis MATICA900	£ 649	JBL M350MKII EACH(	821
Amcron Powerbase 1(	249	JBL M355MK2 EACH(	763
Bose 502	£ 1,215	JBL MR825	£ 680
Bose 502P	£ 1,399	JBL SR4715A	£ 1,244
Bose 802	£ 1,299	JBL SR4726A	£ 1,526
Bose 802C	£ 385	JBL SR4733A	£ 2,832
C Audio RA2001	£ 999	Peavey CS1000X	£ 799
C Audio RA3001	£ 1,299	Peavey CS400X	£ 569
C Audio ST400	£ 699	Peavey CS800X	£ 649
Dynamix DPA400	£ 199	Peavey EUROS1PM	£ 279
Dynamix Spkr Control(	19	Peavey EUROSY1M	£ 100
EV S200X	£ 999	Peavey EUROSYS1	£ 125
EV S200XEQ	£ 369	Peavey EUROSYS1PM(	295
Fender 110ELC	£ 129	Peavey HiSys 2XT	£ 350
Fender 112ELC	£ 146	Peavey HiSYS4XT	£ 550
Fender 115ELC	£ 166	Sabine FBX 1802	£ 1,523
Fender ESP0PD	£ 600	Sabine FBX 901	£ 670
Fender ESPL3001	£ 319	Sabine SL 610	£ 335
Fender ESPL3002	£ 499	Sabine SM 610	£ 387
Fender ESPL3801	£ 329	Samson S6	£ 429
Fender ESPL3802	£ 550	Samson S8	£ 549
Fender LX1504	£ 289	Soundtech PL250M	£ 129
Fender LX1506	£ 349	Spirit Powerstation (	1,199
Fender PCN2	£ 375	Strntr Drmnd PRO123	£ 586
Fender PCN4	£ 469	Strntr Drmnd PRO163X	1,205
Fender SIDEKICK	£ 99	Strntr Drmnd PRO243X	1,174
Fender SPL1185	£ 550	Strntr Drmnd PRO83(	451
Fender SPL2155	£ 825	Yamaha M3000	£ 1,599
Fender SPL2912	£ 642	Yamaha M5000	£ 2,049
Fender SPL2915	£ 737	Yamaha M7000	£ 2,479
Fender SPL4000	£ 575	Yamaha P1500	£ 499
Fender SPL9000	£ 751	Yamaha P2500	£ 599
Fender SPLM300	£ 422	Yamaha P3500	£ 699
JBL 0SR	£ 429	Yamaha YS212E	£ 159
JBL EON15	£ 999	Yamaha YS215E	£ 189

AKAI DR-16 INC. 1GIG HD

First there was the DR4, then the DR8, and now Akai bring you 16 tracks of no-nonsense hard disk recording in a single box! 8 inputs and 16 individual outputs are provided making it perfectly suited for full blown multitrack recording Amongst the options available is a video output board to give a full colour display of all the tracks, which makes editing a breeze Buy now from Turnkey and we will include a free 1 gig hard drive!

NEW DR-16 **£3699** INC. 1GIG HD

Mics

AKG C3000 Large Diaphragm Mic INC FREE BOOM STAND

The C3000 uses all of AKG's experience in building large diaphragm mics such as the C12 and C414, but by using modern manufacturing techniques, and only offering two patterns (cardioid and hyper cardioid), the price has been kept to a minimum Its open sound and superb frequency response make it ideal for vocals, as well as sounding great on a variety of other instruments

RRP £399 **£299** NEW BOXED

AKG D70S	£ 58	AKG WMS5P	£ 309
AKG SE300B	£ 139	Audio Tech AT4033	£ 499
AKG WMS100HTCVC 880		Audio Tech ATM11	£ 79
AKG WMS100HTDVC 880		Audio Tech MB1000H(	65
AKG WMS100PT	£ 939	Audio Tech Pro8HEMC	113
AKG WMS100PTB	£ 939	AUDIX C1	£ 29
AKG WMS100PTG	£ 939	AUDIX CD7H	£ 19
AKG WMS100PTP	£ 939	AUDIX OM2	£ 99
AKG WMS50	£ 299	AUDIX SCX 1	£ 129
AKG WMS5G	£ 309	AUDIX ST 2	£ 89
AKG WMS5H	£ 309	AUDIX UD360	£ 39

GS-1 by Allen & Heath NEW LOW PRICE

Incredible amount of mixer for your money! The GS1 not only has 8 busses, up to 32 inputs and MIDI muting, but the price even includes the meter bridge! Three band EQ with a mid sweep, MIDI Machine control and MIDI learning abilities, XLR mic inputs which can double as balanced line inputs, full length Alps faders and PFL. A good clean signal path can be taken for granted from Allen & Heath, but a continued supply of GS1's at this price can't - order now to avoid disappointment!

RRP £1174 **£699** NEW BOXED

NEW, USED & EX DEMO

A&H GS1	£ 637	Soundcraft Ghost24EXPMK	576
AUDIO LOGIC SC610	£ 69	Soundcraft Ghost24EXST (	423
FOSTEX 2016	£ 406	Soundcraft Ghost24MB	£ 635
FRONTLINE 8x2	£ 99	Soundcraft Ghost24ST	£ 429
Mackie 16	£ 2,375	Soundcraft Ghost32	£ 3,170
Mackie 24	£ 3,100	Soundcraft Ghost32MB	£ 740
Mackie 24E	£ 2,749	Soundcraft Ghost32ST	£ 441
Mackie 32	£ 3,800	Soundcraft LIVE3/12	£ 1,174
Mackie BRIDGE16	£ 649	Soundcraft LIVE3/16	£ 1,299
Mackie BRIDGE24	£ 699	Soundcraft LIVE3/24	£ 1,875
Mackie BRIDGE32	£ 799	Soundcraft LIVE3A8	£ 799
Mackie CR1202	£ 250	Soundcraft LIVE3EXP	£ 684
Mackie CR1202VLZ	£ 339	Soundcraft Protracker	£ 762
Mackie CR1604	£ 550	Soundcraft RACPAC	£ 599
Mackie LM3204	£ 849	Soundcraft SpiritAuto16	£ 2,740
Mackie MBE	£ 799	Soundcraft SpiritAuto24	£ 4,472
Mackie SC 8 SIDECAR(	269	Soundcraft SpiritAuto32	£ 5,608
Mackie SR244	£ 1,495	Soundcraft SPIRLC16	£ 1,786
Mackie SR324	£ 1,999	Soundcraft SPIRLC24	£ 2,421
MIDIMAN minimixer	£ 69	Soundcraft SPIRLC32	£ 3,292
NICHE audio cntrl mod(	99	Soundcraft SPIRST16	£ 1,189
PHONIC 6:2	£ 89	Soundcraft SPIRST24	£ 1,589
PHONIC BMX 8800	£ 169	Soundcraft SPIRST32	£ 2,399
PHONIC MM122	£ 249	Soundtrace MACRO14(	428
Samson MIXPAD9	£ 179	Soundtrace MAX124	£ 1,938
Samson MPL 2242	£ 499	Soundtrace MAX132	£ 2,391
Samson MPL1204	£ 462	Soundtrace MINI12	£ 323
Samson MPL1502	£ 252	SoundtraceTopaz32	£ 3,877
Soundcraft DC2000 24 (	13,790	Spark XTRAMIX	£ 2,999
Soundcraft DC2000 32 (	17,138	Spirit Folio 10:2	£ 329
Soundcraft DC2000 32pnl	20,057	Spirit Folio 12:2	£ 369
Soundcraft DC2020 32 (	23,488	Stbs MEM 24.2	£ 149
Soundcraft DC2020 32pnl	27,600	Stbs stage mix 8:2	£ 199
Soundcraft Folio 10:2	£ 280	Stntrer Diamond	£ 502
Soundcraft Folio 12:2	£ 349	Stntrer Diamond	£ 338
Soundcraft Folio 12:2PK	434,947	Stntrer Diamond 122(	434
Soundcraft Folio 4	£ 1,049	Stntrer P72(8:2(2	£ 3,289
Soundcraft Folio LITE	£ 3,269	Stntrer P72(8:2(2	£ 4,084
Soundcraft Folio SI	£ 499	Tascam M2616	£ 1,195
Soundcraft Folio SIRACK	£ 540	Tascam M2624	£ 1,595
Soundcraft Ghost16MB	£ 529	Tascam MP20	£ 299
Soundcraft Ghost16ST	£ 423	Yamaha 02R	£ 7,049
Soundcraft Ghost24	£ 4,348	Yamaha Promix 01	£ 995
Soundcraft Ghost24E	£ 3,643		

FOLIO SX Multitrack recording console BRAND NEW DESIGN

Brand new mixer from the superb Soundcraft Spirit range - call for details.

NEW PRODUCT **£599** NEW BOXED

FOSTEX MIXTAB package UNDER HALF PRICE

This has to be the best value mixer on the market! Fostex's DCM100 is a fully MIDI controllable rackmount mixer with 8 stereo inputs, 2 aux sends, 2 band EQ, mute, pan and level. An additional 2 stereo aux returns and a stereo master/sub input give a maximum of 22 inputs. This alone would be incredible value for money, but the MixTab also gives hardware control of every function of the mixer via MIDI. The MixTab can store up to 100 snap-shots of all the parameters of the mixer, and multi-colour LEDs allow resetting of all the hardware controls to the current position. MIDI output from the system can be recorded into any sequencer giving totally automated mixing and recall - come back to exactly the same mix weeks later! Cubase and Logic maps also available. Under half price (Total RRP £779) Very limited quantities - last units ever!

RRP £779 **£299** NEW BOXED

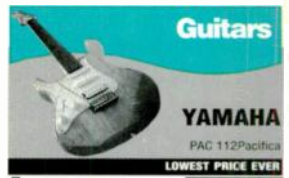
TM1000 Condenser Microphone EXCLUSIVE SCOOP PURCHASE

Using over 40 years of experience in selling microphones, Turnkey have specified the TM1000 condenser mic to be built by Audio-Technica, makers of the legendary ATM4033 The TM1000 has a flat frequency response from 30 Hz all the way up to 21 kHz ±3 dB making it ideal for vocals and instruments with delicate harmonics such as acoustic guitar, piano etc Built-in pop-shield, battery power means no phantom supply required. On/off switch, all metal casing. We think it's the best recording mic under £200, if you don't agree, we'll take it back against any other mic with 14 days. Price includes heavy duty clip.

TURNKEY SPECIAL RRP £299 **£119** NEW BOXED

AUDIX UEM 81	£ 29	Neuman KM184	£ 565
Bayer M300TG	£ 116	Neuman TLM170	£ 1,825
Bayer M88TG	£ 319	Neuman TLM170R	£ 2,028
Bayer MC740	£ 1,174	Neuman TLM193	£ 1,858
Bayer MC834	£ 739	Neuman U87	£ 1,595
Bayer S150M	£ 410	OKTAVA MK219	£ 311
DB tech VHF receiver(	169	REALIST PZ24	£ 50
Groove MD1	£ 680	RODE NT2	£ 499
Groove MD2	£ 1,146	Sennheiser 531	£ 149
Groove MD3	£ 1,565	Sennheiser K6	£ 179
NADY 281	£ 149	Sennheiser MD421	£ 299

Guitars



YAMAHA PAC 112Pacifica LOWEST PRICE EVER

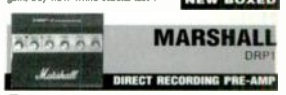
The Yamaha PAC112 was voted Number One budget guitar for the past two years. Massive bulk purchase makes this unbelievable value for money. Order now to avoid disappointment

PRICE CRASH RRP £180 **£159** NEW BOXED

ZOOM 4040 FX PEDAL BOARD

Megadeal on top quality FX pedal board features include 25 digital and analog effects, 6 effects simultaneously plus compression and ZNR noise reduction Built-in expression and volume pedals, MIDI out, built-in tuner, 80 patches, switchable input gain, buy now while stocks last !

RRP £379 **£239** NEW BOXED



MARSHALL DRP1 DIRECT RECORDING PRE-AMP

The Marshall DRP1 makes getting a fantastic sound through any system a cinch Now you can have Marshall tone straight through a PA, studio monitors or direct onto tape (it also makes a great headphone practice amp. Controls include pre-amp volume, gain boost, bass, middle and treble, master volume and line-output level A n LED indicates battery stength (unit can also be mains powered by a DC adaptor) These units are the last ever - incredible price

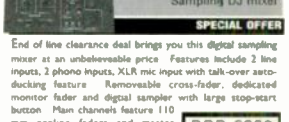
RRP £108 **£49** NEW BOXED

GUITARS - 0171 379 6766

NEW, USED & EX DEMO

BOSS MEB	£ 299	Hartfield Dr. Bass	£ 299
Crate G40CXL 2CM	£ 199	Marshall 8080	£ 329
Crate G40CXL 3CM	£ 199	Rauter 3408	£ 169
Crate G60XL combo	£ 199	Rickenb360	£ 1,179
Digitech BP10	£ 499	Rickenbacker 360	£ 769
Digitech RP5	£ 299	Roland GI10P	£ 499
Epiphone Les Paul	£ 369	Roland GP100	£ 739
Fender 4X12 cab	£ 149	Squier LSG 15W AMP	£ 79
Fender Jap Strat	£ 399	Squier Prec.Bass	£ 199
Fender USA Std Strat	£ 799	Squier Strat	£ 129
Fender USA Strat	£ 599	Trace Road 1X12 Combo(	349
Gibson LP Classic +	£ 1,649	Yamaha diversity sys	£ 99
Gibson ES335	£ 1,499	Zoom 1010	£ 149
Gibson LP EB	£ 1,099	Zoom 2020	£ 199
Gibson LP Studio+	£ 1,899	Zoom 3030	£ 235
M+K Tuberman	£ 199	Zoom 4040	£ 299

D. J.



KAM GM50 Sampling DJ mixer SPECIAL OFFER

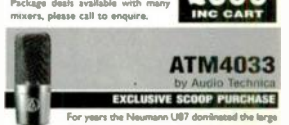
End of line clearance deal brings you this digital sampling mixer at an unbelievable price Features include 2 line inputs, 2 phono inputs, XLR mic input with talk-over auto-ducking feature Removeable cross-fader, dedicated monitor fader and digital sampler with large stop-start button Main channels feature 110 mm proline faders and master section has 10 LED meters Starter pack with 2x KAM DDX380 direct drive decks, stanton carts and headphones - £649

RRP £229 **£129** NEW BOXED

TECHNICS SL-1200 Mk2 / 1210 MEGA DEAL

Still the club standard after many years, SL1200s are still going strong. This incredibly low price includes a free Stanton cartridge. Package deals available with many mixers, please call to enquire.

RRP £529 **£399** INC CART



ATM4033 by Audio Technica EXCLUSIVE SCOOP PURCHASE

For years the Neumann U87 dominated the large diaphragm condenser mic market, but at a price. That was until the advent of the Audio Technica ATM4033 For about one third of the price, it offered superb sound quality - sparkling vocals and acoustic guitars, and all the kind of qualities you would expect from this kind of mic. Now Turnkey have secured a quantity at a new unbelievable price, which even includes the shock mount. If you're in the market for a serious microphone, you can't afford to pass this one by! This price available on current stocks only

TURNKEY SPECIAL RRP £699 **£399** NEW BOXED

Sennheiser MD421	£ 295	Shure SM58	£ 95
Sennheiser MD441	£ 461	Shure SM58	£ 119
Sennheiser MD504	£ 93	Sony ECMHSP	£ 70
Sennheiser ME64	£ 130	Sony ECM999	£ 370
Sennheiser MKE46	£ 69	Soundcraft DM01	£ 321
Sennheiser MKH40	£ 2,500	Soundcraft GM01	£ 321
Shure BETA57	£ 199	Soundcraft M8	£ 73
Shure BETA58	£ 185	Soundcraft PM01	£ 64
Shure BG1.8	£ 40	Soundcraft LM01	£ 321
Shure SM57	£ 59	Soundcraft VM01	£ 64
Shure SM57	£ 110	Soundcraft VM01S	£ 64

SUBSCRIBE & WIN

TASCAM 488 MkII

8-Track Recording Studio

The advanced features and performance of the TASCAM 488 MkII take 8-track cassette multitrack to the professional level. The 488 MkII's mixer features 12 inputs and 4 group busses so you can handle a wide range of live or line-level sources, while features like balanced XLR mic inputs and built-in phantom power for high quality condenser microphones let you take advantage of pro recording equipment and techniques for outstanding sound. There's 3-band EQ with sweepable midrange control on all mono input channels for precision response shaping, and two independent effect sends for external signal processing flexibility. The 488 MkII is also designed specifically for smooth integration into MIDI-based music systems.

The recorder section delivers solid reliability and faultless tape handling with the same mechanism and Hysteresis Tension Servo Control system used in TASCAM's 122 MkIII professional cassette deck. The recorder runs at 9.5 cm/sec. and features built-in dbx noise reduction for high sound quality and low noise. Precision automatic punch-in/out with a rehearsal mode and three auto-locate points allows fast, efficient recording. To enter, all you have to do is subscribe to *Sound On Sound*, answer the tie-breaker question, fill in the form below and return it to us by the closing date of 30 September 1996.

Existing subscriptions expiring within the competition eligibility period are also entitled to enter. When you receive your Renewal Notice, just attach your answer to the competition question on a separate piece of paper, or use the application form below.

Subscription Rates — 12 issues: UK £ 35; Europe £ 50; World £ 65.

What name would you give to an 8-track digital portastudio?

.....

Name.....

Address.....

.....

Postcode ..... (UK subscribers must include their full postcode)

Signature.....

Daytime Tel No.....

As a valued SOS subscriber you not only save on postage but are also entitled to a 10% discount on all SOS Mail Order books, automatic entry into the next twelve months' Subscription Prize Draws, plus Subscriber Special Offers.

Please send a Cheque or Postal Order made payable to 'Sound On Sound Ltd' or pay by Visa/Access/Switch/AmEx/Mastercard.

All overseas payments must be in Pounds Sterling drawn on a British bank.

Card No:

Card Expiry Date: ..... Switch Issue No: .....

Closing Date for entries 30 September 1996

RULES: 1. Only one entry per subscriber is permitted. 2. Employees of TEAC UK Ltd and Sound On Sound Ltd are ineligible for entry. 3. No cash alternative is available in lieu of prizes. 4. The competition organisers reserve the right to change the specification of the prize offered. 5. The judges' decision is final and legally binding, and no correspondence will be entered into. Ends.

Post to: SOS Subscriptions Dept., Media House, Burrel Road, St. Ives, Cambridgeshire, PE17 4LE, England.

YOU MAY PHOTOCOPY THIS FORM

BRITISH MUSIC FAIR

EARLS COURT1, LONDON SW5

PUBLIC PREVIEW DAY - ONE DAY ONLY

SATURDAY 7th SEPTEMBER 10-6pm

TICKETS AT THE DOOR £7.50

Sound On Sound £4 Special Offer

SPECIAL READER OFFER SAVE £3.50 OFF NORMAL TICKET PRICE!

PRIORITY ORDER FORM

Post to: **Sound On Sound Ltd, Media House, Burrel Road, St. Ives, Cambs PE17 4LE**

Please make cheques/postal orders payable to:
'Sound On Sound Ltd'.

Overseas payment must be in Pounds Sterling drawn on a British bank.

SOUND ON SOUND

PLEASE REMEMBER WE CANNOT ACCEPT CREDIT CARD ORDERS UNDER £5.00

BLOCK LETTERS

Name .....

Address .....

.....

Post Code. ..... Tel (Daytime) .....

Please send me _____ **Tickets at £4 each. I enclose a cheque / Postal order for £**_____

AMERICAN EXPRESS / ACCESS / VISA / MASTERCARD / SWITCH accepted.

CARD No.

Valid from Expiry date Switch Issue No Signature

WRH

SPECIAL READER OFFER!

Anatek Pocket Products to

At *SOS*, we have regularly found ourselves referring readers to one or other of the Anatek Pocket range of MIDI accessories to solve their all too common MIDI interconnection and transmission problems. Trouble was, Pocket Products were previously hard to find... until now!

POCKET SYNC

• 'Smart' FSK Tape-to-MIDI synchroniser • Starts anywhere in song • MIDI In to Out merging • Automatic read/write switching • 'Jam Sync' protects against tape dropouts • Records tempo changes • MIDI and FSK status LEDs

POCKET SYNC is the way to expand the capabilities of any multitrack studio. No longer is it necessary to allocate more than one tape track for sequenced parts. Now, shuttling to different points in the song is quick and effortless. POCKET SYNC writes a special FSK sync tone on one track of tape that is converted to MIDI Clock and Song Position Pointer on playback. Merging of data from the MIDI input to the output allows new sequencer tracks to be added while remaining synchronised to tape.

Automatic switching between write (recording FSK) and read (playback FSK) cuts downs on confusing switches and buttons. Tape oxide dropouts are no longer a problem with POCKET SYNC's variable dropout protection. The sequencer can continue playing over a dropout for a short time, even if FSK code is completely lost!

Order Code: PP003 **£69 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET MAC

• Economical Macintosh MIDI interface • No external power supply required • 1 MIDI In, 2 MIDI Outs • LEDs indicate MIDI In/Out data • Uses serial or modem port • High speed CMOS design • Improves signal to minimise data errors.

POCKET MAC opens up a whole new world of MIDI programs for the Macintosh computer user. With many Macintosh programs simultaneously supporting both the serial port and the modem port, one POCKET MAC could be connected to each allowing access to twice as many MIDI devices.

Order Code: PP004 **£39 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET CURVE

• Modifies MIDI velocity response • Controls keyboard sensitivity • 6 tapered curves • 6 velocity increase curves • 6 velocity decrease curves • 6 constant levels • Special DX7 velocity curve

POCKET CURVE is a necessity for master keyboards that require velocity scaling control. With it, a keyboard's response to harder or softer playing styles can be modified to suit the player and their MIDI setup. DX7 owners can especially benefit from POCKET CURVE! A special curve is available to boost the DX7's low velocity output, so that missing dynamic potential can be recovered. Use POCKET CURVE to allow a lighter touch during performance on a heavily weighted keyboard controller. For ease of programming, a quick reference to the many curve possibilities is permanently printed on the sides of the unit.

Order Code: PP005 **£69 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET MAPPER

• Remaps MIDI controllers • Maps Pitch Bend to Aftertouch • 'Set and forget' programming • Supports 15 controllers • Allows unconventional routings • Updates older keyboards.

POCKET MAPPER allows modulation routings to be customised to suit a particular need. Controller data such as Pitch Bend, Aftertouch, Breath Control and others is received and can be retransmitted as a different controller. For instance, DX7 Breath Control modulation can be rerouted to MIDI Volume to modulate synths that do not accept Breath Control. POCKET MAPPER is the most convenient and cost effective way of rerouting MIDI modulation. Now, MIDI wind instruments can remap mouthpiece Breath Control to Aftertouch quickly and easily.

Order Code: PP006 **£69 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET MERGE

• Merges 2 MIDI signals into 1 • Handles System Exclusive • Merges on all 16 MIDI channels • Merges Clock and MIDI Time Code • Merges all controllers • Handles large volumes of data • Stackable for 3 or more inputs

POCKET MERGE is an essential tool for sequencing or live use. Operating as a 2-In, 1-Out MIDI Merger, several Pocket Merges can be stacked to merge more than 2 inputs. Now any controller can be a 'master'. In live setups, POCKET MERGE allows any two controllers (keyboard, drum pads, guitar synth, etc) to share a sampler or sound module. Use one keyboard as a master, while using a favourite pitch bender from another, or combine two keyboards for a multi-tiered, organ-style controller. In the studio, POCKET MERGE is a must for sample dump editors, allowing a keyboard and a computer to be connected to the sampler at the same time. POCKET MERGE handles data very quickly, making buffer overflows a thing of the past.

Order Code: PP007 **£59 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET FILTER

• Filter on all MIDI channels • Filter controllers, System Exclusive and real-time data • Combine data types/channels • DIP switch selectable filtering • Select channel from any keyboard • Filter all data on selected channels

POCKET FILTER is a vital tool for problematic setups. With MIDI data becoming increasingly complex, POCKET FILTER can unclog the MIDI data stream, sending only the most useful info. Use it to remove unwanted clock messages or System Exclusive data or memory-intensive aftertouch and controller information. POCKET FILTER frees-up unused MIDI Channels from multitimbral synths, making them available for other modules. In addition, it can be used to channelise older synths that only receive in Omni mode.

Order Code: PP008 **£69 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95

LONG DISTANCE MIDI

• Enables extra-long MIDI cable runs • Easy to connect to existing 3 conductor wiring • 4,000 feet capability • Balanced XLR connectors • Dual transceivers allow 2-way MIDI communication • Handy data input and output LEDs confirm presence of MIDI signal

The problem with MIDI is that you are likely to encounter data errors when running more than 50 feet of MIDI cable. These can be embarrassing errors such as hung notes, mysterious program changes or worse in the middle of a performance.

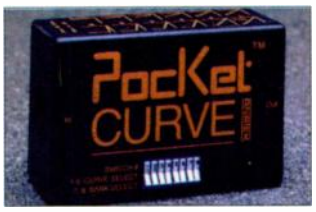
The cost-effective solution is MIDIMATCH by Anatek. Two identical units convert MIDI data to balanced signals that can be transmitted through up to 4,000 feet of cable. The balanced MIDI signal is virtually immune to the problems that have previously plagued studio owners and sound contractors over long MIDI runs.

MIDIMATCH works through ordinary balanced microphone cable so you can connect keyboard controllers to MIDI sequencers or lighting controllers to dimmer packs through your existing snake! Studios already wired for audio can connect MIDI through the cabling already in place. MIDI signals could even be run through a balanced patchbay!

The price includes transmitter and receiver. (Please note: requires two 9V AC adaptors.)

Order Code: PP001 **£115 inc VAT.**

Postage: UK £2.50 Europe £4.95 ROW £8.95



solve your MIDI headaches!

USE YOUR YAMAHA BREATH CONTROLLER WITH NEARLY ANY MIDI SYNTH!

Anatek's WIND MACHINE and your Yamaha BCI or BC2 Breath Controller (not provided) will add woodwind-like expression to keyboard performances. Brass patches can punctuate or pad according to your whim, not to some pre-programmed attack setting. Sax solos will turn heads with their authenticity. And layered string sounds can fade in precisely where they're needed, while your hands and feet are free to control wheels and pedals. *(Will not work with Yamaha WX7/11.)*

Compatible with everything, WIND MACHINE interfaces to Korg, Roland, Yamaha, Ensoniq and the rest! No longer are you forced to use your Yamaha breath controller with only one brand of MIDI synth. Any MIDI keyboard that will respond to MIDI Volume, Aftertouch, Modulation, Breath Control, Pitch Bend, Expression, Foot Controller, or Pan can be controlled via your breath controller and WIND MACHINE.

Blowing into a mouthpiece is the most natural way to enhance keyboard performance. Wind instruments have been designed around this principle for centuries. Alone, keyboard Aftertouch isn't as effective because when you release the keys, the effect goes away. Modulation and Pitch wheels alone aren't as effective because they don't allow you to play chords. But when combined with WIND MACHINE, all of these can be used to create vastly improved expression capability.

A flexible input/output configuration means that WIND MACHINE can fit seamlessly into any setup. The simplest way is to use it to send control signals to the MIDI In of a keyboard synthesizer. If the MIDI setup involves a master keyboard and external modules, WIND MACHINE can combine incoming signals from the master with its control signals and then pass them on to a sequencer or sound modules. WIND MACHINE can transmit the most popular control parameters to keep it simple. Most MIDI keyboards respond to Modulation, Aftertouch or Volume so you won't have any problem finding one compatible with your synth. Any one of the 16 MIDI channels can be selected as well. All control parameters are set by switches on the lid that retain settings even when power is disconnected.

Order Code: PP002 **£85 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET PEDAL

• Sends on multiple MIDI channels • Supports 1 continuous controller • Supports 1 momentary footswitch • Sends pitch-bend, modulation, portamento time, and MIDI Volume • Sends sustain, portamento on/off, sustenuto, and start/stop • Auto pedal/footswitch calibration • Forward/Reverse pedal operation • 3 mode pitch-bend operation • Combine data types

POCKET PEDAL is an indispensible controller for the performing musician. Use it with an ordinary volume pedal and footswitch to send MIDI volume, modulation, and sustain controls on all 16 MIDI channels simultaneously. For owners of multi-effects processors, POCKET PEDAL provides a convenient cost-effective way of providing dynamic control over effects parameters. It is also a handy controller for automated mixdowns, converting any resistive input into MIDI Controller messages for VCAs. Connect a photocell to POCKET PEDAL and control MIDI parameters with a light source!

Order Code: PP009 **£69 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

POWER PACK

• 'Phantom' powers all Pocket Products • Functions in-line with MIDI signal • Powered by most AC adaptors • Automatic polarity switching • Fully regulated supply • Passes all MIDI data • Alleviates hook-up problems • Boosts MIDI signal

POWER PACK provides power to Pocket Products in instances where upstream devices from other manufacturers have neglected to meet MIDI specifications, or in any instance where power is unavailable. POWER PACK can be placed anywhere in the MIDI chain and accepts power from a standard AC adaptor (not included). It provides additional power when more than 4 Pocket Products are used in a row or allows POCKET PEDAL and POCKET FILTER to retain their channel settings when the master device is turned off. What's more, POWER PACK can be used to boost the MIDI signal and extend the maximum distance between two devices.

Order Code: PP012 **£29 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET SPLIT

• 8-Zone Keyboard Splitter • Range from 1 to 127 notes • Fixed boundaries • MIDI Channel/Zone assignment • Footswitch controllable • Floating split point

POCKET SPLIT is an 8-zone keyboard splitter. Each zone has its own MIDI Channel, and has a range of 1 to 127 keys wide. Zone boundaries can be set for hard or soft (overlap or splits). Use POCKET SPLIT to maximise the performance of your master keyboard, or create interesting performance possibilities with your guitar controller. An added feature is an 'intelligent' 2-way floating split that automatically tracks the keyboard player's left and right hands. Now any MIDI device can have the features of a sophisticated MIDI controller at a fraction of the cost!

Order Code: PP013 **£69 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET TRANSPOSE

• In-line 16 Channel transposer • +/- 5 Octave transpose range • Switch between normal and transposed modes • Separate intervals for each channel • Transpose key signature and octave simultaneously • All non-transposed MIDI data is passed • Harmonisation mode • Footswitch controllable.

POCKET TRANSPOSE is a performance-orientated transposer that supports separate transpose intervals for each MIDI channel. Although many keyboards have a transpose function, it's usually too cumbersome for live use. POCKET TRANSPOSE makes transposing easy. Intervals can be set while playing, and the user can select the normal or the transposed setting from a footswitch. Guitar synth players can use the POCKET TRANSPOSE to set intervals on 6 separate MIDI channels, or use it to transpose all strings by a certain amount. POCKET TRANSPOSE provides an easy way to try different arrangements without altering sequencer data. You can even set it so that the drum machine channel remains intact.

Order Code: PP011 **£69 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET CHANNEL

• Remaps Receive channel • Remaps Transmit channel • Sends multiple MIDI channels • Velocity-switch mode • Footswitch controllable

POCKET CHANNEL takes data from any MIDI channel and remaps it on to one, several, or all 16 MIDI channels. Up to 16 different channel assignments are possible. A unique velocity-switch feature allows automatic switching between two different sound modules depending on the key velocity. Use POCKET CHANNEL to organise channel assignments for a multitimbral sound module, or send a controller's output to two or more MIDI channels. With POCKET CHANNEL, for example, two drum machines or two samplers can share the same note assignments and be set to two separate MIDI channels.

Order Code: PP014 **£69 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

POCKET THRU

• 1-In, 3-Out MIDI Thru box • High-speed CMOS design • Very low power requirements • Buffered outputs clean up data • Handles all MIDI data • Stackable for more outputs

POCKET THRU is an essential building block for any MIDI setup and an excellent companion product for all Pocket Products. POCKET THRU provides 3 buffered outputs from a single MIDI input. Use POCKET THRU to minimise MIDI delays, or expand the outputs of a POCKET MERGE unit. POCKET THRU also allows POCKET FILTER to be placed anywhere in the MIDI chain, when using it to channelise older synths. Up to 4 POCKET THRUs can be combined to provide a total of 9 outputs.

Order Code: PP010 **£35 inc VAT.**
Postage: UK £2.50 Europe £4.95 ROW £8.95

ABOUT POCKET PRODUCTS

Pocket Products are handy MIDI accessories designed to solve the problems arising from incompatibilites between MIDI products from different manufacturers. Compact and sturdy, Pocket Products can be placed anywhere in the MIDI signal chain.

HOW TO ORDER

Join the group of satisfied customers worldwide who have found the solution to their MIDI problems with Pocket Products from Anatek, now available direct from SOS.

To order, just fill out the Order Coupon at the back of the Mail Order section (remember to add postage for each product) or simply call our Mail Order hotline on 01480 461244.

DON'T DELAY ORDER TODAY!

Please allow up to 28 days delivery on Pocket Products.

ORDER NOW!
WHILE STOCKS LAST

See last page of Mail Order

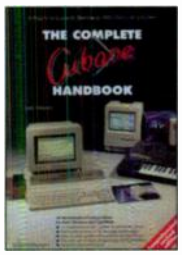
WRH

SOS MAIL ORDER ☎ 01480 461244

SOS Book Shop

BEST SELLERS

THE COMPLETE CUBASE HANDBOOK
2nd Edition

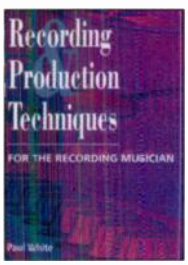


by Udo Weyers

After a short break, the definitive Steinberg Cubase Hanbook is back in print. This *new edition* is once again filled with real world applications and down to earth explanations of how to use all the powerful features offered by Cubase in all its many forms. *The book is now relevant to all three platforms (Atari, Mac and PC)*, and the main attraction of the revised text is its focus on Cubase Score. The Complete Cubase Handbook is a not-to-be-missed purchase for users of Steinberg's highly popular software.

CODE B195 **£29.95**
Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

RECORDING & PRODUCTION TECHNIQUES



by Paul White.

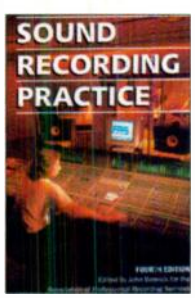
This highly informative book by SOS's own Editor demystifies the techniques used by professionals in the recording of contemporary music.

It reveals how to make full creative use of all manner of studio effects and signal processors. These techniques can be utilised both in the home and commercial studio. The book concludes with an invaluable section on master tape formats and an overview of the various processes and vinyl records.

CODE B200 **£11.95**
Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

SOUND RECORDING PRACTICE (4th Edition)

NOW IN PAPERBACK!



by John Borwick

This now classic text reaches its Fourth Edition, and has been *enlarged and revised* to cover up to date developments in the recording industry. The contents of this 600+ page is too diverse to summarise in such a short space. Suffice to say that every serious recordist, whether amateur, semi-pro or professional should have a copy of this book.

CODE B107 **£19.99**
Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

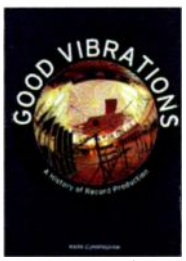
RECOMMENDED READING

INTRODUCING DIGITAL AUDIO
2ND EDITION *by Ian R Sinclair*

Explains digital audio – CD, DAT and sampling – non-mathematically. The updated 2nd edition adds information on oversampling and bitstream techniques, plus a glossary of technical terms.

CODE B274 **£7.95**
Postage: UK £1.50, Europe £4.50, R.O.W. £6.50

GOOD VIBRATIONS

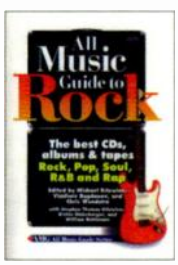


by Mark Cunningham

Good Vibrations — A History of Record Production features a foreward by BRIT award-winning Best Producer of 1996, Brian Eno. The book chronicles the development of recording techniques and music technology, from the invention of sound-on-sound (multitrack) tape recording in 1949, to the current dramatic advances in digital technology. Also highlights the changing role of the producer and engineer, with quotes from George Martin, Brian Wilson, Tony Visconti, Trevor Horn, Hugh Padgham and Pete Waterman. Recordings discussed in detail include The Beach Boys' *Pet Sounds*, The Beatles' *Sgt Pepper's Lonely Hearts Club Band*, Pink Floyd's *Dark Side Of The Moon*, Queen's *Bohemian Rhapsody*, David Bowie's *Heroes*, and U2's *Zooropa*. Includes around 100 photos and illustrations, many previously unseen, plus extensive reference section.

CODE B331 **£9.99**
Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

ALL MUSIC GUIDE TO ROCK

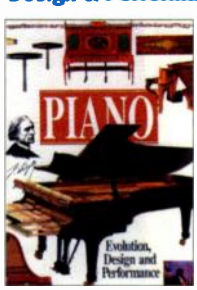


From doo-wop to hip-hop, this is the most complete guide to the best CDs, albums and tapes in all genres of this music, both mainstream and alternative.

Compiled by dozens of top music critics, 15,000 recordings by 2,500 performers are listed, rated and reviewed — including bootlegs, imports, out-of-print albums, and "cult" artists.

Easy to use and fun to explore, the All Music Guide to Rock also gives you major artist bios and discographies, essays exploring dozens of rock styles and influences, music maps, and more.

CODE B318 **£18.50**
Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

PIANO — Evolution, Design & Performance

By David Crombie

This is the most spectacular and informative book ever assembled on the history of the piano. At its heart is a stunning collection of more than 150 pianos ranging from the instruments's earliest roots to today's magnificent upright and grand pianos. This important new book is an essential purchase for every piano player and every musical instrument enthusiast, bringing alive the most fascinating and wide-ranging collection of pianos ever seen in one book.

CODE B308 **£19.95**
Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

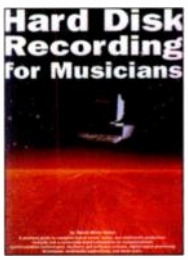
MUSIC & NEW TECHNOLOGY

by Gabriel Jacobs & Panicos Georghiades

Forward by Vangelis. A thorough guide to creating music with today's music technology. Covers music theory, MIDI and electronics principles, computers, what gear to use in your MIDI studio, and most modern MIDI production techniques. Ideal for beginners and advanced readers alike.

CODE B156 **£14.95**
Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

HARD DISK RECORDING FOR MUSICIANS

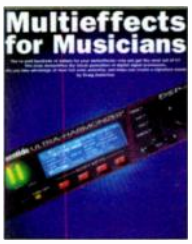


by David Miles Huber

More of a digital recording overview, this book looks at digital audio in all its forms. Huber discusses the equipment, the techniques and processes of digital audio. Computer-based sound editing, digital audio workstations, digital signal processing techniques, sampling and real-world applications in music, film, video and broadcast environments are covered plus multimedia. The text is designed to be understood by newcomers, while delivering information of value to professionals. *182 pages.*

CODE B307 **£15.95**
Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

MULTI-EFFECTS FOR MUSICIANS

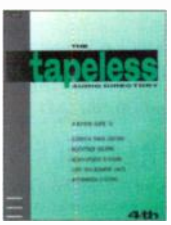


by Craig Anderton

Occasional SOS contributor Craig Anderton adds to his long list of music technology-based books with this comprehensive look at multi-effects units. The book helps you with what to look for when buying a new unit, how to use it when you've got it home, and provides a collection of tips to help you get the most out of your device. 137 Pages.

CODE B306 **£10.95**
Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

TAPELESS AUDIO DIRECTORY



(4th Edition) *By Yasmin Hashmi*

Completely updated, this 4th edition is the only international buyers guide to over 200 professional digital audio workstations and systems aimed at cart replacement and broadcast automation.

The comprehensive listings include target markets, hardware and software specifications, operational features, networking and file translation, future development plans, training and customer support, costs and suppliers details for USA, Europe and Far East. The Directory not only covers all existing systems, but those soon to be launched and those on which development has been halted. It also provides a comprehensive explanation of the terminology, with useful tips for potential purchasers.

CODE B304 **£14.95**
Postage: UK £2.50, Overseas £4.50

TECH TERMS - A Practical Dictionary for Audio and Music Production

by George Petersen and Steve Oppenheimer

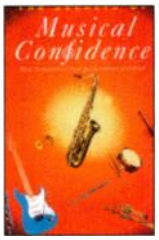
This is a concise collection of definitions of electronic music and recording terms; 300 words and phrases are given quick accurate definitions in plain English. So if you're new to recording, synths, samplers and MIDI, this book could be a big help in getting your mind into the terminology.

CODE B230 **£7.95**
Postage: UK £1.50, Europe £3.75, R.O.W. £4.95

THE ART OF DIGITAL AUDIO

CODE B248 **£49.50**
Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

THE SECRETS OF MUSICAL CONFIDENCE - How to Maximise Your Performance Potential



By Andrew Evans

Written by a musician and psychologist, this is claimed to be a first for musicians: a book aimed at maximising performance potential and increasing confidence.

A series of questionnaires and exercises allow you to analyse your abilities and needs and allow you to deal with stress, creativity and career management, amongst other topics.

CODE B240 **£7.99**
Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

AUDIO

by F A Wilson

Volume 6 of the Elements of Electronics series, *Audio* offers a comprehensive guide to the physics of sound, its recording and its reproduction. There is a lot of physics used in the book – in fact, this aspect makes the book a good basic text for those with a serious interest – but the text in between the formulae is clear and informative. Not bad value for £3.95 – a total of 308 pages.

CODE B277 **£3.95**
Postage: UK £1.50, Europe £4.50, R.O.W. £6.50

SOUND FOR PICTURE

Edited by Jeff Forlenza and Terri Stone

Covers all aspects of film and TV sound, dialogue, music, effects recording, and editing and assembling the result into a final soundtrack. Technical and creative aspects are all covered, and a comprehensive glossary is provided. A good proportion of the book is also taken up with a selection of case studies (including Malcolm X, The Abyss, Northern Exposure and Twin Peaks) that provide hands on information.

CODE B237 **£9.95**
Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

STUDIO MUSICIAN'S JARGONBUSTER

by Godric Wilkie

If the terminology of musical technology and recording leaves you gasping, then this is the book for you! With clear explanations of 1500 terms and concepts, amidst illustrative graphics, the whole work is extensively cross-referenced, and worth its weight in gold.

CODE MX30045 **£12.95**
Postage: UK £2.50, Europe £6.95, R.O.W £9.50

THE COMPOSER'S GUIDE TO MUSIC PUBLISHING
(2ND EDITION)

written & compiled by Annie Gunning

This book has been produced by the Association of Professional Composers and examines the business of musical copyright and music publishing from the composer's point of view. It aims to educate composers of all kinds of music in the operation of the music publishing business to help them obtain, negotiate and benefit from publishing agreements and avoid expensive mistakes. Apart from publishing, the book also covers copyright legislation, performing and mechanical rights, the royalty administration societies, music in film, broadcasting, theatre and ballet and commissioning agreements. There is also advice for composers setting up their own publishing companies. An exhaustive and useful book.

CODE B297 **£18.95**
Postage: UK £2.50 Europe £6.95 R.O.W. £9.50

PROFESSIONAL COMPOSING

CODE B298 **£3.95**
Postage: UK £1.95 Europe £5.50 R.O.W. £8.50

ATTENTION SOS SUBSCRIBERS! You are now entitled to a 10% discount off all books

SOS MAIL ORDER ☎ 01480 461244 SOS MAIL ORDER ☎ 01480 461244

OVERNIGHT DELIVERY OPTION: ONLY £5.00! See Order Form for details

HIGHLY RECOMMENDED

CREATIVE RECORDING EFFECTS & PROCESSORS

by Paul White

The first in this major series, Effects and Processors is a complete guide to the outboard equipment which has today become an integral part of popular music.

A comprehensive analysis of studio effects and signal processors, it provides detailed coverage of each piece of equipment: how it performs its respective task, what effect it has on the sound, and its role in creative music production.

CODE B315 **£9.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

CREATIVE RECORDING TWO MICROPHONES & RECORDING TECHNIQUES

by Paul White

A complete guide to understanding and using microphones in a recording environment.

In plain English, it explains how the different types of microphone work, discusses the advantages of the various different types, and shows how they can be used to get the sound you want onto tape.

CODE B316 **£9.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

CREATIVE RECORDING THREE ACOUSTICS, SOUNDPROOFING & MONITORING

By Paul White

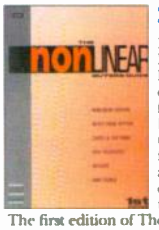
Soundproofing, Acoustics and Monitoring is designed to take the mystery out of studio design, whether you run a bedroom studio or a commercial recording facility.

In plain English, it explains how soundproofing works, how you can change your room acoustics to give the optimum monitoring environment and how to choose and use your monitor system.

CODE B317 **£9.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

NON LINEAR BUYERS GUIDE 1st Edition



New from Sypha is the Nonlinear Buyers Guide. Known especially for their definitive digital audio-focussed Tapeless Directory (look out for the 4th edition in the future), Sypha have applied the same comprehensive approach to digital video systems.

The first edition of The Nonlinear Buyers Guide is the only international source of information on over 150 nonlinear video systems. Products included in the Guide are nonlinear editing systems, mixed mode editing systems, plug in cards and software for editing, disk recorders and servers. The information is provided in an easily accessible format and includes operational and technical specifications, future developments, costs and suppliers details. The Guide also gives useful pointers to those considering investing in a system.

CODE B270 **£19.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

SAMPLERS

THE SAMPLING BOOK

By Steve De Furia & Joe Scacciaferro

How to achieve better samples - this book explains the technical issues involved, clearly and simply. Good advice on what to look for when buying a sampler.

CODE B025 **£11.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

WHAT'S A SAMPLER?

By Freff

Ideal starter book for sampling novices. Whether you are serious about sampling or merely curious, this book is for you.

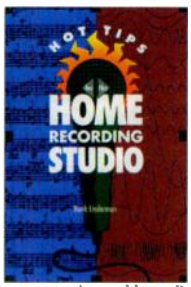
CODE B104 **£4.50**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

RECORDING

HOT TIPS FOR THE HOME RECORDING STUDIO

NEW



by Hank Linderman

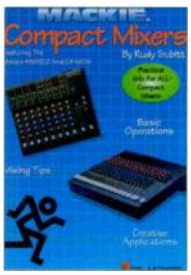
Learn how to lay down music the way you want it to sound, with advice for getting the best from your mixer, multitrack, compressor etc. Discover tricks and what traps to avoid, unlock the mysteries of timecode, prevent noise problems. Packed with sound advice.

CODE B326 **£12.99**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

MACKIE COMPACT MIXERS

NEW



by Rudy Trubitt

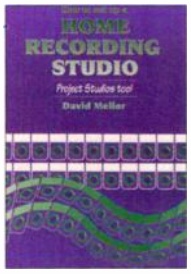
Journey through the design and features of mixers so you can maximise the use of this essential and very flexible audio component. Using Mackie's wildly popular MS1202 and CR1604 mixing desks as a foundation, the book explains general concepts as well as model specific operating tips. Topics include: mixing basics, real world applications, hooking things up, mixing tips, block diagrams and a glossary.

CODE B330 **£14.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

HOW TO SET UP A HOME RECORDING STUDIO

UPDATED & EXPANDED



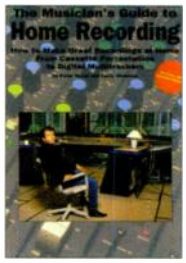
By David Mellor

If you are thinking of setting up a home studio, a project studio or a DJ studio, this book is the place to start. It takes a highly practical 'nuts and bolts' type of aproach to help you produce an efficient and productive studio. It covers soundproofing, keeping the sound in and the noise out, acoustics, studio layout, and studio equipment, and advice on the kit you are likely to need. The book ends with an invaluable questions and answers section, a glossary of terms and a list of contacts.

CODE B116 **£8.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

THE MUSICIANS GUIDE TO HOME RECORDING



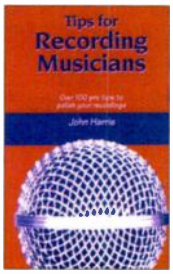
by Peter Mclan & Larry Wichman (Revised and Updated)

This is the book every serious songwriter, musician, and home recordist needs, with a new chapter on MIDI and the lastest digital recording technologies. A problem-solving guide as well as an instructional text, it is designed to expain in simple terms how professional recording techniques can be applied at home.

CODE B314 **£16.95**

Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

TIPS FOR RECORDING MUSICIANS



by John Harris

Today's studio equipment is affordable but sophisticated, and it takes a lot of know-how to use all this technology effectively. This book details the equipment you need - mics, effects, tape machines, etc. It has separate sections on recording of vocals, electric guitar, drums and acoustic instruments, as well as the use of MIDI in the recording process. You will learn how to get the best from delay and reverb, as well as effects like compression and gating. There are some useful tips on using the mixing desk and post production work. All in all it's a handy guide that will improve your recording techniques at a stroke.

CODE B309 **£8.50**

Postage: UK £1.50, Europe £3.95, R.O.W. £3.50

PRACTICAL STUDIO TECHNIQUES

by Tom Misner

This book and audio CD package comes from the School of Audio Engineering's Tom Misner. It's an excellent source of basic recording facts and figures, and if you want concrete examples of the subjects discussed, then listen to the free mixdown demonstration CD.

CODE B301 **£15.00**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

RECORDING TECHNIQUES FOR SMALL STUDIOS

by David Mellor

This well written, user-friendly book is designed to offer accessible and helpful tips on how to get the most out of the equipment in your studio. Chapters cover: mic techniques; musical arranging for recording; 4-track recording; the mixer; preparing for an running a session; recording drums; recording vocals; integrating MIDI; using effects and signal processing; location recording, and digital recording. The book is rounded off with an "any questions" section, a glossary and a list of recording studios in the UK. As you would expect from a book based on an SOS series, this is a *must have*!

CODE B198 **£9.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

THE MASTER TAPE BOOK

Alan Parsons, Bill Foster & Chris Hollebone

The definitive guide to the creation and management of audio master tapes. With 'Master Tapes' literally flying around the world being copied, cloned or re-cut for seemingly endless variations of compilation albums, it is terrifying to think that there is no standard set of procedures for labelling and maintaining master tapes. Until now, that is.

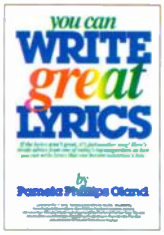
CODE B194 **£15.00**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

MUSIC BUSINESS

YOU CAN WRITE GREAT LYRICS

NEW



by Pamela Phillips Oland

This book helps you develop your own philosophy and style. Its plentiful techniques, combined with practical advice and exercises, will have you writing great lyrics before you know it!

CODE B329 **£11.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

MUSIC PUBLISHING

NEW

by Randy Poe

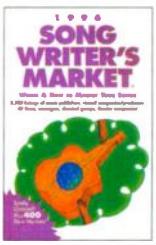
This book demystifies music publishing, explaining what it's all about and what it means to a songwriter. Learn what your publishing options are, from a single song contract to a staff writer to a self-publishing operation. By the time you have finished this book you will never make an uninformed decision about publishing your songs that you will later regret.

CODE B328 **£12.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

SONGWRITERS MARKET 1996

NEW



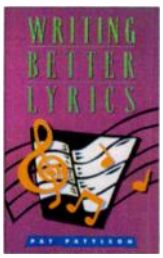
To get your songs published and produced, you must know who the music industry's players are and how to approach them. This directory identifies those seeking the work of songwriters. Lists 2500 lyric and music markets, clubs, associations, contests, workshops and songwriters publications. Includes 'The A & R Roundtable', where pros discuss their role in a songwriter's career, business side of songwriting, music industry trend report, and interviews with music industry professionals.

CODE B324 **£12.99**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

WRITING BETTER LYRICS

NEW



by Pat Pattison

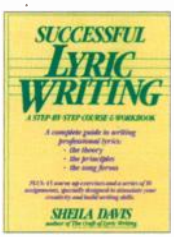
In-depth approach to lyric writing examines 17 songs to discover what makes them so effective. Learn a warm-up exercise that will revolutionise your songwriting imagery, how to use a rhyming dictionary to unlock fresh, unexpected rhymes, avoid cliches and create imaginative metaphors and similes.

CODE B325 **£12.99**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

SUCCESSFUL LYRIC WRITING

NEW



by Sheila Davis

Superb guide to the art of writing words to music. Learn how to create a memorable song title, choose the best music form for each idea, apply writing principles and avoid common pitfalls, write with both sides of your brain, find your voice. Includes songwriter's bibliography and lists over 60 songwriting organisations to help you connect with your chosen marketplace.

CODE B327 **£12.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

PLEASE REMEMBER: POSTAGE IS PAYABLE ON ALL MERCHANDISE

SOS Book Shop

THE SONGWRITER'S GUIDE TO COLLABORATION

by Walter Carter

This book describes what to expect when entering into a co-writing situation and how to make the arrangement work. Covers the pros and cons, how to find a partner, publishing your songs, who writes what, money matters, sharing success and rejection, growing together or apart plus co-producing and pitching.

CODE B323 **£8.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

CREATING MELODIES

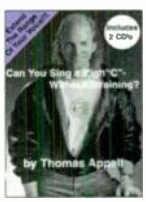
by Dick Weissman

Learn how to create memorable melodies, from love ballads to film scores and jingles. Using lots of examples of popular songs and styles by top-name musicians, Weissman covers the full range of melody writing. Learn how to marry music to lyrics, relate rhythm to the message of your song, read and write musical notation, write instrumentals for films, TV, commercials and theatre, and put together a demo tape.

CODE B322 **£12.99**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

CAN YOU SING A HIGH "C" WITHOUT STRAINING



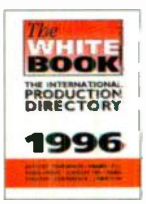
by Thomas Appelt

This book features extensive coverage of the vocal cords and explains clearly how to sing high notes without going into falsetto, and without straining. You'll learn how to extend the range of your voice, and why most singers either strain or "break" into falsetto when attempting to sing above their normal range. It comes with 2 CD's jam-packed with over 2 hours of vocal examples and exercises that you can practice with. Many singers have increased their range by several notes after the first week of practice. If you can't sing high notes without straining, but would like to know how, then this book is for you. 122 pages.

CODE B319 **£24.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

THE WHITE BOOK INTERNATIONAL PRODUCTION DIRECTORY 1996



This is the latest edition of the essential source of contacts for artists, performers, venues, services and facilities associated with music, concerts, shows, festivals, film, TV, video, conferences, exhibitions and corporate hospitality - there's even a comprehensive international section. The layout is logical and an index makes fact finding an easy task - altogether an indispensable 864 pages. The new edition once again comes with a complementary copy of The Little White Book, which distils the contents of the larger volume to a pocket-sized list of names and phone numbers.

CODE B259 **£46.00**

Postage: UK £4.75, Europe £8.50, R.O.W. £16.95

THE MUSICIAN'S GUIDE TO READING & WRITING MUSIC

It's an entertaining but practical introduction, well, to reading and writing music. This is as friendly as it comes. Learning to read and write music isn't easy, but at least the process is lightened up with considerable doses of wit.

CODE B224 **£8.99**

Postage: UK £1.50, Europe £4.95, R.O.W. £7.50

THE ARC MUSICIANS' DIRECTORY

The new Musicians' Directory from Arc Publishing aims to provide all things to all musicians: whatever your style of music, the comprehensive listings offer you the contacts you need, whether it's labels, studios, venues, music shops or management - and that just scratches the surface of the dozens of topics covered by the book. Apart from being a directory proper, the Handbook also includes a selection of useful articles, including subjects such as how to be a session player (by SOS's very own Paul White), music publishing, releasing your own record, copyright protection, accounting, legal advice and more. The Musicians' Directory offers over 380 information-packed pages for little more the price of a new CD.

CODE B219 **£14.99**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

NETWORKING IN THE MUSIC BUSINESS

by Dan Kimpel

Think of this book as a popular psychology course for musicians. If you feel you could benefit from developing a positive attitude to getting ahead in your area of the music business, then *Networking* is for you. There's nothing like it for good, sensible advice: it's often not enough to have talent. To be successful, you'll need to persevere, have good "people skills", and exercise good networking skills. Success depends on what you know, who you know, and perhaps most importantly, who knows you. An essential book, and a snip at £11.95. Hardback.

CODE B251 **£11.95**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

THE SONGWRITER'S MARKET GUIDE TO SONG & DEMO SUBMISSION FORMATS

From the Editors of Songwriter's Market

If you've got the songs and you've got the contacts, this book will help you to choose a format that will get your demo heard as well as overall packaging and presentation and dealing professionally with publishers, A&R reps and other industry people. Plenty of example documents (lyric sheets and letters) are given, and the book is nicely rounded off with a glossary and index. Hardback.

CODE B258 **£12.95**

Postage: UK £2.50, Europe £5.95, R.O.W. £9.95

SONGWRITER'S WORKSHOP

Edited by Harvey Rachlin

If you want to work systematically at improving your songwriting skills, then try this book: it's divided into four individual 'lessons', each of which is backed up by audio material on cassette. This allows you to listen in the car or walk around with your personal stereo and still absorb useful information. The four sections are: On Songwriting by Janis Ian (yes, *the* Janis Ian); Making Demos by John Barilla; Understanding MIDI by James Becher; and The Art of Pitching Songs by Teri Muench (ex-A&R director with RCA and publisher). Also included is an intro, a quick and breezy glossary and an index. Includes two cassettes.

CODE B260 **£15.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

MUSIC BUSINESS AGREEMENTS

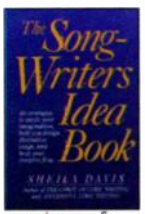
by Richard Bagehot

Written by a practising music business solicitor, "Music Business Agreements" can be seem as a legal textbook for the UK music industry. Don't let the formal tone put you off: this book is a mine of information with reference to real-life problems and examples, and a helpful question and answer appendix. Expensive, but invaluable. 522 Pages.

CODE B303 **£58.00**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

SONGWRITERS IDEA BOOK



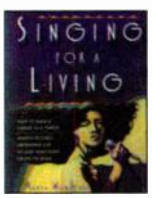
by Sheila Davis

If you want a textbook, this is it: 250 pages of serious, intelligent insight into songwriting. Loads of good advice and a friendly tone make this a useful read to anyone, whether beginner or seasoned pro. The focus is firmly on lyrics rather than music, and the prominent references to poetry terminology shouldn't really be a surprise. Use Davis' 40 strategies and you to could soon be "designing distinctive songs". Hardback.

CODE B250 **£9.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

SINGING FOR A LIVING



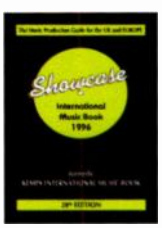
by Marta Woodhull

The title says it all. If you're already a singer, this book gives you everything you need to know in order to exploit your talent further: looking after your voice and voice exercises, business advice and marketing and audience interaction are all covered in this straightforward book.

CODE B252 **£12.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

SHOWCASE INTERNATIONAL MUSIC BOOK 1996

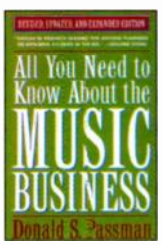


The music industry equivalent of *Yellow Pages*! over 500 pages crammed with all the latest information, including new phone and fax codes for record companies, recording studios, music publishers, equipment manufacturers, artist management, producers, PA and lighting hire, and more. Plus a USA section.

CODE B192 **£32.00**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

ALL YOU NEED TO KNOW ABOUT THE MUSIC BUSINESS



by Donald S Passman

This book is a must: the author manages a portfolio of high profile clients and teaches music business law at the University of Southern California, and has produced a clear overview of the music business. He starts at the beginning of your career, with advice on choosing a manager, lawyer and agent, and moves through getting a record deal, songwriting and music publishing and finishes with details of copyright, mechanical royalties, songwriter deals, films and more. An exhaustive and entertaining read. 415 Pages.

CODE B302 **£19.99**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

88 SONGWRITING WRONGS & HOW TO RIGHT THEM

by Pat & Pete Luboff

This is a real workbook for songwriters, dealing with both the craft and art of songwriting. Song structure, rewriting, matching lyrics to music, collaboration, making the right demo, pitching the final result, and business matters.

CODE B254 **£11.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

BEGINNING SONGWRITER'S ANSWER BOOK *by Paul Zollo*

If you're just starting out as a songwriter or haven't progressed very far, perhaps you have questions about the art and business of songwriting that you can't find answers for. Chances are, they're covered in this book. Over 200 of the questions songwriters most often ask are answered in this book. There are 11 chapters, covering subjects such as lyrics, theory, song structure, collaboration, demos, publishing and the music business. Some answers - such as "What makes a professional-sounding demo?" are actually mini-articles - and an index allows you to target subjects without wading through the text. A friendly, informative read.

CODE B253 **£10.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

THE BROADWAY QY10

by Peter L Alexander with Bobby Maestas

Charts and musical examples for re-creating Broadway songs with your QY10 using only the internal patterns. Includes useful set-up information. 77 pages.

CODE B263 **£3.95**

Postage: UK £1.50, Europe £4.95, R.O.W. £7.50

TG33 QUICK OPERATIONS

by Bobby Maestas

Instant access to Yamaha's neat little Vector Synthesis sound module. Loads of examples, well illustrated. 115 pages.

CODE B264 **£8.95**

Postage: UK £1.50, Europe £4.95, R.O.W. £7.50

YAMAHA SY55 GUIDE

by Bobby Maestas

A good helpful look at this arguably overlooked instrument; technicalities are explained in context of music throughout. 155 pages.

CODE B268 **£9.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

MIDI INFORMATION

MAKING THE MOST OF MIDI

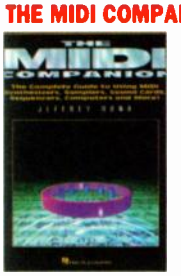
By Paul Overaa

This is a MIDI book unlike any other. It explains the fundamentals of MIDI and MIDI sequencing for the beginner, and it goes much further, dealing with issues that will be of help to more established users. Advice on MIDI fault finding, help for musicians using sequencers with live bands, MIDI messages and MIDI files, plus programming material. So if you are a keen first time user or a MIDI veteran, there will be something in this book to interest you.

CODE B321 **£14.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

THE MIDI COMPANION



By Jeffrey Rona

A breezy run through MIDI that would suit the absolute beginner, this book is well-illustrated, clearly expressed and explains the technical bits in as close to non-technical language as the subject matter allows.

CODE B234 **£9.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

ATTENTION SOS SUBSCRIBERS! You are now entitled to a 10% discount off all books

SOS MAIL ORDER ☎ 01480 461244 SOS MAIL ORDER ☎ 01480 461244

OVERNIGHT DELIVERY OPTION: ONLY £5.00! See Order Form for details

MUSIC TECHNOLOGY REFERENCE BOOK

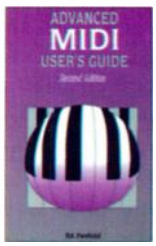
by Peter Buick & Vic Lennard

Written by Peter Buick and Vic Lennard (author of SOS's Atari Notes column), this book offers information at your fingertips and is an indispensable reference source for the musician or sound professional in the recording, broadcast, live, video, computer, multimedia, post production and theatre industries. It includes comprehensive MIDI spec, General MIDI, MTC, MSC, and SysEx information. It also includes charts, check lists, useful hints, tips, and ideas, plus a glossary, list of contacts and a comprehensive indexed, it is also organised into convenient sections. 150 Pages.

CODE B305 **£12.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

ADVANCED MIDI USER'S GUIDE (2nd Edition)



by R A Penfold

Most MIDI users do no more than scratch the surface of MIDI's potentialities. But dare to dig a bit deeper and you'll find a whole new world of creative possibilities.

With the Advanced MIDI User's Guide, you'll learn how to optimise your MIDI system to get the best results from your particular setup, and you'll find out how to use gadgets like switchers and mergers to enhance your system. If you want to incorporate a multitrack tape recorder into your MIDI system there's a section on synchronisers, SMPTE and MIDI time code, and retro freaks will learn how to hook up that dusty old analogue synth to their MIDI systems.

CODE B152 **£10.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

MIDI SYSTEMS AND CONTROL

By Francis Rumsey.

This revised edition has been expanded in an umber of topic areas, to provide even more comprehensive coverage of every area of MIDI. Contents include: an introduction to principles and terminology; MIDI timecode; librarians and editors; different approaches to sequencer software design; practical systems design.

CODE B007AM **£19.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

PRACTICAL MIDI HANDBOOK (3rd Edition)

by R A Penfold

This book is completely updated, and features a section on General MIDI. It provides a "straightforward, non-mathematical introduction to MIDI", and features a full glossary of MIDI terms.

CODE B273 **£8.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

A BEGINNERS GUIDE TO MIDI

by RA Penfold

The title says it all: all aspects of MIDI are explained, and many common beginner's problems are discussed.

CODE B287 **£4.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

MIDI FOR THE PROFESSIONAL

by Paul D Lehrman and Tim Tully

Co-written by SOS contributor Paul D Lehrman, this substantial, exhaustive work covers pretty well any aspect of MIDI that you could think of. As an overview of what MIDI is and does in 1994, this 239 page book couldn't be better.

CODE B227 **£11.95**

Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

MIDI SURVIVAL GUIDE

by Vic Lennard

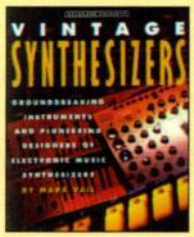
Whether you're a beginner or a seasoned pro, the 'MIDI Survival Guide' shows you the way. No maths, no MIDI theory - just practical advice on starting up, setting up and ending up with a working MIDI system. Contains over 40 cabling diagrams, and how to: connect synths, sound modules, sequencers, drum machines and multitracks; how to budget and buy secondhand; using switch, thru and merger boxes; transfer songs between different sequencers, get the best out of general MIDI , and understand MIDI implementation charts.

CODE B196 **£6.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

SYNTHESIZERS

VINTAGE SYNTHESIZERS



By Mark Vail

This well-illustrated, 300 page book covers synth history, interviews with designers and overviews of important instruments. Mark Vail's book could be the most entertaining and useful synth book yet – check out the definitive history of the Minimoog, complete with pre-production designers' sketches. While not strictly a buyers' guide, there is a comprehensive section to sourcing, valuing, upgrading and servicing classic instruments.

CODE B199 **ONLY £16.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

KEYFAX 2

by Julian Colbeck

1989 version of Keyfax provides individual summaries and specifications of the last of the great mono synths, digital pianos, and classic polysynths like the Roland JX10 and Prophet VS -forerunner of the SY22 and Wave Station. Early Keyboard and rack-mount samplers are covered in this indispensable guide. Still a great buy.

CODE B096 **ONLY £5.99**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

KEYFAX 4

by Julian Colbeck

The new Keyfax book (1993) is the most comprehensive guide to professional keyboards yet compiled, Keyfax 4 spotlights synthesizers and expander, and MIDI keyboard controllers. From classic analogue machines right up to the latest synth/sampler hybrids. Reviews include technical tour on a practical, need-to-know basis. Everything you need to decide which instrument is best for you.

CODE B201 **£12.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

THE MUSEUM OF SYNTHESIZER TECHNOLOGY

by Martin J Newcomb

If you liked our feature on the opening of the Museum of Synthesizer Technology in October, but haven't got the time or the cash to visit in person, then the next best thing has to be the museum's guide book. This 118 book is printed on glossy paper and contains full-colour pictures of a large selection of exhibits from the museum, together with some descriptive text and company backgrounders. The text reads a little like a fanzine, but the hardcore synth fanatic will want this book for the pictures. In these pages you will glimpse instruments that you are unlikely ever to experience in the flesh: an exceedingly large Roland System 100 modular set-up, an EMS Synthi 100, an ARP 2500, a large Emu modular and what must be the comprehensive collection of Moog equipment anywhere.

CODE B291 **£12.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

KEYFAX 5

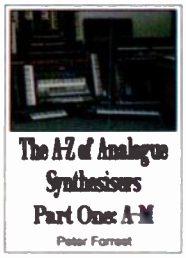
by Julian Colbeck

The latest instalment in the intrepid Keyfax series offers potted specifications and concise mini-overviews of digital pianos, home keyboards, General MIDI modules, stage organs and computer sound cards. Look out for company backgrounders, contact details and cross-references to earlier Keyfaxes.

CODE B231 **£12.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

THE A-Z OF ANALOGUE SYNTHS PART ONE: A-M



by Peter Forrest

The author has aimed to make his book a complete rundown of all the major analogue synths and keyboards ever made, and on the evidence of this first volume, he seems to have succeeded. The book is useful and detailed, and shows evidence of the massive amount of research and effort put in by Peter. He gives pocket company histories and detailed data on the instruments produced - but note that a few entries for a few particularly obscure instruments and companies are limited due to lack of data. The book also provides a comprehensive overview of the qualities of various instruments; charts and tables assess second hand values and maintenance levels necessary to keep a given instrument playable as well as such intangibles as sound quality, collectability and user interface. The A-Z of Analogue Part One, which is limited to 8000 copies worldwide, also features 96 colour pictures of classic instruments.

CODE B294 **£14.00**

Postage: UK £1.95 Europe £5.50 R.O.W. £8.50

DRUM MACHINES

DRUM PROGRAMMING — A Complete Guide to Program and Think Like a Drummer

By Ray F Badness

Coming from a publisher that has a good range of real drum texts, we'd expect this book to be a little different. And it is: it gives plenty of insights into how real drummers approach their job, and there are plenty of example patterns to help translate these ideas to a drum machine.

CODE B235 **£6.95**

Postage: UK £1.50, Europe £4.95, R.O.W. £7.50

DRUM MACHINE RHYTHM DICTIONARY

By Sandy Feldstein

For use with Roland drum machines or any grid-based pattern system. First 75 pages on programming huge range of rhythms in rock, latin, jazz and funk styles. Remainder analyses styles and patterns of world's top drummers - Phil Collins, Billy Cobham, Steve Gadd, Stewart Copeland, etc. Highly recommended.

CODE B110 **£16.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

RHYTHMICAL GROOVES & PATTERNS

By Siegfried Hoffman

Looks at how drummers compose rhythm patterns to add emotion, swing or groove. Contains examples for you to programme into your drum machine or sequencer.

CODE B115 **£11.50**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

260 DRUM MACHINE PATTERNS

By Rene-Pierre Bardet

Even more drum pattern styles (paso doble, charleston, etc)

CODE B019 **£7.95**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

DRUM MACHINE PATTERNS

By Rene-Pierre Bardet

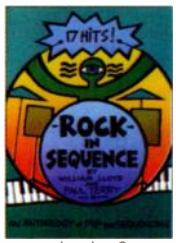
200 drum patterns and breaks presented in one-measure grid notation. Funk, R'n'B, ballad, pop, reggae, afro-cuban and many other styles.

CODE B018 **£7.95**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

PLAYING TECHNIQUES

ROCK IN SEQUENCE



by William Lloyd & Paul Terry

The latest book from the authors of Music In Sequence and Classics In Sequence is now available: Rock In Sequence offers detailed scores of 17 rock and pop hits from the '50s to the present day, alongside a collection of helpful sequencing tips. Songs are included from the likes of the Beatles, Led Zeppelin, Abba, Eurythmics, Blur and more. Rock In Sequence 112 pages.

CODE B320 **£14.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

CLASSICS IN SEQUENCE

by William Lloyd & Paul Terry

Takes concepts behind Music In Sequence and applies them to all-time favourite classical music scores. Authors show how to make fresh, exciting interpretations of classic scores. Info on reverb and effects, interpreting scores, editing synth voices. Highly creative—an ideal workbook for the music classroom. Covers Medieval, Renaissance dance music, Bach's Toccata in D minor; Vivaldi, Purcell, Handel; opera excerpts from Rossini, Verdi, Borodin; Mozart, Schubert, Tchaikovsky, music from Carmina Burana, Debussy, Satie, Steve Reich's Piano Phase and more. Highly recommended.

CODE B193 **£12.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

MUSIC IN SEQUENCE

by William Lloyd & Paul Terry

Still one of our best-selling books. Easy to follow, practical guide to making real use of your sequencer, written by people who really understand music and how to create it using today's technology. This brilliant, unique book carries the SOS seal of approval.

CODE B155 **£12.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

1000 KEYBOARD TIPS

by J Drehsler & Q Harle

The hi-tech musician's guide to the basics of music, scales, chords and harmonies. 256 pages covering chord relationships, improvisation, suggested drum machine patterns, plus comprehensive chord table. Too good to miss!

CODE B113 **£13.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

SOLID GROOVES

By Dieter Peterrit & Herb Quick

128 pages dealing with both bass and drums, the 'heart' of the pop group, together. Although written primarily for drummers and bass players, anyone interested in understanding rhythmical music in popular styles will find this book invaluable.

CODE B172 **£11.50**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

PLEASE REMEMBER: POSTAGE IS PAYABLE ON ALL MERCHANDISE

SOS MAIL ORDER ☎ 01480 461244

SOS Book Shop

COMPUTERS & MUSIC

THE COMPLETE SOUND BLASTER

by Howard Massey

Explains in simple, non-technical terms: how to install the Sound Blaster hardware and software for use in both the DOS and Windows environments, the two sound processes used by the card, MIDI, the Sound Blaster's MIDI capabilites, and the many different applications for the Sound Blaster, including the various software utilities provided with the card, and many of the third party support products that enhance its operation.

CODE B313 **£10.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

MULTIMEDIA ON THE PC

By Ian R Sinclair

If you want to know what multimedia is and what it can offer you, then this is the book for you. Much of the information is general enough for everybody, but as the title suggests, the book is aimed at PC users. The book explains the installation and use of a CD ROM drive and a sound card and covers all key concepts behind multimedia. As an added incentive, if you buy this book, you can send away for a free copy of *Picturebook*, a multimedia authoring package.

CODE B272 **£11.95**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

PC MUSIC HANDBOOK 2nd Edition

by Brian Heywood & Roger Evan

This book will show you how to turn your PC into a creative music making machine. It explains how you can create very sophisticated music on your PC by running sequencing software, how to create your own sounds with a soundcard, how to use your PC as a sound librarian, or a sample editor, or even use it as a hard disk recorder or a sound sampler. All these things are possible with today's sophisticated PC.

The use of sound in multimedia applications is also covered, and there is a chapter on PC hardware with advice on which type of PC is best for your particular needs.

There's advice too on getting connected to the Internet, where you can contact other PC music aficionados world wide!

CODE B332 **£14.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

COMPUTERS AND MUSIC

By R A Penfold

2nd edition. Covers hardware and software applications. Excellent glossary of jargon, and now bang up to date

CODE B098 **£8.95**

Postage: UK £1.50 Europe £4.95, R.O.W. £7.50

SEQUENCER SECRETS

Ian Waugh

Ian's book aims to "go beyond the manual" in telling you how to get the best from your sequencer. The book features 29 hands-on sequencing projects and is suitable for use with all software sequencers. The book hopes to help you optimise your MIDI system and use your sequencer to create all sorts of useful effects. A troubleshooting section helps you track down stuck notes, double notes and so on.

CODE B299 **£6.95**

Postage: UK £1.50, Europe £4.50, R.O.W. £6.50

MUSICAL APPLICATIONS OF THE ATARI ST's

By R A Penfold

Includes a general introduction to MIDI, a handful of MIDI add-on circuits (Thru box, MIDI switcher and so on), plus a collection of programs, in Fast BASIC, that allows you to use the ST's internal sound generator and create little MIDI applications.

CODE B280 **£5.95**

Postage: UK £1.50, Europe £4.95, R.O.W. £7.50

MULTIMEDIA ON YOUR PC

by Frances Botto

A practical guide to multimedia specifically on the PC. Botto's book is once aimed at users, educators and developers, and comprehensively discusses the hardware required to take advantage of multimedia in a PC environment as well as the hardware and software necessary in a multimedia authoring situation. The book is provide with comprehensive appendices covering a glossary and comprehensive product and manufacturer lists.

CODE B296 **£10.95**

Postage: UK £1.95 Europe £5.50 R.O.W. £8.50

LIVE SOUND

SOUND REINFORCEMENT HANDBOOK

by Gary Davis and Ralph Jones

From recording to broadcast, fixed installations to touring, this 400 page reference covers live sound setups, equipment, techniques and jargon.

CODE B105 **£27.95**

Postage: UK £3.95, Europe £7.50, R.O.W. £14.50

CONCERT SOUND AND LIGHTING SYSTEMS

Written by John Vasey.

How to set up and operate sound / lighting equipment for the performance of amplified music or any kind of touring production.

CODE B247 **£14.95**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

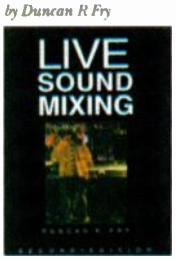
LOUDSPEAKERS FOR MUSICIANS

CODE B284 **£3.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £4.50

LIVE SOUND MIXING

by Duncan R Fry



This is a hands on, friendly introduction to all aspects of mixing live. It hails from Australia, and is an SOS Bookshop exclusive. The author is an experienced live sound engineer and has packed his book with loads of information, diagrams and hints to take you from basic principles through to trouble shooting when things go wrong.

CODE B256 **£19.95**

Postage: UK £1.95, Europe £5.50, R.O.W. £8.50

INTRO TO LOUDSPEAKER& ENCLOSURE DESIGN

by V Capel

The book provides both useful background to speakers and enclosures in general, plus practical information on crossovers and full details on constructing the so-called 'Kapellmeister' design of speakers.

CODE B281 **£2.95**

Postage: UK £1.50, Europe £6.95, R.O.W. £9.50

THE FOCAL GUIDE TO SAFETY IN LIVE PERFORMANCE

Edited by George Thompson

This book provides an authoritative look at safety matters for workers in the live entertainment industry. It is edited by the Standards Officer of PLASA (Professional Lighting and Sound Association), and provides good solid information in an easily digestible, well-illustrated form. Topics covered include audience and crowd control, fire safety precautions and engineering, electrical safety, laser safety, sound levels and noise control and much more.

CODE B271 **£19.95**

Postage: UK £2.50, Europe £5.50, R.O.W. £8.50

PUBLIC ADDRESS LOUDSPEAKER SYSTEMS

by V Capel

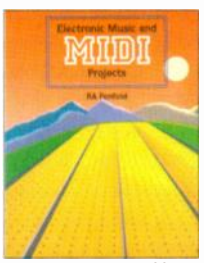
All aspects of PA speaker systems are covered in this book, including low-impedence matching, 100V systems, transmission lines and how to install inductive hearing aid loops. At the heart of the book is the Line-Source Ceiling Array, a system that is claimed to improve clarity, even coverage and reduce feedback. Full step-by-step construction and installation details are given.

CODE B283 **£3.95**

Postage: UK £1.50, Europe £5.50, R.O.W. £8.50

ELECTRONIC PROJECTS

ELECTRONIC MUSIC AND MIDI PROJECTS



by RA Penfold

Want a MIDI THRU box, patchbay or switcher? Well they're all here. And you don't need a degree in electronics either. All the projects are explained in detail, with full instructions on assembly. So if your into MIDI and you want to expand your system without taking out a second mortgage, fear not. Here's the book to help you build up your MIDI system without laying out thousands on hardware.

CODE B203 **£9.95**

Postage: UK £1.95, Europe £4.95, R.O.W. £7.50

DIGITAL AUDIO PROJECTS

by R A Penfold

A two part book, with the first section looking at the basic principles involved including converting an audio signal into digital form and then converting it back to an analogue signal. The second part contains some circuits – for the moderately experienced only.

CODE B279 **£2.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £4.50

HIGH POWER AUDIO AMPLIFIER CONSTRUCTION

By R A Penfold

Much useful background to amplifier design, speaker matching and more is included in the first couple of chapters, while the last section contains a selection of high power amp circuits plus suitable PSU circuits. Copper track patterns are also provided to allow you to make your own PCBs. While the circuits aren't too difficult as such, those with limited constructional experience should note that due to the high supply currents and voltages involved, even minor mistakes could be extremely dangerous.

CODE B282 **£3.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

ELECTRONIC PROJECTS FOR MUSICIANS

CODE B068 **£10.95**

Postage: UK £2.50, Europe £6.95, R.O.W. £9.50

MIDI PROJECTS

by R A Penfold

A comprehensive collection of simple MIDI projects, including CV and gate converters and a MIDI Thru box. A lot of the book is taken up with interface various obsolete computers to MIDI (Spectrum, CPC464, Commodore 64, BBC B, ZX81 and so on), but the general information is basically sound. Could prove a boon to musicians who are *really* broke!

CODE B278 **£2.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

PRACTICAL ELECTRONIC MUSIC EFFECTS UNITS

by R A Penfold

Another selection of musical effects, with more of a guitar angle. Projects include distortion, sustain, parametric EQ, graphic EQ, treble and bass booster, envelope modifier, wah wah effects and more.

CODE B290 **£4.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

ELECTRONIC PROJECTS FOR VIDEO ENTHUSIASTS

by R A Penfold

Projects for the video and camcorder user, including dynamic noise limiter, automatic audio fader, video faders, video wipe and video crispener.

CODE B288 **£4.95**

Postage: UK £1.50, Europe £6.95, R.O.W. £9.50

PRACTICAL ELECTRONIC MUSIC PROJECTS

CODE B289 **£4.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

ELECTRONIC MUSIC LEARNING PROJECTS

CODE B286 **£4.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

NEW VOICE TRAINING NEW

VOCAL WORKOUT Video

by Sam West

Singers of varying abilities will find this video a great aid in assisting their vocal efforts. It begins by explaining the principles of voice production. Breath control excercises plus general vocal techniques are all explained and visually demonstrated. All the exercises are written out in an accompanying booklet, with piano accompaniment.

VIDEO CODE V067 **£22.95**

Running time approx 59 minutes

Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

VOICE BUILDING Cassette/CD

by Sam West

Although geared towards singers of varying abilities, voices and styles, the contents of this recording are often challenging even to the professional singer! The video (code V067) goes into more technical detail, whereas the CD or Cassette concentrate on more intensive practising. First of all the exercises are sung, in various keys and then with musical accompaniment and melody line, so you can concentrate more on your voice while practising (karaoke style).

Vocal exercises can be boring, but this studio recording has been produced and presented to a very high standard, with interesting musical accompaniments to the exercises.

CASSETTE CODE MC001 **£6.95**

CD CODE CD037 **£9.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

PLEASE REMEMBER: POSTAGE IS PAYABLE ON ALL MERCHANDISE

SOS MAIL ORDER ☎ 01480 461244 SOS MAIL ORDER ☎ 01480 461244

OVERNIGHT DELIVERY OPTION: ONLY £5.00! See Order Form for details

SOS Videos

ROLAND MS-1 VIDEO MANUAL

This video manual has been produced by Roland Corporation US, and has been designed to provide the user with tuition, and examples of how to apply your new found knowledge in various applications. There is also a comprehensive "Tips & Tricks" section to give you that extra edge!

CODE V047 **£24.99**

Running time: 50 minutes (approx)
Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND GP100

Presented once again by Nick Cooper, this video manual for the Roland GP100 covers every aspect in detail with many practical demonstrations. Everything you need to know is covered; topics include; an explanation of COSM, layout, typical setups, initialisation, global settings, use of the tuner, selection and editing of patches, and use of the FX loop and harmonist.

CODE V062 **£19.99**

Running Time 45 Minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND TDE-7K DRUM SYSTEM

Roland's TDE-7K Compact Drum System Comprises the TD-7 Percussion Sound Module, MDY-7 Cymbal Pad Holder, FD-7 Hi-Hat Control Pedal, MDS-7 Drum System Stand, PD-7 Drum Pads & KD-7 Kick trigger. You may have a different configuration to what is shown in the video, but no matter!, Roland Product Specialist Gary O'Toole shows you how the complete kit is put together. Gary concentrates on the TD-7 in detail, showing how the parameters are set up, and giving demonstrations of how the sounds are derived and altered. Good use is made of the visual side in this video with multi-camera shots, a 'birds eye' view of the entire Kit shows Gary's playing abilities to the full. As you would expect from a production aided by Roland UK & USA, this video shows you everything you need to know.

CODE V045 **£19.99**

Running time 65 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

YAMAHA PSR6000 ELECTRONIC KEYBOARD VIDEO MANUAL

Yamaha's PSR6000 is a home keyboard with a difference, and offers many professional features plus excellent sound quality. Tim Walter starts at the beginning and makes the instrument look easy and fun. His enthusiasm is catching, and, yes, the PSR6000 is a very capable instrument. The tape runs to 75 minutes, which makes for excellent value.

CODE V029 **£19.99**

Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND GR-1 GUITAR SYNTH

These two video manuals have been produced to help the user get the most out of Roland's sophisticated GR-1 guitar synth, the first covering all the basics from mounting the pickup and getting tuned up to selecting sounds and using the on-board sequencer. Each step is patiently explained and demonstrated by Roland's guitar synth specialist, Jay Stapley.

The Advanced tape takes the mystery out of sound editing, custom tuning, advanced sequencer applications, external sequencer hookups, using other MIDI sound modules, indeed virtually everything the GR-1 is capable of doing. If you own a GR-1 or are thinking of buying one, do yourself a favour and order these indispensible videos.

CODE V014 **ONLY £29.99 FOR 2 VIDEOS**

Total Running time: 4 hours Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

STEINBERG CUBASE

This manual is presented by Chris West, Steinberg expert. It's very much a practical, 'get up and running' video, showing the novice user exactly how to install and begin using Cubase, whether they're running the program on an ST, Mac or PC computer — there's even a basic background on using the computers themselves! All of Cubase's controls are shown, explained and demonstrated in depth. Once you're familiar with the basic controls, Chris takes you slowly through recording your first session, followed by overviews of the various edit screens. It's rather like having an expert tutorial that you can run again and again in the comfort of your home, until you can use Cubase like a true pro.

Topics covered include; the main screen, customising names and outputs, copying and pasting between arrangements, MIDI filter, cycle mode recording, the tool box, all edit screens.

CODE V011 **£29.99**

Run time, 1hour 30 minutes Format VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

KORG AX30G TONEWORKS VIDEO MANUAL

The Toneworks series of guitar processors from Korg gets a real work out on this 55 minute tape. Korg's guitar demonstrator Steve Fairclough whizzes through the G1, G2, G3 and the flagship AX30G and provides clear explanations of how each units works. And to put the units into context, there's lots of footage of Steve showing off the sonic capabilities of each processor (not to mention his prowess as a guitarist).

ORDER CODE V028 **£19.99**

Postage: UK £1.75, Europe £4.95, R.O.W.£6.95

BAND IN A BOX 6.0 BASICS FOR WINDOWS

Designed to get the new user, and those less familiar with Band In A Box, up and running quickly and easily. Experienced users can also benefit from the in-depth tutorials which cover Basic MIDI, MIDI Connections, Custom Patch Maps, Screen Layout, Juke Box, Printing, Recording & Editing Melodies, Importing & Editing Styles, Drum Editor, Masks, Assigning Instruments.

CODE V031 **£34.99**

Running time: 88minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

3 CAKEWALK 3.0 VIDEO MANUALS

CAKEWALK 3.0 For Windows

A collection of three videos on the Cakewalk Professional system for Windows, covering just about everything you would need to know to become totally proficient with Cakewalk. If you own Cakewalk Home Studio — no problem! The videos cover everything Cakewalk Home Studio is capable of and more...

BASICS

Basic MIDI, Step & Realtime Recording, Playback Features (on the fly), Editing Features, Graphic Views, The Inspector Menu, Menu Overiew, The Control Bar.

CODE V032 **£34.99**

Running time: 120 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

BEYOND BASICS

This video explains Customising Cakewalk, Extrack Merge, more graphic Views, Advanced Editing, the Settings Menu, Synchronisation, Embedding Wav Files and more...

CODE V033 **£34.99**

Running time: 113 mins
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

CAL

Programming Fundamentals, Creating a Program, Creating a CAL Program, How to use CAL Programs, CAL Examples, Automating Tasks, Tips on working with CAL, Creating Computer Music, Troubleshooting.

CODE V034 **£34.99**

Running time 90 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

JUST ARRIVED!

MACKIE ULTRA MIX VIDEO GUIDE NEW

This highly informative video for the Ultramix automation system, clearly demonstrates how to set up and use Ultramix's many time-saving features to get the best from your system. The cost of the video may be redeemed against the purchase price of an Ultramix system, making the video a good way to try before you buy!

CODE V066 **£9.99**

Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND G800 NEW

Presented by Roland UK's product demonstrator Sara Reybould, this video covers every essential feature and function of the Roland G800. Sara provides the user with a wealth of knowledge on this sophisticated instrument, with recourse to many practical examples and close-up shots of the LCD screen. The video was produced in association with Roland USA and Roland UK to ensure that the content is accurate and informative.

CODE V060 **£19.99**

Running Time 92 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND GR09 NEW

Presented by Roland UK product demonstrator Nick Cooper, this application-based tutorial video for the Roland GR09, produced in association with Roland USA, covers every function completely. Covered topics include; the GK2A Synthesiser Driver, pickup sensitivity, use of the tuner, what a patch consists of, use of the pedals, patch edit 1 & 2 (including layering and detune, chromatic function, reverb & chorus, edit target, pitch shift), the use of external midi devices, saving to an external sequencer & more.

CODE V061 **£19.99**

Running Time 57 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND JV-1080 VIDEO MANUAL

Roland's amazing JV-1080 synthesizer module is covered in detail in this informative video. Presented by Tim Walter the video the video guides you through the basics, and leads you painlessly onto the advanced features. The video even shows you how to fit the expansion boards & gives demonstrations of some of the wonderful sounds they contain. Once again this video has been produced in association with Roland UK & USA to ensure that everything it contains is accurate, and relevant to the new and more experienced users alike.

CODE V046 **£19.99**

Running time 80 minutes Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND XP-50 NEW

This XP-50 video owners manual is produced by Roland Corporation US and covers all the major features of the instrument in detail. This is an application based video that provides many examples of how your new found knowledge can be applied. Just a few of the 30 separate topic areas covered are: Effects, Choosing Sounds, Loading a Song, Loop Recording, Copying a Track to Pattern, Making an RPS Set, Track Editing, Multitrack Recording, Patch Editing, Creating Splits & Layers in a Patch.

CODE V063 **£24.99**

Running time: 63 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

WINDOWS 95: WHAT WILL YOU LEARN TODAY? NEW

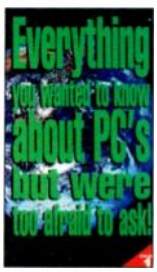
This video is aimed at new Windows 95 users and goes from basic to in-depth advice, covering topics such as minimum hardware requirements and common problems, and providing useful tips and tuition. The video also features Labyrinth's Video Index System to help the user locate particular topics, by means of on-screen timecode and an index booklet.

The video is written by computer journalist Ian Waugh.

CODE V065 **£19.99**

Running time: 74 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

EVERYTHING YOU WANTED TO KNOW ABOUT PCs BUT WERE AFRAID TO ASK!



Written by Ian Waugh

This video has been produced in response to the number of potential PC buyers and existing new users who do not fully understand the jargon and basic operating procedures associated with PCs.

It covers everything from 'What is a PC' to the 'Internet'. There is even a Windows tutorial, and a DOS basics section. (Over 120 different sections.)

It includes a booklet listing all the main and sub sections along with their respective TimeCode number for easy access when used as a reference tool.

CODE V048 **£19.99**

Running time 91 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

KORG PROPHECY VIDEO MANUAL

Written by Phil MacDonald

Korg's new Prophecy Synthesizer now has its own video manual!

The video covers all the major features over 6 sections, with lots of examples of the amazing effects that are available using the 'log' and 'mod' wheels. The video's visual interest is maintained by the extensive use of Chroma Key and multi camera effects. This is a video that is ideal for new owners, and those who want to know more about the Prophecy before they make a purchase.

CODE V049 **£14.99**

Running time: 36 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

BOSS ME-8 NEW

Nick Cooper (Roland UK product demonstrator) explains every single feature and function of the ME-8 in detail. The unit is clearly explained in a logical sequence with examples given of how the functions effect the available sounds, a perfect aid to new users of the ME-8 and those who would like to get that little bit more from it. Just some of the main points covered are: What is a Patch?, Selecting a Patch, Copying a Patch, Edit Mode, Using The Effects, Control Effects, The Tempo Function, Manual Mode, and lots more.

CODE V064 **£19.99**

Running time: 72minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ATTENTION SOS SUBSCRIBERS! You are now entitled to a 10% discount off any Books

SOS Videos

EMAGIC NOTATOR VIDEO TRAINING MANUAL

This video manual is detailed and helpful, and is presented in a most friendly and approachable manner by session musician Tim Walter, whose tone throughout the video encourages and inspires confidence. If you are new to Notator and are still in awe of its power, this is the video to bring you down to earth. An introduction and 28 tutorials take the user from the absolute basics - including plugging in the dongle - to working with Unitor and SMPTE, and synchronising to video. As well as actual recording of MIDI data and sequencing, comprehensive coverage is given to using the score layout and printing facilities that are so much a part of Notator. Topics covered include: sequencing page, score editing, lyrics and text, graphic arranger mode, hyper edit, the printer page, using the part box.

CODE V012 ONLY **£19.99**

Running time: 2 hours 20 minutes Format: VHS(PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

KORG X3

This video offers an easy way in to this powerful workstation. It starts from absolute basics, including audio connections and volume levels, and the clear and helpful script covers all basic facilities of the X3. The video features a sophisticated use of picture in picture, with the X3's display cut into the main image to show you clearly what Phil is actually doing, and main points are reinforced with on screen text and graphics. The main section headings are:

• *X3 Audio Connections* • *Getting Around the X3* • *Factory Disk* • *Disk Drive Modes* • *Selecting Sounds* • *Global Modes* • *Sequencer Mode* • *Quick Sound Editing* • *Playing MIDI Files on the X3* • *Using the X3 with an external sequencer*

Note that these are loose headings, with each section also containing information on connected subjects in varying amounts of detail. A lot of ground is covered, and we can recommend the tape to any X3 owner.

CODE V018 **£19.99**

Running time: 55 minutes Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

HOW TO GET A RECORD DEAL

The facts you need from the people who know. How To Get A Record Deal contains vital information and insight that you will not find anywhere else, from artists and executives who have made it and know what it takes.

On this video music industry pros give you the straight facts on how to break into this extremely competitive business. Because sometimes the difference between success and failure is information.

Presented by the National Academy Of Songwriters

CODE V003 **£14.95**

Running time: 1 hour 7 minutes
Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

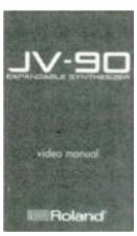
BOSS DR-5 DRUM MACHINE

Presented by Nick Cooper (Roland UK Product Specialist) this video covers all the functions of the DR-5 in a clear and concise manner. Produced in association with Roland UK & USA. By using the information gathered from Roland 'helplines', particular attention has been paid to the areas that many users find most difficulty in. This makes it of interest to beginners and experienced users alike. Nick imparts the information with ease and a professional manner, making it enjoyable and entertaining.

CODE V043 **£19.99**

Running time 57 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ROLAND JV-90 SYNTH



Roland's JV-90 synthesizer gets the treatment in this informative Labyrinth production. Virtually every facet of the JV-90 is covered, from the basic functions to more advanced programming. Chris Allen guides you through the powerful features this instrument has to offer. Produced in association with Roland UK & USA to ensure that everything it contains is accurate, and relevant to new and more experienced users alike.

CODE V044 **£19.99**

Running time 70 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ANALOGUE HEAVEN

Remember our feature on the opening day of the Museum of Synthesizer Technology which we ran back in October 1994? Wish you'd actually been able to attend?

Well, now you can have the next best thing: the museum has released a fascinating 50 minute promo video that features footage shot on the day as well as a lightning tour of the facility. The program is hosted by SOS contributor Julian Colbeck. The tape opens with synth pioneer Bob Moog making the inaugural speech and officially opening the museum, followed by a nostalgic run through one of his old modular systems. Analogue Heaven makes diverting viewing for anyone interested in vintage synths, represents good value, and offers the perfect companion to the Museum's guide book, also available from SOS Bookshop.

CODE V026 **£12.95**

Running time: 50 minutes Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

MASTER TRACKS PRO 4/5 BASICS

FOR WINDOWS & MACINTOSH

All the basic functions of Master Tracks, from installing the software to advanced editing. Everything you need to know to get you started and beyond in easy to understand step-by-step instructions.

Basic MIDI, Track Editor Window, MIDI Settings, Screen Layout, Conductor Window, Transport Controls Window, Inserting Measures, Step & Real Time Recording, Event List Editor, Piano Roll Editor, Quantising, and much more.

CODE V041 **£34.99**

Running time 105 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ORDER YOUR VIDEO NOW!
01480 461244

PERFORMER 5.0 BASICS

FOR MACINTOSH

Expert tuition covering the basics and more for Performer 5.0. This video will provide you with all that you need to know, covering all the major topics: Basic MIDI, Tracks Window, Multitimbral Operation, Patch Changes, Time Signature & Meter, Real & Step Time Recording, Event List/Graphic & Notation Views, Regional Editing, Quantisation, Transposing, Copy/Cut/Paste/Merge & Erase, Loop Recording, Track Palette, Device Groups, Counter Window, and much more.

CODE V042 **£34.99**

Running time 87 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

KORG X5 SYNTH

Korg's new X5 synthesizer, reviewed in SOS' January 1995 issue, now has its own video manual. Presented by Tim Walter in an entertaining and lighthearted manner, and explains all basic aspects of Korg's highly affordable instrument in very clear terms. If you're in any way daunted by your new purchase, or want to get a feel for the instument before laying out your cash, this is the video for you.

CODE V027 **£19.99**

Running time 55 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

YAMAHA QY20 MUSIC SEQUENCER VIDEO MANUAL

by Tom Robinson

Yamaha's popular QY20 portable sequencer/ sound source is a deceptively simple device to use; if you think you might like some insight into getting that little bit extra out of the device, then look no further. Produced in co-operation with Yamaha, the video features mobile musician Tom Robinson showing you how to get the best from this portable marvel. Tom, who has used the QY20 extensively as a writing tool on the road, says: "I never leave home without it".

CODE V016 **£19.99**

Running time: 90 minutes Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

HOW TO GET THE MOST OUT OF HOME RECORDING

3 TOP CLASS VIDEOS

A superbly presented set of videos which no home recordist should be without. Have you got your set yet?!

LEVEL ONE

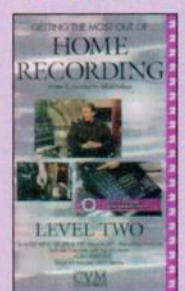
This well presented video explains how to set up and operate a simple cassette-based multitrack home studio. It clarifies all the basic terminology and demonstrates the recording of a song from beginning to end, covering how to record guitars, keyboards, vocals and drum machines; which microphones to choose; how to patch in effects units and use them well; what makes a good arrangement; what makes a good mix; plus what to master on to and why.

Full of professional tips and clear examples, this superb video offers the musician with no recording experience a fast route to successful operation of a simple home studio.

CODE V005 **£24.95**

Running time: 1 hour 10 minutes
Format: VHS(PAL) HiFi Stereo
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

LEVEL TWO



This is, in our opinion, the *best ever* guide to the equipment and skills needed to produce high quality results from a home studio.

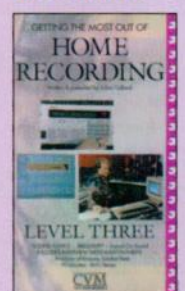
Full of clear examples and graphic information, the video majors on effects and how to use them well. It also covers the do's and don'ts of track bouncing; microphones and mic techniques for different applications; getting the most out of multi effects units; plus an analysis of guitar effects with top session guitarist Milton MacDonald and an enlightening interview with ace producer Alan Parsons.

Writer/ presenter Julian Colbeck packs the programme with professional tips, allowing musicians of all kinds to get the most out of their home studio.

CODE V006 **£24.95**

Running time: 1 hour 45 minutes
Format: VHS(PAL) HiFi Stereo
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

LEVEL THREE



This video is packed with information and professional tips on advanced MIDI applications in the home studio, including interfacing with sequencers, which sync code is best for which application and why. Hit producer Martyn Phillips (Erasure, London Beat) discusses modern recording techniques, and top programmer Paul Wiffen examines the opportunities and benefits offered by hard disk recording.It offers practical advice on sampling - how to save time and tracks; plus professional tips on advanced arranging and mixing techniques, including spectrum mixing.

CODE V007 **£24.95**

Running time: 1 hour 30 minutes
Format: VHS(PAL) HiFi Stereo
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

GETTING THE MOST OUT OF THE KORG M1

Written and presented by Julian Colbeck

The Korg M1 is a classic instrument. The range and quality of its sounds has made it one of the most successful synthesizers of all time. But because the M1 is so immediate, it's too easy just to scratch the surface, leaving many of its exciting capabilities undiscovered. This highly informative video enables M1 owners to unleash the full creative potential of this enormously powerful workstation.

With plenty of musical examples, tips and inside information, the video offers clear, concise explanations of the instruments features and operating procedures, helping you to greatly expand your dexterity and creativity across he whole range of this world-beating instrument.

Comes with a FREE exclusive custom library of fabulous new M1 sounds on Atari format floppy disk (100 Programs, 100 Combinations) created by ABWH/Yes programmer Chris Macleod.

CODE V002 **£24.95**

Running time: 1 hour 10 minutes Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

SOS MAIL ORDER ☎ 01480 461244 SOS MAIL ORDER ☎ 01480 461244

OVERNIGHT DELIVERY OPTION: ONLY £5.00! See Order Form for details

4 FINALE 3.0 VIDEO MANUALS

FOR WINDOWS & MACINTOSH

Four superb videos covering the Windows Version and four for the Macintosh version. From Basics through to the most Advanced topics in Power User, these detailed videos will guide you through Finale, giving you the knowledge you need to become a Finale expert with ease.

BASICS

MIDI setup, Tool Palette, Default File, Customising Templates, Drawing Slurs & Expressions, Key & Time Signatures, Metatools, Music Spacing & Allotments, Printing, Measure & Page Layout, and much more.

CODE V037 **£34.99**

Running time 123 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

BEYOND BASICS

Custom Instrument Library, Font Size, Pickup Measures, Measure Number Enclosures, Chord (midi & manual input), Finale Chords, Guitar Fret Boards, Mirroring, Mass edit Menues, Transoping, Alternate Notation, Moving Layers, and much more.

CODE V038 **£34.99**

Running time 92 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ADVANCED

Clef Changes, Text Blocks, Tempo Tool, Multi-measure Rests, MIDI Tool, Making an Ossia, Optimising Staves, Custom Score Layout, Page Tool: Multiple Windows, Tiling Pages, and much more...

CODE V039 **£34.99**

Running time 75 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

POWER USER

More Options Menu, MIDI Tool, Optimising Staves, Using Clip Files, Grouping Staves, Using a Macro Program, Shape Designer, Importing MIDI Files, Multiple Windows, Short Cuts, Hints & Tips, Advanced MIDI Topics, Tiling Pages, and much more...

CODE V040 **£34.99**

Running time 108 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

THE EMAGIC LOGIC TUTORIAL VIDEO VOLUME 1

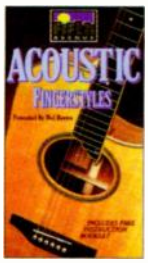
Produced by Emagic themselves, this video once again sees Tim Walter (featured on the excellent Notator video) in the tutor's chair. There are plans for a series of videos which become ever more detailed and informative, but for now Volume 1 takes you through the first steps of getting the software up and running, and covers virtually all the controls you'll need. *This video is valid for all versions of Logic, whether being run on an ST, Mac or PC.* Presentation is rather intriguing, with a mobile camera that helps to hold the interest more than the average training video and some interesting graphics that aid comprehension and help to quickly find specific tutorials and bits inside tutorials. Contents as follows:

- Tutorial 1: The Arrange window and basic sequencing
- Tutorial 2: Playback parameters & Toolbox
- Tutorial 3: Controlling MIDI data flow
- Tutorial 4: Manipulating sequence data
- Tutorial 5: Moving around in Logic
- Tutorial 6: Windows and key commands
- Tutorial 7: More sequencing
- Tutorial 8: Score
- Tutorial 9: Looking at the Event List
- Tutorial 10: Editing the Event List
- Tutorial 11: Using the Environment
- Tutorial 12: The best of the rest (HyperEdit, Matrix Editor, Cycle Mode and more).

CODE V023 **£29.99**

Total running time 70 minutes Format: VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ACOUSTIC FINGERSTYLES



Presented by Mel Reeves

In this video there are 5 major instrumental studies to work through including country, classical and blues. Each style is broken down into small sections allowing you to learn more quickly and efficiently. Each piece is demanding, but great fun to play. The final section looks at styles and techniques used by players such as R.E.M, The Eagles, Sheryl Crow and Paul Simon, and provides an insight into creating new and interesting fingerstyles of your own.

CODE V059 **12.99**

Running time approx 90 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ACOUSTIC BLUES GUITAR

Presented by Mel Reeves

Whether you can already play fingerstyle guitar, or are simply familiar with basic chords, this programme will show you all of the necessary techniques to play great blues guitar. All of the technical aspects are explained in the clearest possible way before getting down to the real business of learning 5 real blues that are great to listen to and terrific to play.

CODE V058 **12.99**

Running time approx 63 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

PLAY KEYBOARDS NOW! MELODIES

Presented by Mel Reeves

This programme will not only teach you note reading, rhythm, rests, ties and how to move up and down the keyboard with ease, but will also teach you 6 complete melodies familiar to lovers of rock, pop and classical music.

In addition, there is a further look at improvising, making use of melody and scales combined.

Clear computer graphics and the booklet enclosed will mean you won't miss a thing.

CODE V057 **12.99**

Running time approx 55 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

YAMAHA QY300 VIDEO MANUAL

Complete overview of Yamaha's new QY300 sequencer/sound source. Presented by Joe Ortiz of Heavenly Music, the video offers a hands-on tutorial on what is potentially a very powerful piece of hardware. Starts off with a runthrough of QY300 features, followed by a clear, step-by-step tutorial that introduces you to creating your own sequences and styles. As a bonus, the video comes with a free disk loaded with 6 new QY300 styles and 6 demo sequences.

CODE V025 **£19.99**

Running time 69 minutes Format VHS (PAL)
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

ENCORE 3.0 FOR WINDOWS

The basics of Encore for Windows is covered, with in-depth tuition over 83 minutes. Everything you need to get up & running is here. Basic MIDI, Score Layout, Accidentals, Key Signatures, Note Editing, Step Time Entry, Adding Staves, Click Setup, Record Setup, Linear View, Quantisation, Editing, Printing, Staff Position & Spacing, and much more...

CODE V036 **£34.99**

Running time 83 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

CUBASE 2.6 BASICS FOR WINDOWS

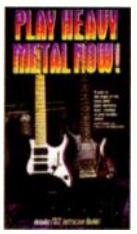
Practical guide to Cubase for Windows covers all the basic functions, ideal for the new user and those who need added insight into this complex system.

Contents: Basic MIDI, Value Selection, Arrangments, Arrange Window, Transport Functions, The Inspector, The Toolbox, Quantisation, Grid Editor, Step Recording, and much more.

CODE V035 **£34.99**

Running time 85 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

PLAY HEAVY METAL NOW!



A concise, easy to follow video guide to real heavy metal playing for guitarists of all levels.

A guide to hard rock/heavy metal techniques for guitarists of all levels. The programme covers RHYTHM, SOLOING, and TECHNIQUE. All of the techniques, solos, etc are clearly demonstrated

No need to read music. Free booklet contains tab, chord and scale diagrams.

CODE V052 **£12.99**

Running time approx 65 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

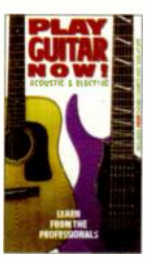
START HOME RECORDING NOW!

This is the ideal volume one guide to the use of home recording equipment. From the set up of basic 4-track cassette machines to sub-mixing Mel Reeves uses straight-forward language to talk to fellow musicians about the methods used to get the sounds in their heads onto tape. Includes free instruction booklet.

CODE V055 **£12.99**

Running time approx 55 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

PLAY GUITAR NOW! ACOUSTIC & ELECTRIC



An easy-to-follow video to take you from the basics to a full rock solo.

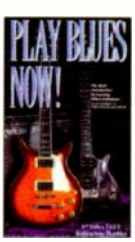
The programme covers TUNING, CHORDS, FINGERSTYLE, 12 BAR BLUES, BARRE CHORDS and ROCK SOLOING for both electric and acoustic guitars. Includes free chord/tab booklet.

It is not necessary to be able to read music to learn from this video.

CODE V053 **£12.99**

Running time approx 51 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

PLAY BLUES NOW!



A complete guide to blues guitar playing that shows a variety of blues rhythm and soloing styles — for both beginners and advanced players alike.

Learn the blues style of Eric Clapton, Stevie Ray Vaughan, Peter Green, etc. The programme not only covers the usual blues shuffles and scales but using 4 complete songs, gives you the resourses and techniques to create professional blues parts and solos in a wide variety of blues styles.

CODE V051 **£12.99**

Running time approx 50 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

PLAY KEYBOARDS NOW!

Presented by Mel Reeves

An up-to-date video/booklet that gets to the heart of modern keyboard playing with no need to read music!

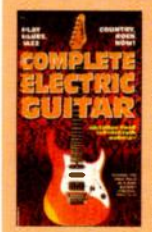
All you need to be able to create pop, rock and even jazz chord accompaniments using major, minor, seventh, sus 4th and added 9th chords. Learn arpeggios, random arpeggios, chord 'splitting', crushed tones, boogie blues, inversions and much more.

Free instruction booklet and stickers included.

CODE V054 **£12.99**

Running time approx 60 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

COMPLETE ELECTRIC GUITAR



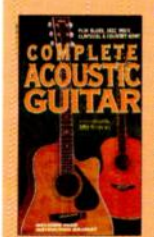
Presented by Mel Reeves

Learn how to create solos and rhythm parts in any style! The programme covers ROCK 'n' ROLL, BLUES, JAZZ, COUNTRY, ROCK and FUSION and much, much more. Plus the clearest possible guide to chord and scale construction, tonal centres and working out parts for yourself. Includes free construction booklet.

CODE V050 **£12.99**

Running time approx 65 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

COMPLETE ACOUSTIC GUITAR



Presented by Mel Reeves

Whether you only know a few chords, or are already proficient, this easy-to-follow programme will show you all of the main guitar styles, as performed on the acoustic guitar. As well as learning tips and 'tricks of the trade' Mel Reeves will show you 6 great instruments, step-by-step and take your playing to new heights. Plus, open tuning, the capo, high-strung guitar, reading music and more!

Styles include: Guns 'n' Roses, Bon Jovi, Hendrix Blues, Mississippi Blues, Django Style Jazz, Nuits En Moscow, Classical, Romance, Carter Style, Buffalo Gals and Bottleneck/Slide Style.

CODE V056 **£12.99**

Running time approx 78 minutes
Postage: UK £1.75, Europe £4.95, R.O.W. £6.95

SOS CDs

SOUND CHECK TEST CD

Impeccably recorded and compiled by Alan Parsons and Stephen Court.

Sound Check CD contains 92 tracks of test signals and reference recordings made at Abbey Road Studios that can be used to set up monitors, check room performance, faulty equipment etc, and overall recording quality. No studio should be without one! 20+ close-miked instruments/vocals/ music extracts. SMPTE/EBU timecode tracks (25, 30, drop-frame). Pink noise test tones. Third octave tones. Sweep tones. Sine + Square wave tones.

CODE CD029 **ONLY £19.50**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

SYNTHESIZER TECHNOLOGY ASTRAL AMBIENCE CD

Hours of research and endeavour in the raw timbral archives of the largest collection of analogue synthesizer systems in the world have resulted in the release of the first in a long awaited series of creative resource CDs.

The vast psycho-acoustic spectrum of the Museum of Synthesizer Technology has now been opened up to the music-making populace — Over 1500 samples.

CODE CD036 **£32.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

ATTENTION SOS SUBSCRIBERS! You are now entitled to a 10% discount off any Books

SOUND ON SOUND

10 % OFF MAIL ORDER BOOKS with all new UK Subscriptions

(or Sub Renewals at the new rate)

SPECIAL SUBSCRIPTION OFFERS

Anyone taking out (or renewing) a 12 issue subscription to SOS becomes entitled to a 10% subscriber discount on SOS books *(remember: always quote your unique Subscriber Number when ordering books).*

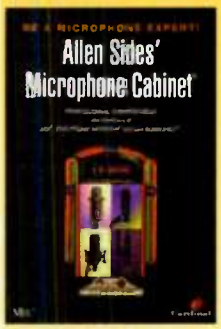
SUBSCRIPTION RATES		
UK	12 ISSUES	£35
EUROPE (AIRMAIL)	12 ISSUES	£50
WORLD (AIRMAIL)	12 ISSUES	£65

HOW TO ORDER

To order your SOS subscription, phone now on **01480 461244** and ask for the Subscriptions Dept. (Visa, Access, Amex and Switch cards accepted.) Outside office hours call our Mail Order Hotline on **01480 461786**, and leave the following details: your name, address and daytime telephone number, your credit card number, expiry date (and issue number if a Switch card), and ask for a 12 month subscription. Alternatively, you may send a cheque/postal order (made payable to *Sound On Sound Ltd*) with one of the order forms in the magazine.

CALL NOW TO SUBSCRIBE 01480 461244 (9am-5.30pm) 01480 461786 (out of hours)

BE A MICROPHONE EXPERT! CD-ROM



From Cardinal Business Media

A revolutionary new microphone auditioning tool. This unique, fully interactive CD-ROM lines up the top professional microphones, both classic and contemporary, for a

ALLEN SIDES' MICROPHONE CABINET

series of 16-bit audio comparison tests on dozens of instruments. A superb resource for professionals and students alike, the disc features tests of 66 mics and 33 different instruments, including drums and cymbals, percussion, guitars, a Hammond B-3 organ and a wide variety of brass, woodwinds and strings. The microphones were chosen from the world-renowned collection at Sides' Ocean Way studios in Los Angeles, including models from: AKG, Audix, Audio-Technica, B&K, Bever, Coles, Crown, Electro-Voice, Groove Tube, Milab, Neumann, RCA, Sanken, Schoeps, Sennheiser, Shure, Sony and Telefunken. Sort by microphone to check out the best instruments for each, or sort by instrument to see which mics you should use.

CD-ROM Requirements:

Mac: *68030 or better, System 7.0 or later, min. 8Mb RAM, double-speed CD-ROM drive.*

PC: *80486 or better, Windows 3.1 or later, min. 8Mb RAM, 640 x 480 or higher screen in 256 colours, double-speed CD-ROM drive.*

CODE CDROM 2 **£49.95**

Postage: UK £1.50, Europe £3.95, R.O.W. £5.50

SOS Special Offers

QUALITY CABLES

Due to the popularity of our range of affordable eight-way cable looms, SOS Mail Order can now offer you even more products in a similar vein. All cable is manufactured to the same high quality as the looms, and prices are once again excellent. Whatever your cable needs, you should find something in our list at a price that's right.

3m 8-way phono to phono
Code CRA803 **£27.90**
Postage: UK £2.50, Europe £5.95, R.O.W. £9.95

3m 8-way phono to jack
Code CPR803 **£27.90**
Postage: UK £2.50, Europe £5.95, R.O.W. £9.95

3m 8-way jack to jack
Code CPP803 **£27.90**
Postage: UK £2.50, Europe £5.95, R.O.W. £9.95

7m 8-way jack to jack
Code CPP807 **£39.00**
Postage: UK £5.00, Europe £9.95, R.O.W. £18.95

3ft MIDI cable
Code MID303 **£3.30**
Postage: UK £1.75, Europe £3.50, R.O.W. £3.75

10ft MIDI cable
Code MID310 **£4.80**
Postage: UK £1.75, Europe £3.50, R.O.W. £5.25

20ft MIDI cable
Code MID320 **£6.70**
Postage: UK £1.75, Europe £3.50, R.O.W. £5.25

10ft right-angle MIDI cable
Code MDR110 **£4.69**
Postage: UK £1.75, Europe £3.50, R.O.W. £5.25

25ft Mic cable
Code MCL125 **£14.50**
Postage: UK £1.75, Europe £3.50, R.O.W. £5.25

25ft jack to jack cable
Code GTR425 **£9.99**
Postage: UK £1.75, Europe £4.50, R.O.W. £6.50

1.5ft jack to jack patchbay cables, 8 per pack
Code CPP845 **£14.70**
Postage: UK £1.75, Europe £3.50, R.O.W. £5.25

1m insert leads – stereo jack to two mono jacks
Code STP201 **£4.50**
Postage: UK £1.75, Europe £3.50, R.O.W. £3.75

Stereo jack to 2X mono female socket adaptor
Code YPP117 **£3.40**
Postage: UK £1.75, Europe £3.50, R.O.W. £3.75

MIDI female - MIDI female adaptor (joins two MIDI cables)
Code GMD108 **£3.49**
Postage: UK £1.75, Europe £3.50, R.O.W. £3.75

Musician's Home Stereo Interface

If economic necessity means that you've got to use your hi-fi system for monitoring, then this affordable little box is for you. It simply matches the output of your mixer or synth to your hi-fi, and features three switchable inputs for maximum flexibility.

Code AJB128 **£39.50**
Postage: UK £1.75, Europe £3.50, R.O.W. £5.25

☎ Sally Thompson on 01480 461244, 9.00am to 5.30pm to order. Or call our 24 hour hotline on 01480 461786, and leave the following details on the answer phone: the order code and quantity you require; your name, address and daytime telephone number; your credit card number, expiry date (and issue number if a SWITCH card). Your credit card will not be charged until each item is sent. Orders are well-packaged and sent promptly. UK readers, to use our new overnight delivery option (£5.00), please ring 01480 461244 before mid-day and ask for an overnight delivery. Depending on stock availability, items will reach you on the next working day (not Saturday/Sunday).

PRIORITY ORDER FORM

Post to:
Sound On Sound Ltd, Media House, Burrel Road, St. Ives, Cambs PE17 4LE

Please make cheques/postal orders payable to:
'Sound On Sound Ltd'.
Overseas payment must be in Pounds Sterling drawn on a British bank.

PLEASE REMEMBER WE CANNOT ACCEPT CREDIT CARD ORDERS UNDER £5.00

To ensure that our pricing policy is as fair as possible, postage is payable on each individual item. Refer to the item details for the amount of postage. *The Postage Calculator system used previously no longer applies.*

SOS subscribers are only entitled to 10% discount on their book order if they enter their current subscriber number in the boxes provided.

BLOCK LETTERS

Name .....

Address .....

.....

.....

.....

Post Code ..... Tel (Daytime) .....

Do you currently subscribe to SOS? Y ☐ N ☐ Your Subscribers Ref. No. ☐☐☐☐

AMERICAN EXPRESS/ACCESS/VISA/SWITCH accepted.

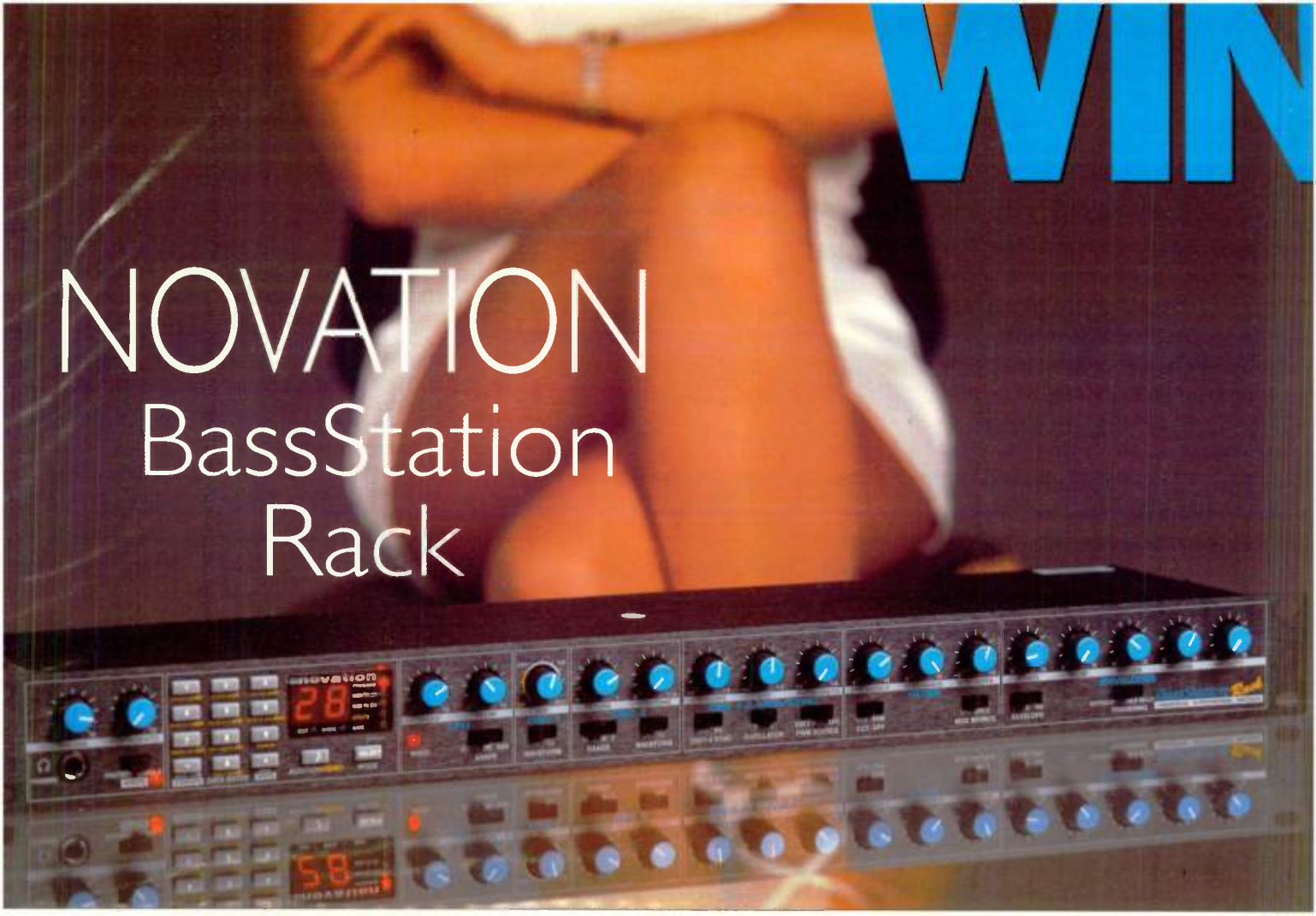
CARD No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Valid from ☐☐ ☐☐ Expiry date ☐☐ ☐☐ Switch Issue No ☐☐ Signature .....

ORDER CODE	QTY	DESCRIPTION	PRICE	POSTAGE	SUB-TOTAL

ORDERS ARE DESPATCHED 10-14 DAYS FROM THE TIME WE RECEIVE THE ORDER, DEPENDING ON STOCK LEVELS AND CHEQUE CLEARANCE. **TOTAL**

WRH



WIN

NOVATION BassStation Rack

Go back to the future and win Novation's classic analogue synth sound module, described in our *SOS* review as "a true, programmable monosynth for the '90s" and "tremendous fun and an unqualified bargain at £399". Features include two oscillators with standard waveshapes, a voltage controlled filter with resonance, plus an LFO and two envelopes for filter/pitch/pulse width modulation, all housed in a handy 1U rack unit. The BassStation Rack is fully conversant with MIDI and includes real-time transmission and reception of filter and envelope controls — perfect for live 'tweaking' and recording on your MIDI sequencer. There's even a built-in MIDI to CV converter to allow you to control other analogue synths.

To enter, use your skill to select the correct answer to each multiple-choice question below, and complete the tie-breaker. (See our review of the BassStation Rack in *SOS* July 1995, if you require inspiration.) Then, send your completed entry form to the address below, to arrive no later than

Friday, August 9th 1996.

Prize kindly donated by Novation. Tel: 01628 481992.

the small print

1. Only one entry per person is permitted.
2. Employees of Sound On Sound Ltd, Novation Electronic Music Systems Ltd, and their immediate families are ineligible for entry.
3. No cash alternative is available in lieu of the stated prizes.
4. The competition organisers reserve the right to change the specification of the prize(s) offered.
5. The judges' decision is final and legally binding, and no correspondence will be entered into.
6. No other correspondence is to be included with competition entries.
7. Please ensure that you give your DAYTIME telephone number on your entry form.
8. Prizewinners must be prepared to make themselves available in the event that the competition organisers wish to make a publicity presentation.

QUESTIONS

1. Which of these is *not* a Novation product?

a. BassStation ☐
b. DrumStation ☐
c. SpaceStation ☐
d. RaveStation ☐

2. What does 'CV' stand for on the BassStation Rack?

a. Curved Velocity ☐
b. Curvaceous Voluption ☐
c. Controlled Velocity ☐
d. Contro Voltage ☐

3. What standard oscillator waveshapes are offered by the BassStation Rack?

a. Square, Saw, Pulse ☐
b. Soft, Blur, Pulp ☐
c. Saw, Square, Triangle ☐
d. Rhomboid, Hammer, Saw ☐

4. What is the cutoff frequency range of the BassStation Rack's filter?

a. 0Hz to 5Hz ☐
b. 5Hz to 10kHz ☐
c. 5kHz to 100kHz ☐
d. 5MHz to 100MHz ☐

Name .....

Address .....

.....

.....

Daytime tel. no .....

TIE-BREAKER

In not more than 30 words, describe the essential features of a new product that you think Novation should manufacture

.....

.....

.....

.....

.....

.....

.....

.....

☐ Please tick box if you do not wish to receive further information from Novation.

Post your entry to: *SOS Novation Competition, Sound On Sound, Media House, Burrel Road, St Ives, Cambridgeshire, PE17 4LE.*

Novation Competition

CLASSIFIEDS

☎ 01480 461244 Fax 01480 492422 - Patrick Shelley

DISPLAY BOX £26.00 + VAT per single column centimetre (minimum height 4 cms).

SITUATIONS VACANT £30.00 + VAT per single column centimetre.

LINEAGE 80 pence per word including VAT (minimum of 12 words).

Classified Dept., Sound On Sound, Media House, 3 Burrel Rd, St Ives, Cambs PE17 4LE

(3 column page). Spot colour available on request.
Box Numbers available at an additional £25.00 per insert.

The attention of advertisers is drawn to the Business Advertisements (Disclosure) Order of 1977, which incidentally was first made from the 1st January 1978 all advertisements by persons who seek to sell goods in the course of business must make that fact clear. Please the above date, companies, partners, private persons whether an advertisement relates to a sale by a trader or a private individual.

Index to Advertisers

Artists Wanted	259	Duplication	254 259	Insurance	259	Situation Vacant	252
Clubs	261	Flight Cases	253	Licensing	254	Soft Cases & Covers	259
Courses	260 - 261	For Hire	259	Recording Studios	253/263	Studio Acoustics	261
Digital Editing	259	For Sale	244 253	Services	262 - 263	Tuition / Programming	261

Studio Clearance Sale

All prices are o.n.o. and plus VAT. Part Exchange considered

Quested Q312 Studio Monitors, ATC crossover, 3 Yamaha Power Amps	£2600	JL Cooper Rack Mount MIDI to CV and Gate Converter	£150
Hammond C3. As New, unsplit in flightcase, with pedals and Leslie 147	£2260	Yamaha Mup 4 MIDI Processor	£150
Hammond C3. As New, unsplit in flightcase, with Leslie 147	£2100	Yamaha MJ 802 Rack Mount Line Mixer	£150
Roland MKS 50 and Programmer	£275	Alesis HR 16 Drum Machine	£120
Roland MKS 70 Rack Synth	£475	Roland MC 500 Mk2 Sequencer	£250

Phone 01306 889131. 10am to 7pm

ALL MPC USERS

Excellent prices on all Turtle Beach sound cards Saw Quad Cakewalk Pro Audio and Cubase Audio
Complete hard disk recording packages available

Secondhand recording equipment available including...

Fostex M80 Rackmount & looms	£625	Drawmer DS201 dual noise gate	£200
Seck 18:8:2 mixer	£649	XRI XR300 SMPTE	£95
Slapback Audio Vocal Exciter	£75	Various mics	from £15 each
Drawmer LX20 dual compressor	£195	2 off Rackmount trolley's	£45 each

Contact: Musical Technics - Tel: 0121 445 3572 *evenings & weekends welcome*

FOR SALE

MULTITRACK SALES CENTRE

KURZWEIL K2000R / SAMPLER (V3 8Meg)	£1599
FOSTEX E16 (excellent condition)	£1499
FOSTEX B16 (new relap head)	£1299
AKAI S900 + LIBRARY	£350
TASCAM 238S (new)	£795
FOSTEX R8 (new)	£975
ALESIS A-DAT XT (20 hours)	£ 1899
ALESIS A-DAT (94 hours V4.3)	£OFFERS
ROLAND SRV2000	£299
YAMAHA DEQ 7 (Digital e.q.)	£495
TASCAM DA88 (180 hours)	£offers
TASCAM RC848 (big remote)	£699
ROLAND TB303	£OFFERS
AKAI S950 (fully expanded)	£699
EVENTIDE H3000 D/SE (unused as new)	£1800
KORG DSS 1 (sampler synth)	£499
FOSTEX 812 (12/8 new)	£695
TASCAM M2600 32:8 (8 aux as new)	£1899
FOSTEX R8 (v.g.c.)	£699
AKAI DR4D (MIDI + SMPTE card)	£799
YAMAHA PROMIX 01 (new)	£1399
AKAI S3000 (8meg + dig board)	£1499
E-MU PROTEUS 1	£275
TASCAM 1508 (mint)	£499
DIGIDESIGN A-DAT DIGI INTERFACE	£699

* PART EXCHANGE WELCOME *

ALL STUDIO & MUSIC EQUIPMENT

WANTED

FOR CASH NOW !

☎ ASCOT (01344) 891110
or (0831) 882666

Hands On MIDI Software Ltd

Superior quality MIDI files - suppliers to *I.B.M, Roland, Yamaha and Microsoft*

MIDI SONG FILES From **£4.95**

Large Library of hit songs.
Easy to Use - All songs are Configured for GM, GS & XG devices for 'hassle free' use.
All major platforms/Keyboards supported - IBMpc, Mac, Atari, Korg Yamaha, Roland, Technics, Alesis DDSQ etc.,
Fast Delivery - All orders are normally dispatched first class post same day.
Quality - Look at the company we keep!
Unparalleled technical support.
Comprehensive Documentation.
Lyrics available to every song - free to computers users!

Bulk Discounts Available

The Hits are BACK!!! - Latest Releases

STOP PRESS!! TAKE THAT SONGS NOW AVAILABLE from - Hands On Deutschland

Lifted - Lighthouse Family
Give Me a Little More Time - Gabrielle
Children - Robert Miles
Missing - Everthing But The Girl
Ooh Ahh Just A Little Bit - Gina G
Fast Love - George Michael

NEW **MIDI Chords for PC**

Only - £19.95

Automatically analyses a MIDI file and prints out the Chords

Got an Atari?
Want a MIDI file player?
You've already got one with.....

OnStage

OnStage Pro - £99.95
OnStage - £79.95
OnStage Soft - £39.95
Excellent Reviews
Crash Proof! - phone for details.

Sweet 16

16 Track, 32 MIDI channel MIDI Sequencer for IBMpc and Atari ST.
Demo versions available.
Excellent Value £59.95

All trademarks are Acknowledged
Prices and Specifications are subject to change without notice. E & OE.

Handbook of MIDI Sequencing NEW

Covers all topics on MIDI Sequencing including Guitar, Brass & Drum programming!
For Beginners to Advanced users
Over 250 Pages
This Book is "THE BIZ!"
Order your copy Today!

Giveaway price of **£12.95**

Psst! Want 32 MIDI Channels for your Atari ST/STE?

16+ The Original **£24.95**

Suitable for Cubase (all versions), Creator/Notator, Mastertracks Pro.
Moneyback Guarantee!!

Call for your FREE 34 Page Catalogue - NOW!

"Hands On" Midi Software Ltd., 11 Warfield Avenue, Waterlooville, Hampshire PO7 7JN
Tel: 01705 783100 Fax: 01705 783200 BBS Service: 01705 783400

The MACKIE 8•BUS console is the most acclaimed mixer in the world. Make your Mackie look even more brilliant - add a Mack Stack, which encloses the meter-bridge, hides the cables and creates a place for monitors. From £299.

Available from all good Mackie stockists.

For your nearest dealer contact:

Key audio systems Ltd.

Tel: 01245 344001 Fax: 01245 344002

MUSIC IRELAND

MIDI SONG FILES

Excellent selection

COUNTRY - FOLK

OLDTIME & MODERN

Tel. 01504-265113 for free Catalogue.

Fax. 01504 265708

2 Demos available send £2.00 in stamps to;

Music Ireland

12 Killala Pk, Foyle Springs,

Londonderry BT48 0DG

1416

Studio Systems

Specialising in Soundtracs Consoles

The SOUNDTRACS range:

LARGE PRODUCTION CONSOLES

QUARTZ 32/32/16/6-Remix/Midi Mute/6 Aux/TT P/Bay

IS LINE 36/8+8 FX Rets (8S-Remix)/8 Aux/TT P/Bay (surface Lit)

CMX 32/32/24 (36-Remix) digi route/6 Aux/TT P/Bay

CM4400 32/32/24 similar to CMX

PROJECT / MID RANGE

M Series 32/8/16 (40-Remix)/8 Aux

Mega 32/24/24 (36-Remix)/6 Aux Midi Mute

MIDI PC 32/32+8 FX Rets (32-Remix)/Midi Mute

MIDI PC 24/24 (40-Remix) Midi Mute

SOLO 32 and Topaz

All consoles are serviced to full spec', guaranteed, and will give you years of sonic security!

Please call and check for stock / info and prices from:

Studio Systems

"THE HOME WHERE THE SOUNDTRACS ROAM!"

We have had over 12 years experience with Soundtracs range and carry virtually every spare part in stock. Call our Service dept for technical advice and studio installation quotes.

If you would like to SELL YOUR SOUNDTRACS then call.

Tim Jones Studio Systems.

WATFORD 01923 267733 CELLNET 0850 373964

1426

ADVANCED SOUNDS LTD

New & Used Equipment Sales

Selection of current used stock

(Telephone for new equipment prices)

Akai S1100 (18 Mag)	£1629	Fostex DMT8	£1199
Allen & Heath GS1 (3 months)	£729	Fostex 3045 (16ch Dolby C)	£499
AKG 414 ULS (4 months)	£689	J L Cooper PPS100 Sync	£199
Alesis SR16 (as new)	£169	Kurzweil Micropiano	£399
Alesis ADAT XT (150 hours)	£2259	Mackie 24/8/2 (2 months)	£2799
Alesis BRC (as new)	£869	Mackie 1202 VLZ	£325
Alesis BRC (vgc)	£749	Mackie 1402 VLZ	£439
Apple Trinitron 14" Mon (3 months)	£215	MIDI Timepiece 2	£469
Behringer Intelligate XR2000	£215	RolandVS880 + INT HD + FX	£1799
Behringer Eurodesk (as new)	£1699	Tascam SY88 for DA88	£459
Digitech Studio Quad	£399	Tascam DA20 (5 months)	£599
EMU Proteus 2 (3 months)	£569	Tascam 246 (ex cond)	£335
Fostex R8 (vgc)	£769	Yamaha PFP100 Clavinova	£1099
Fostex E16	£1739	Yamaha C3 Grand Piano	£5495

* Part exchange and equipment purchased for cash * Licensed credit broker * Multitrack and Keyboard Repairs * Well established co formed in 1983 * We can despatch by courier overnight * Studio and Musical equipment hire dept including home recording packages. Prices include VAT.

TEL: 0181 462 6261 (OR 8621)

1360

ROW AUDIO SALES

NEW - USED -

EX DEMONSTRATION

AKAI S950 FULL EXP	£780
AKAI S3000 + 10MEG (EX DEM)	£1575
KORG WAVESTATION EX	£875
YAMAHA SY88 + ROM + CARDS	£700
ROLAND JUNO 106 MINT	£500
ROLAND SUPER SC88 (NOT VL)	£500
ROLAND DMC 1 MODULE (EX DEM)	£400
DBX 266 COMP/GATE NEW	£220
ROLAND PC200 MKII EX DEM	£120
ALESIS ADATS FROM V.4	£1500
A+H GS3 16/8/2	£1100
AKG C3000 MICS NEW	£290
VARIOUS 4 TRACK FROM	£200
VARIOUS 8 TRACK MACHINES (FR)	£650
FOSTEX E16	£1695
STUDIOMASTER PRO-LINE 16/4/8	£500
CHEETAH M56 MODULE	£200

PHONE FOR UP TO DATE LIST

WANTED

ALL USED GEAR COMPLETE HOME OR PRO STUDIOS, SAME DAY COLLECTION BEST PRICES PAID. OPEN 7 DAYS

TEL 0161 483 8551 ANYTIME

0860-105111 MOBILE

1454

BIG BAD SOUNDS SAMPLE CD

"Pure Groove Inspiration"

Original Tranced Induced Distorted Acid Grooves, Moods, Atmospheres, Sweeps, Analogue distortions and more.

Percussion/Multi-Basses included.

Over 600Mb of Grooves and production sounds.

Add this to your collection!

~~£29.99~~ inc P&P

Tel / Fax 0151 353 0394

E-Mail address: amplesou@mail.cybase.co.uk

Internet: http://www.cybase.co.uk/ample-sounds/

Ample Sounds UK

PO. Box 18, Neston, South Wirral L64 3UX

1424

twiddly bits

http://www.gmedia.net/keyfax

1 Vol 1 - General Instruments. £19.95 Plus £2 P&P
Licks, Riffs, Runs, Slides, Rolls, Trills for Bass, Brass, Drums, Strings and many more. All played on the corresponding MIDI Controllers by world reknown players.

2 Vol 2 - Gate Effects. £12.95 Plus £2 P&P
The classic studio effect "I was quite basically amazed, not only by the simplicity of operation but also by the extraordinary transformation of a quite mundane synth sound" The Mix May 96

3 Vol 3 - Elec & Acoustic Guitars. £19.95 Plus £2 P&P
Future Music Platinum Award. The ultimate Guitar "Bits" by Steve Hackett (Genesis), Milton McDonald (Eternal) and more.

4 Vol 4 - Drums & Percussion. £19.95 Plus £2 P&P
Ever wanted Bill Bruford (King Crimson) or Gavin Harrison (Incognito) on your tracks ? Over 700 "Bits".

5 Vol 5 - Country. £19.95 Plus £2 P&P
"So good are the examples on this disk that it's hard to believe the performance are coming out of a GM module" Said Paul White in Feb Sound On Sound.

6 Vol 6 - The Funk. £19.95 Plus £2 P&P
Killer funk bits on a 70's tip. Snake Davis (M-People), Shane Meehan (Definition Of Sound), Cyril McCammon (Freakpower) and more.

Twiddly Beats - Brazilian Rythms. £19.95 Plus £2 P&P
"If they weren't so darn danceable they'd be a fine educational tool". Keyboard US Nov '95.

Master Series - John "Rabbit" Bundrik. £24.95 Plus £2 P&P
Rabbit's CV read like a who's who of rock; Mick Jagger, The Who, Free, Joan Armatrading etc. "A delightful collection" Keyboard Review May 96

AWE 32 CD ROM

Keyfax announce a superb CD ROM with sounds taken from; BassStation, Nord lead, CS80, Minimoog, Grand Piano, Bass, Guitars and much more. All recorded at 44.1kHz for optimum quality

Only £34.95 Plus £2.00 P&P

Keyfax Software P.O. Box 4408, Henley on Thames, Oxon, RG9 1FS

Tel: 01734 471382. E-Mail; 100705.3565

Keyfax Software U.S.A. P.O. Box 958, Aptos, CA95001. Sales line 406 688 4505 E-Mail jaiceeee@aol.com

AARONSOUND

TASCAM M2600 32/8 DESK (6 MONTHS OLD) £2295
SOUNDTRACS MEGAS 32/24 MIDI (MINT) £4195
STUDIOMASTER P7 MIDI 24/8 (6 MONTHS OLD) £1695
ALLEN & HEATH GS1 MIDI & UPTO 32CH £545
MACKIE CR1604 BOXED AS NEW £595
AKAI S1100 4MEG £1300 ..... DIGITAL BOARD (OPTICAL) £145
AKAI S950 FULLY EXPANDED £650 ..... S1000 2 MEG £1050
KORG MS10 MONOSYNTH £175, SQ10 ANALOGUE SEQ £400
ROLAND D50 VGC £395 ..... JX8P £365
MOOG PRODIGY £235
ROLAND R70 DRUMBOX (808 & 909) £265 ..... DR660 ..... £225
AKG C414B ULS MIC INC POP SHIELD & CLIP MINT £595
YAMAHA TX816 (8 DX7s) £745 ..... TX802 ..... £325
ASHLEY SC60 6 BAND PARAMETRIC EQ (1970's) £145
ROLAND A30 MASTERBOARD £245 ..... PC200 MK2 ..... £140
ROLAND JUNO 60 MINT £285 ..... JUNO 6 ..... £195
MICMIX MASTERROOM USA VINTAGE SPRING REVERB £195
SOUNDCITY ECHOMASTER 2 DISC ECHO £245
EMT 140 PLATE REVERB (MASSIVE) £595
16MEG SIMMS FOR AKAI XL SAMPLERS £265
4MEG SIMMS FOR AKAI XL SAMPLERS £65
EVANS AE205R ANALOGUE ECHO & SPRING £145
AKG BX5 SPRING REVERB £145
HOHNER HS1E 2MEG SAMPLER (RESONANT FILTERS) £445
SIMMONS SPM 8/2 RACK MIDI MIXER £145

ALSO
YAMAHA DMP7 £645, YAMAHA DX5 (2 x DX7's) £425, CUBASE V3 £150, ATARI & MON £195, AKAI ME35T TRIGGER £160, YAMAHA REX 50 £130, ROCKTRON PRO CHORUS £90, ROLAND SIP300 GUITAR PRE AMP £135, H/H VX300 POWER AMP £245, AMCRON DC300 £345

ALL PRICES INCLUDE VAT

WANTED

All Gear & Studios for Cash

Overnight delivery — Same Day Collection
We are looking for:- Analogue Synths & Drum Boxes, Outboard + FX, Juno 106, Samplers, JD800, Mixing Desks etc.
WE WILL SELL ALL YOUR EQUIPMENT ON BROKERAGE!

FAX / TEL 0161 442-8616
MOBILE 0831 1066-85

Keychange Music Services

The Musicians supplier of Atari Spares
Repairs and Upgrades.
Machines and Hi Res monitors always available
Try us for CD Rom drives and The Internet
Warrington 01925 266120

Bob Moog says

"THEREMINS are BACK" ..from £269!!

At last... an affordable THEREMIN! Now made in the USA by Bob MOOG's company, Big Brian, the ETHERWAVE THEREMIN is an authentic compact version designed to emulate the tone colour and playing characteristics of Leon Theremin's original designs of 70 years ago... hear the "Good Vibrations" ethereal sound WITHOUT TOUCHING ANYTHING!... and to help your playing technique, we include Lydia Kavina's "Complete Theremin Video". ...please phone for more information...

Kit version (model ETK) ...£269
Assembled (model ETLB) ...£299
Assembled + Turbo PCB (for midi) ...£329
Package (ETLB Turbo + I/face) ~~£348~~ ...£775
with the interface the Theremin will control ANY MIDI device
*Real time pitch readout *SIM MIDI/VC/Theremin conversion
*128 prog user patches *Hold via F/Switch (extra £40)
*Midi merge *Twin 1 volt o/p
*8 octs tracking ...and more, call us for specs!

E-Mu ORBIT Has Docked

"...its a pleasant surprise to find the UK price at £269 inc delivery... (the Etherwave) is an improvising instrument... it puts out the sort of signal FX boxes love... a wonderfull cost-effective way to own a unique sounding instrument... well designed, quite remarkable quality hardware, excellent instructions... sonically flexible... mounts on a mic stand... and made by the most famous thereimn manufacturer living!..." *The Mix 1996 ?.*

Sole UK/Eire distributor
SECOND GEAR
2nd Floor Business Centre
Forest Mills, Highurst Street
NOTTINGHAM NG7 3QA
0115-978-0582 (6 days 11-late)

E-Mu/FOSTEX/Behringer specialists
NEW HIRE SERVICE
Mail Order & Free Delivery

1444

Roland
STANDARD MIDI FILES

We have a large selection of genuine Roland midi files albums in stock, Programmed by Roland, this collection is essential for Roland GS users. Over 20 albums are currently available, ranging from Classical thru Jazz to Rock and Reggae with lots more categories in between.

- Price: £11.99 Per Album
- Free Catalogue available featuring the entire range. Phone for your copy.

Labyrinth midi file Albums
NEW ADDITIONS
NOW AVAILABLE WITH ENCODED LYRICS (SEE BELOW)

We have increased our collection to 7 compilation albums. There are lots more on the way. Stay tuned!
- Madness Album
- Roxette Album
- Beatles Hits Volume 1
- Beatles Hits Volume 2
- Queen Greatest Hits Album
- Cliff Richard Album
- Motown & Soul Greats

All above are priced at just £11.99 each

POWER BYTES
NOW AVAILABLE IN XG FORMAT

Power Bytes is a song construction package which offers the user a wide range of usable Drum, Bass, Guitar and other instrument patterns, including Wah guitar licks and Bass riffs in various styles, this product is designed to help you compose your own song sequences or Midi Files. Get an instant idea of what your compositions will sound like without having to spend hours sequencing the parts yourself. Power Bytes has recently received excellent reviews in the Music Press.

PRICE: £14.99 + P&P

A NEW CONCEPT IN STANDARD MIDI FILES

SMF's with Encoded Lyrics

The latest addition to our product catalogue is a collection of SMF compilations containing encoded lyrics which when used with the correct equipment will be displayed visually in synchronisation with the music. This collection will be particularly interesting to Roland G-800 and Roland E-96 users as the lyrics will display on the LCD screen of they keyboard. In addition, software programs such as the Tune 1000 "Soft Concert" or Cakewalk Professional packages will also display lyrics on your computer screen in this fashion. Apart from the Motown & Soul Greats, the remaining Album titles shown above are available with encoded lyrics at the price of £14.95 Per Album

FREE INFO PACK

Labyrinth currently possess an extensive product catalogue which includes midi files. Midi file titles are available individually (excluding Roland titles) and we do not set a minimum order. Please call us to receive your package which includes a FREE midi file demo disk and extensive product catalogue.

All major credit cards accepted.
Sameday Despatch

STYLES FOR KORG

New I-series style disks available. Programmed by the team at Labyrinth. These currently available are:
- Pop Styles 1
- Big Band Volume 1
- Big Band Volume 2
- Dance/Rave Styles 1
- Rock Styles 1
- E.P Ballads Vol 1

£7.95 per style disk!

STYLES FOR Roland

Labyrinth are now able to offer a range of new style disks for the Roland E-86 and G-800 keyboards. There are currently 4 disks available for each keyboard with new styles ranging from Country through to Waltzes and everything in between. Each disk is priced at £14.99 Please phone for your FREE LIST of what is available.

Labyrinth Midi Music, Labyrinth House, 11 Albert Place, Lower Darwen, Blackburn, Lancs. BB3 0QE
Telephone: 01254 678915 Fax: 01254 678917
Compuserve: 100305, 1751. E-mail: 100305, 1751 @ compuserve.com

LICENCED BY M.C.P.S. and E.M.I.

LABYRINTH MIDI MUSIC
A LABYRINTH INTERNATIONAL COMPANY

Phuture Sounds is sole Worldwide Distributor for DAC Products

1 U Rack systems

The following are available in a convenient 1 U rack module
Rack includes power supply, cooling fan, SCSI cable & terminator, and 1 piece of media (where applicable)

R2000	135Mb Syquest EZ Drive	CALL
R2000	270Mb Syquest Drive	CALL
R2000	1Gb IOMega Jaz Drive	CALL
RW2000	230Mb Optical Drive	CALL
MDR2000	270Mb Syquest + 230Mb Optical	CALL
MDR2000	1 Gb Jaz Drive + 230Mb Magneto Optical	CALL
MD2000	270Mb Syquest + 540Mb Fixed Drive	CALL
MD2000	270Mb Syquest + 1Gb Fixed Drive	CALL
MD2000	270Mb Syquest + 2Gb Fixed Drive	CALL
MD2000	230Mb Optical + 540Mb Fixed drive	CALL
MD2000	230Mb Optical + 1 Gb Fixed Drive	CALL
MD2000	230Mb Optical + 2Gb Fixed Drive	CALL
HD2000	540Mb Fixed Drive	CALL
HD2000	Twin 540Mb Drives	CALL
HD2000	1Gb Fixed Drive	CALL
HD2000	Twin 1Gb Fixed Drives	CALL
HD2000	2Gb Fixed drive	CALL
HD2000	Twin 2Gb Fixed Drives	CALL

2 U Rack systems

R4000	88Mb Syquest Removable Drive	CALL
R4000	200Mb Syquest Removable Drive	CALL
CD4000	Quad Speed CD Rom Drive	CALL
CD4000	Six Speed CD Rom Drive	CALL
RW4000	230Mb Optical Cartridge Drive	CALL
RW4000	Panasonic Optical/CD Rom Combined	CALL
RW4000	1.3Gb 5.25" Optical Drive	CALL
RW4000	2Gb Tape Backup	CALL
RW4000	2Gb to 8Gb Tape Backup	CALL
RW4000	4Gb to 16Gb Tape Backup	CALL
RW4000	Exabyte 7Gb Native DAT	CALL
MD4000	88Mb Syquest & Quad Speed CD Rom	CALL
MD4000	200Mb Syquest & Quad Speed CD Rom	CALL
MD4000	270Mb Syquest & Quad Speed CD Rom	CALL
MD4000	88Mb Syquest & 230Mb Optical	CALL
MD4000	200MB Syquest & 230Mb Optical	CALL
MD4000	230Mb Optical & Quad Speed CD Rom	CALL
MD4000	1.3Gb Optical & Quad Speed CD Rom	CALL
HD4000	2Gb Fixed Drive	CALL
HD4000	2Gb Fixed Drive AV Ready	CALL
HD4000	4.2Gb Fixed Drive	CALL
HD4000	4.2Gb Fixed Drive AV Ready	CALL

Desktop systems

DTR	Desktop 135Mb Syquest EZ Drive	CALL
DTR	Desktop 88Mb Syquest Drive	CALL
DTR	Desktop 200Mb Syquest Drive	CALL
DTR	Desktop 270Mb Syquest Drive	CALL
DTR	Desktop 1Gb IOMega Jaz Drive	CALL
DTCD	Desktop Quad Speed CD Rom Drive	CALL
DTCD	Desktop Six Speed CD Rom Drive	CALL
DTPD	Desk. 650Mb MO/4*Speed CD Rom Combo	CALL
DTMD	Desktop 230Mb Optical Drive	CALL
DTMD	Desktop 1.3Gb 5.25" Optical Drive	CALL
DTHD	Desktop 270Mb Hard Drive	CALL
DTHD	Desktop 540Mb Hard Drive	CALL
DTHD	Desktop 1Gb Hard Drive	CALL
DTHD	Desktop1Gb AV Hard Drive	CALL
DTHD	Desktop 2Gb Hard Drive	CALL
DTHD	Desktop 2Gb AV Hard Drive	CALL
DTHD	Desktop 4.2Gb Hard Drive	CALL
DTHD	Desktop 4.2Gb AV Hard Drive	CALL
DTHD	Desktop 9Gb Hard Drive	CALL
DTHD	Desktop 9Gb AV Hard Drive	CALL
DTDAT	Desktop 2Gb Tape Backup	CALL
DTDAT	Desktop 2Gb - 8Gb Tape Backup	CALL
DTDAT	Desktop 4Gb - 16Gb Tape Backup	CALL
DTDAT	Desktop 7Gb Native DAT	CALL

WANTED !

All Analogue Synthesizers & Drum Machines.

WE CAN PAY CASH

Collection facility available

Phuture Sounds

Tradewinds House . 5 Albert Road . Crowthorne .
Berkshire RG45 7LT. Fax: 01344 762 262

Tel: 01344 780 008

All prices include VAT @ 17.5%. Next Day Delivery Available

Memory Upgrade List

If your Apple Mac / PC / Sampler is not listed below, please call

Akai S950
0.75Mb £85.00

Akai S2000/S3000XL/ S3200XL

4Mb	£65.00
8Mb	£130.00
16Mb	£265.00
32Mb	£520.00

Akai S1000
8Mb £365.00

Akai S2800/S3000/S3200
8Mb £385.00

E-Mu Esi-32, E-64, E-IV

8Mb	£200.00
16Mb*	£400.00
32Mb	£800.00
64Mb*	£1,600.00

** only for E-64 and E-IV*

Ensoniq ASR-10

8Mb	£200.00
16Mb	£400.00

Kurzweil K2000/K2500

8Mb	£200.00
16Mb	£400.00
32Mb	£800.00
64Mb	£1,600.00

Akai Re-Mix 16

4Mb	£65.00
16Mb	£265.00

Roland DJ-70
2Mb £78.00

Roland S-750

8Mb	£200.00
16MB	£400.00

Roland S-760

8Mb	£110.00
16Mb	£265.00
32Mb	£520.00

Roland S-770

2Mb	£78.00
4Mb	£165.00
8Mb	£320.00

Yamaha SY-85
2Mb £78.00

Reductions

All SIMM's are Brand New Gold Edged with up to 5 years warranty, and branded
All prices include VAT @ 17.5%
MAC & PC SIMMS are also available - Please Call

Second User / Ex-Demo Analogue & Digital

Manufac.	Model	Description	Price
Akai	S900	12Bit Sampler, inc. large library	£400
Akai	S950	Fully expanded, excellent condition	£750
Korg	MS-10	Analogue Patchbay monosynth	£195
Korg	Prophecy	Multi-Oscillator Synthesizer, as brand new	£749
Moog	Mini Moog	Excellent condition, model D	£1,049
Moog	Prodigy	Excellent condition with original manual	£275
Roland	Juno 106	Analogue Polyphonic synth with MIDI	£485
Roland	Juno 60	Analogue Polysynth with DCB Port	£275
Roland	Jupiter 6	Mint condition B1-Timbral Analogue Polysynth	£825
Roland	JX8-P	Analogue/Digital Hybrid synthesizer	£350
Roland	M16-C	Memory cartridge for JX8-P	£30
Roland	M64-C	Memory cartridge for MKS-70, TR-909, TR-707	£40
Roland	MC-202	Analogue 2 channel microcomposer	£295
Roland	MKS-50	Rackmount Alpha Juno	£399
Roland	PG-300	Programmer for Alpha Junos & MKS-50	£199
Roland	PG-800	Programmer for JX8-P, JX-10, MKS-70	£299
Roland	R-8	Human Rythm Composer	£349
Roland	SH-101	Analogue Monosynth, with Mod Grip	£285
Roland	SVC-330	Vocoder, in excellent condition	£495
Roland	TB-303	Classic Acid box, mint condition	CALL
Roland	TR-505	MIDI Rythm Composer	£95
Roland	TR-606	Analogue drum machine, mint condition	£150
Roland	TR-727	Latin MIDI Rythm Composer	£145
Sequential	Pro-One	Two oscillator monosynth	£395

The above items are currently on our database.
Some are in stock at the time of printing, some are on their way to us.
Please call for latest updates and prices.

Kenton	Pro Solo	Single channel high spec. MIDI to CV Converter	£118
Kenton	Pro 2	Dual channel high spec. MIDI to CV Converter	£189
Kenton	Pro 4	Quad channel high spec. MIDI to CV Converter	Call
Phillip Rees	MDS	Midi to Syno 24 converter	£69

NEW ANALOGUE EQUIPMENT IN EVERY DAY - PLEASE CALL FOR LATEST LIST!

E&OE. Prices subject to change without notice. WRH

DESIGNED BY BELL MULTIMEDIA

HEAVENLY MUSIC MIDI SOFTWARE

HEAVENLY MUSIC
P.O. Box 3175, CO15 2RP
Tel/Fax +44 (0) 1255 821039
You can also E-Mail us at
heavenly@ortiz.demon.co.uk
1394

DJK Music
MIDI SONG FILES
- Extensive Catalogue
- Medleys
- Compilation Disks
- Songs Programmed To Order
- Bulk Buying Discounts

Telephone for FREE demo and catalogue: Licensed by MCPS and EMI
DJK Music, Malgrat, Thorpe Road, Tendring, Essex CO16 0BW.
Phone (01255) 830185 (Mon-Fri 9-5); 861949 (evenings/weekends);
Mobile 0589 894856, Fax 861190.
We can also supply songs on DAT / cassette, Mini disc or CD
1168

CALLING ALL SY85 & XP50/80 OWNERS!
OUR SY85 MEGA-PACKS ARE NOW AVAILABLE AT THE INCREDIBLE PRICE OF £44.95EACH.
"Techno/Dance" MEGA-PACK
765 voices + 384 performances.
"Vintage Synths" MEGA-PACK
765 voices + 384 performances.
Buy two and get "Contemporary Keys" voice disk free.
NEW!!! "Ambient & Techno" voice disk £19.95
NEW XP50/80 "Classic Synths"
128 patches + 32 performances £24.95
Cheques/Postal orders payable to:
MEDIASONIC
Dept. 2, 26 Gilsland Avenue,
High Howdon, Tyne & Wear,
NE28 ONQ Tel: 0191 287 1720
1437

STANDARD **baktrax** mid
The Best Value For Money Midi File Sequencing Company
TOP QUALITY GM/GS MIDI FILES WRITTEN BY GIGGING MUSICIANS FOR THAT "LIVE" PERFORMANCE.
NOW ON THE INTERNET - CHECK OUT
http://www.baktrax.com
CALL 01329 834692 For your free catalogue
BBS Service 01329 835455
Fax: 01329 835444 - Licensed By EMI & MCPS
The Minstrals Ingoldfield Lane Newtown Nr Wickham Hants PO17 6LF
AMP
1236

Keysoft
For All Your Software Needs
Blank Disks
Keyboard Bags
Keyboard Covers
Mini Mixers
I Fads Etc

TUNE 1000 MIDI Files
10 songs per disk
Over 75 Albums now in stock
Incl. Lyrics & Vocal Harmony Data
SEND FOR OUR COMPREHENSIVE MIDI FILES & ACCESSORIES CATALOGUE
20 Hogarth Drive, Hinckley,
Leics. LE10 0JG
Tel: 01455 238156
Fax: 01455 637827
1461

If you need an Audio Supplier who does more than just deliver boxes.
You should be talking to us
LARKING AUDIO LIMITED
Telephone Andy or Don
on 01234 772244 or Fax 01234 772109

Westec Midi-Market BEAT THE HYPE!!
MIDI Shareware/PD
editors for all makes / sequencers etc etc £3.95 per disk
Atari MU1 Midi utilities
MU4 studio facilities
MU6sysex handlers
PDS2 quality 16trk sequencer
PDS8 backing track creator
and now P.C
loads of software now available
Professional Backing tracks - GM midifile -
5 for £19.95
10 for £34.95
SEND FOR OUR full list and FREE MIDI GUIDE
4 way Midi Switcher Boxes £12.95
The STM adapter for the Atari £14.95 works with cubase
Beware of expensive alternatives
Credit Card orders and HORIZON bulletin board now open E.C.S 01621-778778
Roland LA Essentials for:- D5 D10 D20 D110 MT32 CM32 CM64
GM emulator £14.95
Quality Sounds - 64 per disk £7.95 per disk
Get Dumps - save sounds/ settings in your sequencer - £12.95
All prices fully inclusive
30 Fish Street · Goldhanger · Maldon · Essex · CM9 8AT
Tel: 01621 - 788466
1403

Midi Magic... Where excellence comes as standard!
Midi Magic INTERNATIONAL
20 MYSYDD TCE. SWANSEA SA1 2PZ UK
Tel/Fax:(01792) 642381
FOR FREE CATALOGUE
E-MAIL 100733.555@compuserve.com
Keeping pace with your requirements!
We're not sitting on our laurels (too painful at this time of year!) If you want to take a Magical Mystery Tour down Abbey Road to Strawberry Fields avoiding the Taxman, you'll hear Midi Magic song files Here There & Everywhere. So if you need Help don't have A Hard Days Night just ask Dr.Robert or Eleanor Rigby or simply order our FREE CATALOGUE AND DEMO DISK and even Your Bird Can Sing!
Apart from producing Professional, High Quality midi song files we also produce:
- Drum Beats 1+2 • Mix & Match • Short Cuts
- The Rhythm Guitarist • A Chord & Scale dictionary
- Bass & Drum patterns • Composer series Vol.1 Blue Moods, Vol.2 Rock & Roll, Vol.3 Country.
- Classical guitar Tracks • Ragtime Piano
- SR16 GM Converter.
- Patchworks (New sounds for the 'Canvas').

VISA MasterCard Access
ALL PRODUCTS BY 'MIDI MAGIC' AND 'BAKTRAX' ARE SOLD UNDER LICENSE ONLY. FOR USE ONLY BY THE PURCHASER AND NOT FOR RESALE, EXCHANGE OR DUPLICATION IN ANY FORM.

PROFILE Entertainments

610 Mansfield Road,
Sherwood, Nottingham
(0115) 9245454

The UK's Number 1 Mail Order Company

Midi Files

Profile Single Midi Files are back
The Industry Standard "Still The Best"
Midi Files Compliation

The Shadows	Prince
Top Hits 90's	Elton John
No 1 Hits of the 90's	Motown Gold
Frank Sinatra	Whitney Houston
Queen 1 & 2	Gloria Estefan

+ Many others

Willie Nelson	Beach Boys
James Taylor	Supertramp
U2 Hits	Whitney Houston
Elton John	Steve Miller
Bee Gees	George Michael
Lisa Stansfield	Babara Streisand
The Hollies	Abba
50's Hits (3 Vols)	Syx
60's Hits (6 Vols)	Earth Wind & Fire
Annie Lennox	Annie Lennox/D Stewart
Country Hits (4 Vols)	Elvis Presley
Sting	Eric Clapton
Police best sellers	

Plus Many Many More Titles
Ask for Our Free Catalogue

Music Software

Cubase PC/Atari
Cubase Light
Cubasis Audio
Cubase Score
Cubase Audio
Band In Box
Jammer Pro
Cakewalk Express
Cakewalk Pro
Music Station
The Pianist
Jazz Guitar
Turtle Beach
Tahiti / Tropex
Yamaha

Lighting & Lighting Packages Par 56/64 Cans

MIDI & S/to light RIGS
Call for more information

Quality 4 way Par Can
Lighting Rigs from £210.00
8 Way Par Can
Lighting Rigs from £399.00

MIDI LIGHTING IS OUR SPECIALTY
Every type of MIDI Lighting Controller is available
Technical Advice and setup information is just a phone call away

Effects Lighting Best UK Prices

Abstract Scatter Spot	NJD Blaxer
Abstract Twisters	NJD Blitzer
Abstract Wildstar	NJD Datamoon
Abstract Hypermoon	NJD Cylcne
Abstract Rave	**The New Ryger**
Abstract Scenesetters	**Lighting is here**
Abstract Futurescan II & III	

Martin Lighting(Everything)

MIDIMAN GM/GS
SOUND MODULE
Only £199.00

Amazing Sounds
Amazing Price

- 1/4" line level input
- Front panel XLR/mic. connection
- 4 voice detune for vocal thickening
- Bypass activation (external f/switch)
- Scalic mode for dynamic harmony motion
- Chordal mode for automatic vocal harmonies
- Vocoder mode for triggering harmonies via MIDI notes

Roland Music Shop

MT80s MIDI Player
MT120 MIDI Player Sound Module
MT120s MIDI Player Sound Module
E Series Keyboards
RA 35/95 Real Time Arrangers
NEW! MC303 Rave Machine
Sound Canvas SC55/SC88UL
VS880 Digital Recorder
XP10/50/80 Workstations
DJ70 Workastation
AX1 Remote Keyboard

ROLAND EVERYTHING!!!

The New Digitech MIDI Vocalist Is Here

PRO AUDIO SHOP

Ephos 8:2 Mixers
Ephos 12:2 Mixers
Ephos 16:2 Mixers
Ephos 14:2 Mixers
Ephos 16:2 Mixers
Powered versions available

Amplifiers (all makes)

Lion Forge 115 x 115 watt	£199
Lion Forge 200 x 200 watt	£239
Lion Forge 410 x 410 watt	£369
Lion Forge 1050 x 1050 watt	£990

Fender Loudspeakers
Amazing New Range of Speaker Systems from Fender
From Just £399 a pair

Radio Mic Systems Wireless Guitar Systems Microphones by Beyer, Shure, AKG
Call for more info

FREE CATALOGUE & PRICE LIST

Ask for our Free Catalogue.
In store finance, mail order finance - No Problem

Stage 1 music
Telephone or write for a FREE Catalogue
MIDI SONG FILES
Tel: 01843 836150
6 Linden Close, Westgate, Kent CT8 8EH
Fax: 01843 836151
796

MIG Music 0181 641 6808 55 Angel Hill, Sutton, Surrey SM1 3EH
SYNTH VOICES on ST, PC, AMIGA OR MAC DISK 320D5/10/110/20, 128D50, 960DX7, 560ESQ1, 575FBO1, 320K1, 64K4, 200 Matrix 1000/6, 240MT32, 128 Proteus 1, 640TX81Z/21/100, 128VZ1.
VOICES (ST / PC ONLY) 256DW8000, 128JD990, 64JV80/880/90/1000/1080, 128 Juno 1/2, 240K5/K3, 200 Matrix 12, 192CZ, 128MKS50, 100MPS, 400M1, 200O1W, 300 03rw/X3, 300 05rw/X5, 200SY22/SY55, 240 VFX, 100 Wavestation, 100TG500.
ST EDITORS CZ, D10/20/110, DX7/21/100, DX7II, DW8000, FB01, Juno 1/2, K1, K4, M1, TX81Z, U110, VZ1, XE8, YS200/100.
PC EDITORS CZ, D110, DX7, DX7II, FZ1, Matrix 6, MT32, Juno 1/2, Sound Canvas, TG55.
Prices £9.75 each 3 for £26 4 for £30 P&P £1 SENT 1ST CLASS, SAME DAY
SAMPLE LIBRARIES EPS/EPS16+ / ASR10 / TS10 / K2000 / MIRAGE / TX16W
Several hundred sample disks per library at £2.80 per disk or less. Please call / write for free info
1369

SOUND SOLUTIONS
SPECIALISING IN SAMPLE CD's, SOFTWARE & SOUNDCARDS
Sample CD's
AWE Sound Font 1/2 £29.00
Solo AWE Collection £29.95
Creative Essentials £19.95
Cube 1-10 (WAV/AIFF) £12.95
Sound Cards
Yamaha DB50 xg £129*
Tropez Plus £249
Yamaha SW60-XG £149*
TBS2000 £159
Software
Cakewalk Pro £199
Cakewalk Pro Audio £299
Cubase 3.0 (PC/MAC) £299
We handle all T&S CD's most software & soundcards.
*Free Cakewalk Express
We welcome Access, Visa & Delta
Above is a small selection from our range, please telephone for latest prices.
CONTACT ADRIAN ON 01403 732606
EMAIL SOUND.SOLUTIONS@DIAL.PIPEX.COM
WEB HTTP://DSPACE.DIAL.PIPEX.COM/SOUND/SOLUTIONS/
SAMPLES FROM TIME & SPACE ARE AVAILABLE FOR DOWNLOAD.
1450

MIDI NATION
MIDI Files for gigging musicians
GM/GS COMPATIBLE
SAME DAY DESPATCH
MIDI SONG FILES 100%
PRODUCED "IN-HOUSE" QUALITY - EVERY PURCHASE!!
NO MIDDLE MAN, NO FIDDLE MAN - EVERYONE'S A "HAPPY MAN"
MIDI NATION, 29 KESTREL ROAD, WALTHAM ABBEY, ESSEX. EN9 3NB
TEL: 01992 651797
1483

TRACK EXPANSION
For multi-track recorders.
Never run out of tracks!
28 pure audio tracks from a 4 track!
300 tracks from an 8 track!
Without track bouncing!
All tracks can be kept!
Fully descriptive booklet and sync tape.
No other equipment needed.
£49
GUARANTEED TO WORK OR YOUR MONEY BACK.
To order, or for more details, write or phone:
Spectrum Sound Studios (Dept SS 2)
31 Wakebourough Road, Westcliff, Essex SS0 9DR
01702 354045
877

TRIPLE DAT
DO YOU HAVE A PC?
YOU
will get the best advice and prices from us . . . .
We stock all the Turtle Beach products plus Saw, Quad, Cakewalk and much more.
New Procyon Pro & Samplitude sequencer + 8 track of digital audio for under £350!!!!!!
1000 samples FREE with every soundcard purchased.
Call: John at Music Maker
Tel: 01309 676008
Evenings and weekend calls welcome
TRIPLE DAT
950

PRO-MIDI B.F.P.
CAXTON HOUSE, CAXTON AVE, BLACKPOOL. FY2 9AP
TEL: 01253 345386 DAY. (01253) 591169 NIGHT FAX: 01253 406899
GENERAL MIDI INSTRUMENTS
Licenced by MCPS & EMI SPECIAL OFFERS

Country Hits (30 Songs Only £40.00)
King Of The Road, Rugby, The Gambler, Big Bad Leroy Brown, American Trilogy,
UPDATE LIST
A Girl Like You
All I Need Is A Miracle
I Am Blessed
Don't Look Back In Anger
Falling Into You
Jesus To A Child
Kiss From A Rose
Missing
Wonderwall
Lifted
Roll With It
Supersonic
Plus Many More

15 IRISH SONGS £25.00
15 OF THE BEST SHADOWS SONGS INCLUDING APACHE, FBI, KON MAN OF MYSTERY, ARGENTINA, WONDERFUL LAND, AND MANY MORE £25.00

Singalong (12 Songs Only £15)
12 Pub Singalongs
12 Classic Male Ballads
12 Classic Female Ballads
12 Dinner Dance Songs
15 War Songs £25.00
ALL SPECIAL OFFER SONGS ARE SUPPLIED IN ORIGINAL KEY ONLY. ADD £1.00 PER SONG FOR ALTERATION TO KEY. ADD £1.50 FOR POST & PACKING

Dance Class 12 Songs £15.00
Sight For Sore Eyes
Its My Life
All That She Wants
I Saw The Sign
Moving On Up
We Are Family
Rhythm Is a Dancer
Safe Day Night
Please Don't Go
Living On My Own
No Limit

Party Pack (12 Songs Only £15.00)
I Am The Music Man
Agadoo
Rivermans
The Conga
The Hokey Cokey
The Can Can
Lambada
The Time Warp
YMCA
The Gay Gordons
Birdie Song
The Twist

Special Occasions £15.00
Happy Birthday
Jolly Good Fellow
The Wedding
Anniversary Waltz
We Are Sailing
God Save The Queen
21 Today
Old Lang Syne
Old Wedding Ring
We'll Meet Again
We Are The Champions
Star Spangled Banner

SPECIAL OFFER FOR JUNE ONLY
BUY 50 SONGS FOR ONLY £35 P&P
OR 20 SONGS FOR ONLY £15 P&P

MIDI Hardware
By Viscount
RD-70 Data Filer £300
RD-800 Active Data Filer £440
MF-01 Song Worker £625

MUSIC CONTROL

01270-883779

http://www.demon.co.uk/control

Music Control Stocks new stuff from the following companies:
Akai, AKG, Alesis, Control Synthesis, Denon, Digidesign, Drawmer, Emagic, Emu, Ensoniq, Fostex, General Music, Goldstar, Kenton, Korg, Kurzweil, LA audio, Lexicon, Mackie, Oberheim, Opcode, Roland, Spirit, Steinberg, Studiomaster, Tannoy, Tascam and Yamaha.

If you're after secondhand stuff then try Music Control for:
Akai, ARP, Casio, Cheetah, Elka, Emu, Evolution, Fairlight, Hammond, Kawai, Moog, Oberheim, Octave, Oscar, Rhodes, Roland Sequential, Wurlitzer and Yamaha.

Here is a list of stuff stored on the database at the moment - over five of each of these!

Akai
ASQ10, AX73, MPC60, S01, S1000, S1000HD, S1000KB, S1000PB, S1100, S2800, S3000, S612, S700, S900, S950, VX90, X7000, XE8.

Alesis
1622, 3630, Adat, D4, Datadisk, HR16, Microverb II, Microverb III, Midiverb II, Midiverb III, MMT8, Quadraverb, Quadraverb +, SR16

ARP
Axxe, Odyssey, Omni II, Sequencer

Atari
1040 + M

Boss
DR660

Casio
CZ101, DA7, FZ1, FZ10M, RZ1, VZ1, VZ10M

Chase
BIT01, BIT99

Cheetah
MS6, SX16

Crumar
Stratus

Drawmer
DL221, DS201, LX20

EDP
Wasp

Emu Systems
Emax II KYBD, Emulator II, Morpheus, Proteus 1, Proteus 2, Vintage Keys

Ensoniq
EPS, EPS16+, ESQ1, SQ80

Evolution
EVS1

Fender Rhodes
Stage 73

Fostex
280, 812, B16, E16, R8

Gem
S2

Hammond
C3, X82

Kawai
K1, K1 II, K1 M, K1 R, K4, K4 R, K5

Korg
01/W, 01/WFD, 01R/W, 03 R/W, 05R/W, 707, BX3, Delta, DS8, DSS1, DW6000, DW8000, EX800, EX8000, KMS30, M1, M1 R, M1 REX, M3 R, Monopoly, MS10, MS20, P3, Poly 6, Poly 61, Poly 800, SGD, T3, Wavestation, WS1EX, WS1R, WSSR, X3

Kurzweil
K2000

Lexicon
LXP1, LXP5

Moog
Mini Moog, Opus III, Poly Moog, Prodigy, Rogue

Oberheim
4 VOICE, M1000, Matrix 6, Matrix 6R

Octave
Cat

Revox
B77

Roland
A30, A80, AX1, CR78, CSQ600, D10, D110, D20, D5, D50, D550, D70, DEP5, JD800, JD990, Jupiter series, Juno series, JV1080, JV30, JV80, JV880, JX1, JX10, JX3P, JX8P, MC202, MC50, MC500, MC500 II, MKS10, MKS100, MKS20, MKS30, MKS50, MKS7, MKS70, MKS80, MSQ700, MT32, P330, PG1000, PG200, R5, R70, R8, R8M, RE201, RE501, RS09, S10, S330, S50, S760, SH09, SH1, SH1000, SH101, SH2000, SH3A, SRV330, TB303, TR505, TR606, TR626, TR707, TR727, TR808, TR909, U110, U20, U220, W30

Seck
18:8:2

Sequential
Drumtrax, Prol, Prophet 5, Prophet 600, Prophet VS, Sixtrak

Sony
DTC1000ES, DTC750

Tascam
488, 644, MM1

Vox
Continental

Waldorf
Microwave

Yamaha
CS15, CS5, CS60, DMP11, DMP7, DX100, DX11, DX21, DX27, DX5, DX7, DX7 II, DX7S, KX5, KX88, NS10M, QX5, QY20, R1000, RX17, RX21, RX5, RX7, RY30, SPX 90, SPX 900, SY22, SY35, SY55, SY77, SY85, SY99, TG100, TG33, TG55, TG77, TX7, TX802, TX81Z, V50

Music Control will buy your second-hand equipment - why not give us a call on 01270-883779 and see if we can help you!

Recent Music Control Customers include:
Björk, Pulp, Phil Collins, Tricky, Darkman, Incognito, The Lisa Marie Experience, Roachford, CJ Bolland.

You can email Music Control using:
emma@music-control.co.uk
chris@music-control.co.uk
daz@music-control.co.uk
john@music-control.co.uk

Music Control HQ

Chapel Mews, Crewe Road, Alsager, Staffs. ST7 2HA
Tel: 01270-883779 Fax: 01270-883847

Music Control South

43-44 Hoxton Square, London N1 6PB.
Tel: 0171-729-4100 Fax: 0171-729-7400

01270-883779

FOR SALE

ASTONISHING MEMORY PRICES!

30 PINS SIMMS 256k £3 1mb £13 4mb £59 16mb £236
EMU 32/64/IV Ensoniq ASR10/R/TS10/TS12 Kurzweil K2/2500/R Roland S750/770/DJ70/JS30 Yamaha SY85 Mac PC AtariSTE

72 PIN SIMMS 4mb £32 8mb £63 16mb £125 32mb £249
Rol S760/DJ70mk2 Akai CD3000i+ S2000 S3000XL 3200XL Mac PC

CALL **JETRAM** NOW 01753 734644 / 0956 837429 anytime
ALL SIMMS BRANDED, NEW, 1 YEAR WARRANTY. E&EO
1469

Studio Sale

Digitech Vocalist 2, Studiomaster P7 Mixing Desk 32:8:16:2, Alesis ADAT XT, Alesis 3630 Gate/Comp., Yamaha 3 Head Cassette Deck, Emu Morpheus, Alesis SR16, Emu Proformance 1+, Atari Mega STE (4/40Mb Hard Drive) with Monitor and Notator, Denon DRM800 3 Head Cassette Deck

Each item can be sold individually

Please call with offers

Call evenings 01454 329500
1432

Cash Paid

for all types of Synths, Samplers, Outboard, Mixers, 4/8 Track etc.

Contact Simon or Chris
0171-240-0593
1213

TOP PRICES PAID FOR

Synths, Computers hard and software
Recording equipment
Anything considered – SELL QUICKLY
Call FREEPHONE 0800 132 193
Collection arranged nationwide

THE ABC music COMPANY
branches at :-
LONDON - OXFORD - BRISTOL
EXETER - SLOUGH
941

MUSIC STORE

TUNE INN

WANTED

ANALOGUE & DIGITAL SYNTHS
SAMPLERS - SEQUENCERS
DRUM MACHINES - FX
HI-TECH - COMPUTERS
PA & RECORDING EQUIPMENT

0181 - 698 4446

COMBOS - GUITAR FX - DRUMS
NEW & VINTAGE GUITARS
SAXES - CLARINETS - FLUTES

BUY! SELL! P/EX!

129-126 ST MILDREDS RD LEE LONDON SE12 ORG
OPEN: MON - SAT 10.00 - 6.30
452

BOSS DR660 drum machine hardly used. boxed, £225 Telephone 01489 784288

AKAI S950 sampler, 1 expansion card, boxed, manual, mint condition £700. Telephone 01793 612606

ROLAND JUPITOR 4 £350, Korg MS10 £150. Telephone Runcorn 01928 712864 after 6pm

SOUNDCRAFT SERIES 760 MkIII 16 track 1" tape machine with B.E.L n/r loom and remote. Soundcraft Spirit Studio 24:8:2 in line console £2850 o.n.o. Telephone 01293 546322

PRO 1 SYNTH for sale with original manual as new, best offer accepted. Telephone 0115 929 1601

ROLAND D50 + 2 sound cards, 8 banks on disc and flight case £350 o.n.o. or will part exchange for DD50. Telephone 0973 776675 or David Lennox 01332 832389

KORG PROPHECY, new, boxed with manuals £750 o.n.o. Telephone 0802 775547

FOUR TIER KEYBOARD STAND £50, Greengate DS3 MIDI disc library + spare computer £150 o.n.o. Statik spring reverb £50. Sessionmaster pre-amp £220. Azden 10 band stereo graphics £100. GPO Patchbay 3 x 24 hole £50. Telephone 01432 880442

KORG 01W PRO 21/2 months old, manufacturers warranty, home use only, demo disc, manuals, some spare discs, immaculate condition, keyboard stand included £1500 o.n.o. Telephone Peter 0117 944 1156

LEXICON LXP1 £220, EMU Proformance £150, Rhodes Stage 73 £200, Roland M240 £350, Siel DK80 £120, Korg Mini 700 battered £40, Leave message on 01426 209138

ROLAND SVC 350 Rackmount Vocoder excellent condition, rich analogue sound £295 o.n.o. Spirit Folio 12:2 CD quality desk, boxed £250 o.n.o. Telephone 01772 322123

FOSTEX 812 MIXER, 12:8:2, superb condition, boxed, hardly used £600 o.n.o. Telephone Basingstoke 01256 410178

ROLAND JV880 + Vintage Synth expansion board and Atari Editor £450. Telephone 01843 586913 (East Kent)

KORG 01W FD with MIDI file update and flight cases £950 o.n.o. Telephone 0973 776675 or David Lennox 01332 832389

KORG WAVESTATION X perfect condition with card £800 o.n.o. Yamaha KA 20 2 amp speakers £800 o.n.o. perfect condition. Ring after 5pm 01772 623483

FOSTEX A8, mint, boxed, spare head £500, Studiomaster 16:2, inserts 3 auxillaries £350, Tascam 34 £225 Telephone 01522 530605

YAMAHA MT3X £300, Roland D110 synthesiser module £200, Desctech DT 602X £150 Telephone 0973 758680

TASCAM 488 MkII Porta Studio boxed + Philip Rees TS1 £750 Telephone 0181 248 3424 ask for Graham

TASCAM 424 4 channel mixer as new £325. Phone 01635 248412 Newbury - London for viewing

ALLEN & HEATH GS324 56 channels on mixdown, excellent condition £1750. Telephone Gavin 01364 661420

MACKIE CR 1604 mixer rackmountable 16 channels £595 Telephone 01553 828063

FOSTEX R8 £700 o.n.o. Atari 1040 STE + Monitor + Cubase + Unitor 2 £350 o.n.o. Telephone Pelham 01703 552993

MULTIMEDIA ACCESSORIES CATALOGUE. Prosonix. Phone now for free copy. Telephone 01323 848808

ENSONIQ ASR10, 4Mb, library, boxed, manuals £1450, Yamaha DX21 £150, Siel SK80 £165. Telephone Rob 0973 850334

ROLAND XP50, keyboard / workstation, original box and manuals, excellent condition £900 o.n.o., can deliver. Telephone Alan 01332 720291 (Derby)

STUDIO SALE Digitech Vocalists 2, Studiomaster P7 Mixing Desk 32:8:16:2, Alesis ADAT XT, Alesis 3630 Gate / Comp, Yamaha 3 Head Cassette Deck, Emu Morpheus, Alesis SR16, Emu Proformance 1 +, Atari Mega STE (4/40Mb hard drive) with Monitor and Notator, Denon DRM800 3 Head Cassette Deck. Each item can be sold individually. Please call with offers. Call evening 01454 329500

EMU ESI 32 library £770, Korg Wavestation £610, Roland JD800 £985. Telephone 01261 832898

YAMAHA DX7IID plus 'E' board, 8-way multitimbral, mega ROM, breath controller, v.g.c. £469 o.n.o. Telephone Martin 0117 972 4626

WANTED

DRAWMER 1960 Compressor. Telephone 01202 526453

SITUATIONS VACANT

Sales Engineer

With the launch of the GREEN range, Focusrite Audio Engineering is looking to appoint a Sales Engineer to support its rapidly expanding sales.

Ideally in your mid 20's you will be an outgoing personality, a keen musician or sound engineer and computer literate. Above all you will enjoy dealing with people.

A technical background and some previous sales experience would be useful but are not essential.

Based in the UK with some international travel, you will be responsible for demonstrating and operational training for all of Focusrite's RED, BLUE and GREEN ranges of premium signal processing.

Please send your CV together with a covering letter to:
Tony Henderson, Focusrite Audio Engineering, Unit 2, Bourne End Business Centre, Cores End Road, Bourne End, Bucks. SL8 5AS Great Britain

Focusrite audio engineering
1462

Talented, Female, Singer, Songwriter

Would like to team up with an experienced Producer/Engineer with studio (at least 24 track) To obtain a deal.

Contact Larkland on
0181-926-4358 or
0181-926-9851
1443

STAFF VACANCIES AT TURNKEY

Sales Persons / Demonstrators
We require the successful applicant to demonstrate a good working knowledge of the current marketplace and a full understanding of equipment owned or used. We are particularly looking for knowledge of the MIDI keyboard market

PC Music Specialist
Sales and demonstration of PC compatible MIDI and digital audio products, phone and shop floor, tech support and staff training. Min 6 months experience with Windows. Good familiarity w th at least 1 Windows sequencer.

Computer Notation Specialist
We require full-time demonstrator with Associated Board Grade 5 or similar and a full understanding of the scoring needs of classical musicians. Sales experience not essential, but you must have good interpersonal skills

Send your application in writing to 114 Charring Cross Road, London WC2H 0DT, by fax to 0171 379 0093, or e-mail to jobs@turnkey.demon.co.uk. Include phone no & 2 references

As part of Arbiter Group plc, and as the UK's largest outlet for MIDI and Multi-track, we offer first class training, unrivalled salary, good prospects and real job security. We are an equal opportunities employer.
1205

FOR SALE

Virtual World Technology

A small selection of our new & used stock, please call us if you don't see what you need

Alesis ADAT (Black)	£1499
Alesis BRC	£899
Apple MAC 7100 8/500	£1499
Akai S1000	£1199
Akai S3200	£2699
Akai S950	£699
Behringer Eurodesk	£1899
Drawmer DL221	£250
Emu Vintage keys	£495
Fostex E16	£1485
Fostex D80	CALL
Korg Wavestation	£600
Korg Prophecy	£699
Kurzweil K2000 rack	£1399
Lexicon LARC 480L	£599
Roland DM80 direct to disk	£899
Roland S760 sampler	£1399
Soundcraft Topaz 24	£1895
Soundcraft Spirit 24	£1699
Tascam DA30 DAT	£899
Yamaha ProMIX01	£1449

* PART EXCHANGE
* EQUIPMENT PURCHASED FOR CASH

TEL: 0181 944 5685

1470

FLIGHT CASES

KH CASES
PROTECT YOUR INVESTMENT!

KH Cases manufacture a full range of cases for guitars, amplifiers, lighting, computers and industrial equipment, custom built to your specification.

The Old Plumbers Shop, Medway Depot, St James Road, Tunbridge Wells, Kent TN1 2HD

Tel: 01892 527200
Fax: 01892 527201

FLIGHT CASES 19" RACK CABINETS

Standard and custom design for the musician and studio. Large range of accessories also available. For further information and illustrated brochure, contact:

GROVESTREAM ENGINEERING SERVICES
29 Silverdale Road, Tadley, Hants RG26 6JL
PHONE / FAX: 01734 713309

CUSTOM MADE
FLITE KASES
THE ULTIMATE PROTECTION PACKAGE

AUTOPIA
V A N Q U P

Tel: 01633 873118 Fax: 01633 873051

1435

RECORDING STUDIOS

RMS STUDIOS

Studio 2:– A great MIDI Studio. 10meg S3000 with 340meg hard drive, M1, 4 Meg Atari, Lexicon PCM80, REV 5, Quadraverb, 40 input Saber MIDI desk, E16, Tascam DAT, Tannoy and NS10 monitors, XR300, Creator, Cubase, Aphex, DS201 gates, ADR Vocal Stresser and superb mice.

All this in an unusual split-level control room and overdub room for a paltry £7.00 p/h, or £12.00 (+VAT) with engineer/programmer! New SADiE 8-track hard disk recorder for brilliant remixes and edits!

Studio 1:– Ideal for live music – 2 live rooms, sumptuous drum sound, Studer 2" 16-track, extraordinary outboard, and a lovely grand piano all for a mere £15.00 p/h (+VAT).

There's daylight in every room and real coffee, tea and meat-free biscuits in the kitchen. Low-cost CD-Rs and tape copying too.

Please phone for a full info pack...

0181 653 4965

1113

911 Recording Studios

Fully digital recording studios **from £10 an hour** (includes engineer and VAT)

- Mackie 32:8:2 (32 channel desk)
- Mackie CR1604 (16 channel desk)
- Soundscape hard disk recording
- Digidesign Audiomedia III (Session 8 Software)
- Tascam DA30 MKII DAT Recorder

Korg M1, Akai S1100 (8Mb) and (16Mb), JV1080 X 2 Vintage Keys, Quasar, Roland U220, Novation Basstation, Basstation Rack, Novation Drumstation, Moog, Pro-One, Juno 106.

Effects: Boss SX700, Boss SE-70, Lexicon PCM80, Yamaha SPX1000, Quadraverb Gates, Compressors, Limiters, Expanders SPL Vitaliser for surround sound.

Facilities: Vocal Booth, Lounge, Cable TV, Internet, games machine, patio, (overnight stay facilities with writing suite optional) and complementary coffee or tea.

In-house engineers, programmers and producers available

Two recording suites to choose from!

For a booking or brochure please call

Tel: 0171-916 9222
Fax: 0171-916 9298
Swiss Cottage, NW3

1451

areWeMad?

RECORDING STUDIOS FOR HIRE

24-TRACK STUDIO - 2", 16-TRACK STUDIO
BOTH STUDIOS AVAILABLE WITH ADAT & ENGINEERS
call now for competitive rates

ONE-OFF C D s AVAILABLE DUPLICATED FROM VINYL, D.A.T. OR CASSETTE

TEL: 0181 665-9544 / 0181 771-7341 FAX: 0181 771-1911

solon

Dance Music Production

32-track Pro Tools, 72 input TAC Bullet. 2 Akai S1100 with 52 Mb RAM. Oberheim Matrix-12, Obie Rack, TB-303, SH-09, MC-202, Juno 106, JD-800, Wavestation, DW8000, D-50, H3000, PCM70, SPX900. Mastering, Remixing, Digital Editing, One-off CD's. Superb vocal sound. Creative and friendly vibe. Experienced and talented programmers. Clients include KLF, Paul Oakenfold, J-Pac, Ministry Of Sound, Virgin, EMI, East West. Rates from £240 per day including engineer/programmer.

0171-924 0211

DIGITAL EDITING & POST PRODUCTION

Compilation
Remixing
Noise reduction
Mastering to Dat / CDR

Experienced engineers using Pro Tools III
• Sound Designer II • DINR • Session 8 •
• Soundscape • Gallery Software •

FIRST CLASS PROFESSIONAL SERVICES....
WHY PAY LONDON RATES? PRICES FROM £25

TEL: 01425 470007

The M Corporation, The Market Place
Ringwood Hants BH24 1AP

1441

CUSTOM MADE CASES
HIGHEST QUALITY AT LOWEST PRICES
Ring or Fax us First
R & J Flytes
Tel/Fax: 01933 651706

LOOK HEAR!

19" Rack & Flight Cases
- to tour the world
- lightweight expandable EMS, for home and studio.

Standard sizes, off-the-shelf.
* 19" Microphone & Storage Draws
* 19" Keyboard & Lap Top Trays
* 19" Conversion Mounts
* Tour Briefcases

Call: CP Cases
Tel: 0181-568 1881 Fax: 0181-568 1141
Tel: 0161-873 8181 Fax: 0161-876 6599

1372

RECORDING STUDIOS

Wax Work Studios

MASTERING • DIGITAL EDITING • REMIXING • PROGRAMMING

Mac System 18/HR HD Recording Time, Cubase Audio, Logic Audio Sound Designer, DINR, Time Bandit, CD-R, SampleCell 64 Channel Fully Automated Mixing, S3200, K2000, S760 U110, Morpheus, Basestation, Juno 106, SY85 Outbounds 8g: Eventide, Zoom, Sony, Roland, DOC, BBE, Yamaha

If You Want A Fully Equiped Digital Studio Then Call Us.
Prices From £25/PH Including Engineer

Tel: 0181 809 6341

1483

WOLF STUDIOS

Best value 24/48 track in a comfortable and creative studio

24 track 2" Studer, 48 track ADAT, Amek Angela desk automated, sync to video, AMS, Lexicon, Focusrite, Tubetech, TC2290, Urei, Eventide H3000, Notator, Cubase Audio, Mac/Atari, PPG Wave, M1, D50, Kurzweil K2000, Akai S3000/S1000, Prophet 5, Vintage Keys, MPC60, Waldorf Microwave, Vocoder, Proteus 2, music to picture programming, remixes, digital editing, Pro Tools III, One-Off CDs

Prices from £24 p/h + Vat. Access/Visa welcome.
For more information or to view the studio.

call: 0171-733 8088

1264

DUPLICATION

FULL COLOUR CASSETTE INLAYS

- Low prices
- Specialists in small orders
- No minimum order
- Full design service
- Labels
- CD Inserts

FREE SAMPLE & DETAILS FROM
MAXIMUM IMPACT
LANE END, CARLISLE ROAD, TILFORD, FARNHAM, SURREY, GU10 2EF
TELEPHONE: 01252 792407
8AM-5PM MONDAY-FRIDAY

One off CD's up to 74 mins £20.00 + VAT
Compact Disc Manufacture

500 CD Singles complete only £690.00 + VAT
500 CD Albums complete only £820.00 + VAT
1000 CD Singles complete only £995.00 + VAT
1000 CD Albums complete only £1190.00 + VAT

Digital/Post Mastering
Sadie - Focusrite - GML - Neve
Lexicon - TC Electronics - MD2
20 Bit A to D - 32 bit DSP.

Artwork Design & Layout
Drum Scanning - Typesetting
Fine art -Imagesetting
to Film & Bromide.

Tel C.R.S. 01424 436426

LICENSING

Looking for a record deal ?

Blonde Bombshell Records Ltd currently licence music worldwide to countries such as South Africa, Brazil & Poland, as well as distribution through TRC/BMG in the UK. We are constantly searching for new artists in order to extend our own UK catalogue and increase both our UK and foreign licencing.

Through our choosen CD manufacturer (Voyager) we categorise and assemble artists on compilations which we send to other record companies with the aim to negotiate a deal for you.

We work on commission only so there is no charge from Blonde Bombshell Records Ltd. There is however a CD manufacturing contribution fee of £90 (plus VAT & delivery) to be paid to Voyager, for which you will receive 14 copies of your compilation.

If you are interested please give Voyager a ring on 01382 205 100.

Blonde Bombshell Records *in association with* Voyager Media

High Quality Real Time Cassette Duplication

- Custom Wound Cassettes •
- Printed Labels •
- DAT to DAT Copies •
- Competitive Rates •

Contact Sounds Around
Tel/Fax 0116 270 2442

PUT YOUR MUSIC ON CD!
One-off CD's
up to 74 minutes £20
- From any format
- Next day service
- Free colour insert
- Specialist in small orders

Call today
0181 840 6536

DUPLICATION

COPYTRAX MULTI MEDIA
ONE-OFF CD's
£16.99 +VAT
(UP TO 74 MINS)
Contact Sales Department on
(01202) 661525
SAME DAY TURNAROUND

MIRROR IMAGE
AUDIO CASSETTE DUPLICATION
50-80,000 COPIES
REAL TIME / HIGH SPEED
ON BODY PRINTING
PRINTED LABELS
BLANK CASSETTES //
COMPACT DISCS
TEL/FAX: 0161 228 1119

HYPERSONIC PRODUCTIONS
CD MANUFACTURING SERVICE
"A cut above the rest"
- Short run CD packages
- Minimum order 300 units
- Digital editing
- In-house graphic design
- Quality products
- Exceptional prices
- Rapid turnaround
- 5 years experience
- Full colour printing
- Personal service

Look no further, call...
Matt Smith (01629) 636572 9am-7pm.
Or write to: Hypersonics, Robins Croft, Main Street, Stanton-in-Peak, Nr.Matlock, Derbyshire DE4 2LX.

Telephone: 0181 521 2424 • 0181 503 6360 *Facsimile: 0181 521 4343*
http://www.knowledge.co.uk./xxx/hiltongrove/ *Email: hgrove.demon.co.uk*

- *Compact Discs*
- *Pro-Mastering*
- *Digibin Cassettes*
- *Reprographics*
- *Print*

HILTONGROVE
where sound advice counts

- *32 Bit Technology*
- *ISDN Lines*
- *MD2*
- *3 Band DSP*
- *One-off CD's*

Alpha Business Centre, 60 South Grove, Walthamstow, London E17 7NX
4 mins walk from Walthamstow Central (Victoria – Br), 12 mins M25, 8am - 8pm 7 days. (Tel)

1 DESIGN ON YOUR COMPUTER

2 PRINT ON ANY PRINTER

3 APPLY PERFECTLY EVERY TIME!

LABELLING CD'S IN 3 EASY MOVES

KIT INCLUDES:

LABEL DESIGN TEMPLATE (PC & MAC)

THE NEATO LABELLER

COMPLETE INSTRUCTION GUIDE

ORDER NOW AND GET 99 FREE LABELS

NEATO™

CD LABELLER KIT

PATENT PENDING

THE £55 SOLUTION

+VAT & P&P

VISA SALES HOTLINE 0990 561571 MasterCard

MICROPATENT EALING HOUSE
33 HANGER LANE LONDON W5 3HJ
FAX: (0181) 932 0480
SEE US AT- http://www.neato.com

4 ONE-OFF CD'S FREE

We will send you 4 one-off CD's absolutly free worth £80.00 when you order a minimum of 500 cassettes.

Call Copytrax Multi Media
01202 661525

• CASSETTES & CD MANUFACTURE • ONE-OFF CD'S • 16 TRACK DIGITAL STUDIO •

1395

DiADEM DESIGN

ARTWORK ■ GRAPHIC DESIGN ■ TYPESETTING

Complete CD artwork package - four page booklet, back inlay plus disc label with full design, typeset and colour seperation to final film - ring for details includes three full colour scans plus colour proof!

0161 678 1569

THE COMPACT DISC COPYING CO.

One Off's + Printing

We specialise in short run compact discs at unbelievable prices ...

CD's Are Now Affordable !

Mail Order Welcome

Full Colour Inlay Cards Available

5 CD's + On Disc Printing £60 + vat
10 CD's + On Disc Printing £90 + vat
20 CD's + On Disc Printing £155 + vat
50 CD's + On Disc Printing £290 + vat

0171 - 561 0136

1245

RMS cassette copying

DAT, 4", F1, Free colour labels, SADiE editing, precisely PQ'd CD-Rs.

0181 653 4965
(South London)

1112

You've recorded your CD
Now make it look professional!

PressIT™ CD Labelling System

The quick, effective, safe way to print and apply circular labels to CD ROMs and Audio CDs using laser and inkjet printers

PressIT™ comes complete with:
100 white, 118mm circular labels; layout templates for Mac and PC; and The PressIT™ label applicator
Introductory price: £79.95 + £5 shipping and handling + VAT
Additional labels: 200 white £30; 200 coloured £32. clear plastic labels available

Credit card orders freephone:
0500 026103
enquiries tel: +44 (0) 171 794 5546
fax: +44 (0) 171 209 0645

Cheques or Postal Orders to:
Rocky Mountain Traders, Ltd.
PO Box 9446, London NW3 2WG
PressIT™ is made in Europe.
Patent pending.

1422

VOYAGER™

Manufacturing & Mastering of Compact Discs & Cassettes

500 CD Singles - £680

Price Includes: Full Mastering, Glass Mastering • Cases, 2 Colour On CD Printing & Colour J Cards

Post production Mastering

For a free information pack please call
Tel:01382 - 205100 • Fax 01382 202229

Make it with us . . .

Sound Recording TECHNOLOGY

MANUFACTURING

- Compact Discs
- Digitally Duplicated Cassettes
- Print And Reprographics

HIGH END MASTERING

- Five Studios
- Latest 32 Bit Technology
- Multiple Mastering Formats
- Super Bit Mapping
- Cedar
- 20 Hz Monitoring
- 20 Bit Recording
- 20 Bit Editing

MARKET LEADERS

☎ 0181 446 3218 London
☎ 0141 550 4640 Glasgow
☎ 01480 461880 Cambridge
☎ 0161 876 7633 Manchester

☎ 0800 581166 FREEPHONE CD

CDM

* On-off & short run CD's
* CD Mastering
* On CD Printing on one-offs
* Artwork on small or large runs
* For all your CD pressing needs at competitive prices

Call C.D.M. on Freephone 0800 525 626

1465

RELIABLE CASSETTE DUPLICATION

- FROM DAT, REEL OR CASSETTE
- BLANKS WOUND TO LENGTH
- ON BODY PRINTING
- FAST TURNAROUND, HIGH QUALITY

SMALL RUNS UP TO 1,000

PHONE FOR BROCHURE

DUPLITAPE

Tel/Fax: 0161 442 6910

37 SHAW ROAD, HEATON MOOR, STOCKPORT, SK4 4AG

1067

PRIME CDS LTD CONTACT JACQUI OR PHIL TEL 0171 561 0400 FAX 0171 272 5393

CDS • CD ROM
SOUNDTOOLS
DIGITAL EDITING

CASSETTES
VIDEO
PQ MASTERING

PACKAGE PRICES ON: 100 • 300 • 500 • 1000 CDs

CASSETTES REALTIME 1-100 PRODUCTION RUNS 200 +

PQ MASTERING FROM £70 FOR 2 MASTERS ON CDR

FULL DESIGN & PRINT SERVICE FOR CD BOOKLETS & CASSETTE INLAYS

ONE-OFF CDs FROM £17 INC VAT • LASER PRINTED LABELS FOR CDS

EMAIL • 101564 2602 @ compuserve com

diverse media

cd mastering

audio (full pq mastering)
on a pentium SADiE system
data & mixed mode
to cdr & exabyte, PC & Mac

Telephone (0181) 651 2222
Facsimile (0181) 651 3333
e-mail: info@diverse-media.co.uk

1185

Melody Ltd

MANUFACTURERS OF COMPACT DISCS & AUDIO CASSETTES

CD REPLICATION
- PRE-MASTERING
- GLASS MASTERING
- CD REPLICATION
- PRINTING

CASSETTE DUPLICATION
- MASTERING
- TRANSFER
- HIGH SPEED DUPLICATION
- PRINTING

!!! ALSO SPECIALISING IN CD-ROMS !!!

Master to Masterpieces

* Quick Service * Cost Savings * Experienced Staff * Professional Results *

ORDER NOW AND GET 50 CD's FREE, LIMITED PERIOD ONLY

FOR MORE INFORMATION AND THE BEST PRICES AROUND CONTACT US ON THE FOLLOWING NUMBERS

Freephone: 0800 515 145 * Telephone: 0181 570 6999 (3 lines) * Fax: 0181 570 7778

OPAL DYNAMICS

SPECIALISTS IN

- Quality Audio Cassette Duplication
- Custom Wound Blank Cassettes
- On Body Printing
- Printed Labels & Inlay Cards

OPAL DYNAMICS

Outstanding Audio Services

TEL: 0161 429 7447
Fax: 0161 429 8088

1449

sound performance

CD pressing, cassette duplication, design and repro, print, booklets, inlays, labels

expect
quality product at excellent rates

need
a supplier that meets delivery dates

want
a company that cares about getting it right with experienced professionals to co-ordinate your work

don't compromise your chance of success, work with the best.
call sound performance you'll notice the difference.

tel: 0181 691 2121 fax: 0181 691 3144
unit c, 80 blackheath road, greenwich, london se10 8da

1348

CASSETTES

Blank or Duplicated

- High Quality Chrome & Ferric Tape
- Cassettes to any length (C2 - C130)
- Minimum order 20 Cassettes
- White & Coloured Labels / Inlay Cards
- Standard, Crystal & Dble Library Cases
- Ampex reel Tapes / DAT Cassettes
- Video cassettes & Accessories
- Computer Disks / Technical books
- Same day despatch by Credit Card

FREE ! Catalogue and sample cassette

Tel: (01372) 272422
Fax: (01372) 276122

DOWNSOFT LTD
Downsway House, Epsom Road
Ashtead, Surrey KT21 1LD

76

WNE (Tamworth)

BLANK CASSETTES WOUND TO LENGTH
MINIMUM ORDER 50

CASSETTE DUPLICATION
LOOP-BIN MINIMUM ORDER 250

ON-BODY PRINTING DIGITAL EDITING
ALL FACILITIES IN HOUSE

0182 731 0052

ONE-OFF CDs,
CD MASTERING
DIGITAL EDITING
SONIC SOLUTIONS
SOUND RESTORATION
CD ROMs

SOUND CUTS LTD.
MASTERING SUITE
0181 964 4091

TapeLine
CASSETTES & CDs

- BLANKS
- LOOP BIN DUPLICATION
- APEX DIRECT PRINT
- COMPACT DISCS
- ACCESSORIES
- NATIONWIDE DELIVERY

0161 406 8608 1447

As seen on all the best-pressed CDs...

Digital Mastering by Henry Smithson at Sounds Good, Theale, Reading

- CD Manufacturing
- CD Mastering
- One off CDs
- Professional cassette duplication
- Inlay printing

We've listened to more mixes here than you've had hot dinners! Years of experience in professional mastering is free to our CD customers - our CD manufacturing prices include the mastering session, which you can attend, plus a free reference CD-R.

SOUNDS GOOD

Tel: 01734 302600
Fax: 01734 303181
www.sounds-good.co.uk
1173

DUPLITAPE

HEAD OFFICE
26 FORTWILLIAM PARK BELFAST BT15 4AL
TEL: 01 232 778395
FAX: 01 232 781640
MOBILE: 0850 537759
DUPLICATION MACHINERY BY TELEX AND SONY
CD PRODUCTION SERVICE AVAILABLE

BLANK AUDIO CASSETTES CUSTOM WOUND TO EXACT SIZES - CASSETTE DUPLICATION BY NORTHERN IRELAND'S ONLY GAUSS LOOP-BIN SYSTEM
A BJ ENTERPRISES COMPANY 852

THE COMPLETE CASSETTE & CD PRODUCTION SERVICE

CASSETTE DUPLICATION & CUSTOM LENGTH BLANKS
COMPACT DISC MASTERING & REPLICATION
DIGITAL EDITING • ONE-OFF CD
ARTWORK, DESIGN & PRINT

O·C·T·A·G·O·N RECORDS & TAPES

FOR A FREE BROCHURE & ALL THE ADVICE YOU NEED

(0191) 495 2324
(0191) 495 2306 FAX

Ground Bass Productions

DIGITAL MASTERING SUITE
24-BIT DIGITAL EDITING
ONE-OFF / CD DUPLICATION
CD ROM AUTHORING

Windsor Centre, Windsor Street, The Angel London N1 8 QH
Tel: 0171 288 1833 Fax: 0171 288 1834

NEW IN LONDON
1451

MUSIC MEDIA MANUFACTURERS Ltd

Experts in COMPACT DISCS, CASSETTES, VINYL, PRINTING, TYPESETTING, GRAPHICS, ADVICE ON ARTWORK.

500 CD Singles Complete Package £650 plus VAT = £763.75 • 1000 CD Singles Complete Package £950 plus VAT = £1116.25
500 CD Albums Complete Package £800 plus VAT = £940.00 • 1000 CD Albums Complete Package £1150 plus VAT = £1351.25

Don't Be Misled By The Others... Sometimes Their Prices Are Incomplete
Our Prices For The Above Packages Are COMPLETE Including FREE Mastering From DAT, Print Origination from camera ready artwork, Films CD's, Jewel Boxes or Slimline Cases, 4 Page Full Colour Booklet (4/1) and Tray Card or "J" Card. (4/0)

104 HARMOOD STREET, LONDON NW1 8DS
TEL: 0171 916 4450 FAX: 0171 916 4456
1367

SIMPLY THE BEST DEAL IN TOWN!

REAL CHEAP REAL TIME!

Realtime from DAT or cassette
Small quantity specialist
Excellent label designs available and more

J B AUDIO/VIDEO
01621 783518
1862

The Digital Audio Co

CD Mastering & Manufacture

500 Singles £680

500 Albums £750

Call Us On 01756 797100

Price inc mastering (20 min single / 60 min album - over 60 min add £40), discs, cases, 4 page 4 + 1 booklet / traycard from film & packing, ex VAT
1448

- **Hard disk CD Mastering**
- **One-off CDs & PM-CDs from £10**
- **Real time cassette copying**
- **Copy masters and editing**

- Laser printed labels & inlays
- Every copy individually checked
- Excellent quality & presentation
- Unparalleled service, best prices
- Fast turnaround – hours not days

LOW PRICES

MAGNETIC IMAGE

Repeat Performance

London W10
0181 960 7222
1365

FROM THE UK'S LARGEST INDEPENDENT

THE ONE-STOP SERVICE FOR ALL YOUR PRESSING AND PRINT NEEDS – AT REASONABLE PRICES. WE CAN HANDLE EVERYTHING FROM MASTERING TO ARTWORK ON SMALL OR LARGE RUNS

CASSETTES VINYL CD's

FOR ADVICE, QUOTES & INFO PHONE ANDREW OR LOUISE

0171 924 1661

MAYKING RECORDS

250 YORK ROAD, BATTERSEA, LONDON SW11 3SJ
1051

A WORD IN YOUR EAR

THE Cassette duplicator in the south

TAPESTREAM

WITH A GAUSS HIGH SPEED LOOP BIN DUPLICATING SYSTEM, DOLBY HX-PRO MASTERING & ON-BODY PRINTING, TAPESTREAM WILL GIVE YOU QUALITY. TAPE AFTER TAPE AFTER TAPE

CD's

YES TAPESTREAM ARE BROKERING FOR A MAJOR CD PLANT HERE IN ENGLAND, NOW YOU CAN CONVENIENTLY ORDER ALL YOUR REQUIREMENTS UNDER ONE ROOF.

GIVE US A CALL ON:

01798 344108 FOR DETAILS

TAPEStream "DUPLICATING SUCCESS"

THE Cassette duplicator in the south
784

DUPLICATION

COPYTIME

Real time cassette duplication
Specialising in small runs of 50-200
Label and inlay card printing.

RING FOR BROCHURE

0181 421 1970

986

Panton Music

Audio Cassette & CD Duplication Services including Blanks · Compilation Editing · Printing etc.

Call Dave Panton **0121 558 8338**

between 10am-4pm Mon-Sat

709

REAL TIME CASSETTE DUPLICATING

LABEL & INLAY PRINTING.
BLANK CASSETTE SALES.
DAT & AMPEX REEL TAPES.
FRIENDLY, PROFESSIONAL SERVICE

TEL: 01252 794253 FAX: 01252 792642

Keynote CASSETTES

87

DIGITAL EDITING

Pro Tools & Sonic Solutions Editing & Hire

Contact: Digital Gratification

Tel: 0171 483 3506

1314

PRO TOOLS @ THE BUNKER

DIGITAL EDITING & POST PRODUCTION

COMPILATION · REMASTERING · NOISE REDUCTION
TIME COMPRESSION · REMIXING · SOUND FX DESIGN

CALL : BEN STONEHAM OR ROBIN HILL

0171 209 2128 / 2125

FOR HIRE

ADVANCED SOUNDS LTD (Hire & Sales)

143

- Musical & Studio Equipment Hire
- Home Recording Packages Hire
- New & Used Equipment Sales - Part/Ex
- Delivery/Collection – Nationwide

LOW RATES / GOOD SERVICE

0181 462 6261 (or 8621)

New PA Hire Service

400W to 2K with Foldback
Hughes & Kettner Pro Cabs
Soundcraft, Mackie, H&K desks
Rates from £50 to £250 pd
Dry Hire to Full Production
Call for free info pack!
We offer Pro PA systems for Gigs, Functions and Parties.

tickle 0181 964 3399

The best in Pro-Audio Hire and Sales

COUNTERPOINT CLASSICAL

BEST PRICES BEST SERVICE

CASSETTE BLANKS/DUPLICATING
HARD DISC DIGITAL EDITING

PO Box 6 Hengoed
S. Wales CF8 7SR

01495 201116
Mobile 0860 333089

INSURANCE

Sound Insurance

PHONE BERNADETTE OR DAVID FOR YOUR FREE QUOTATION

HENCILLA CANWORTH INSURANCE GROUP

0181 686 5050

Insurance House,
27/29 Brighton Road,
Croydon CR2 6EB

1328

G.M. INSURANCE IMBER BROKERS LTD.

WHY PAY MORE FOR YOUR INSURANCE THAN YOU NEED?

Our specifically designed schemes for musical instruments and equipment, employers & public liability, non appearance, travel & motor will help cut costs.

G.M. IMBER LIMITED
FREEPOST SE5052 GRANGE HOUSE
GRANGE WALK LONDON SE1 3DT
Tel: 0171 231 5005 Fax: 0171 252 3656

695

FOR HIRE

ATLANTIC HIRE SERVICES LTD

RECORDING EQUIPMENT HIRE
Discounts — Best Rates

TEL: 0181-209-1384/0025 (24HRS)

61

STUDIOHIRE

0171 - 431 - 0212

0171 - 431 - 0212

- YOU'VE READ THE REVIEWS IN THIS MAGAZINE.
- NOW YOU CAN HIRE THE LATEST EQUIPMENT FROM US!
- NEW ADDITIONS INCLUDE DIGIDESIGN PROTOOLS 3, TECHNOX, KORG TRINITY PLUS & PROPHECY, NORD LEAD, BASS STATIONS, WALDORF WAVE, KURZWEIL K2500, PC88, QUADRASYNTH PLUS, AKAI S3200XL, S3000XL, DR8, DR4D, EMULATOR 4, E64, E51-32.
- PLUS TOO MANY VINTAGE SYNTHESIZERS TO MENTION HERE!

YOU NAME IT, WE'VE GOT IT!

1272

Audiohire

Hire of virtually any recording and backline equipment

Tel: 0181-960 4466

1387

SOFT CASES & COVERS

QUALITY COVERS & SOFT PADDED CASES

ANY MANUFACTURER
ANY MODEL

AKAI, AMPEG, CARLSBRO, E.V., ENSONIQ, FENDER, J.B.L., KAWAI, KORG, KURZWEIL, LANEY, MARSHALL, MESA BOOGIE, PEAVEY, RIVERA, ROLAND, TECHNICS, TRACE ELLIOT, VOX, YAMAHA.

Sample and Brochure from:

CAPITAL MAMBA

PO Box 150
Aldershot GU12 6YP

Tel: 01252 336505

1456

ARTISTS WANTED

Singers / Songwriters

You've got the words & melodies, we've got the production skills, digital studio, industry contacts + track record, to turn your ideas into hits. Dance / Soul / Pop specialists – promotion possible

Creative Productions
Tel 0181 337 6311 or 0181 296 9962

1291

CATHARINE COURAGE MUSIC

ARE NOW LOOKING FOR

Femaile Mainstream/R & B

Dance trax to license to European & Japanese labels
For further details contact Mike Shepstone

48 De Lisle Road, Bournemouth BH3 7NG

TEL & FAX 01202 241508

1464

FIND YOURSELF A RECORD DEAL

IN THE BANDIT A&R NEWSLETTER

TRY IT – FREE

BANDIT will tell you which Record labels, Publishers, Production Co's etc are currently looking for new artists - Information is Power! If you're an ambitious act send an SAE to Bandit for your **FREE SAMPLE EDITION** of this invaluable monthly newsletter.

BANDIT (SOS), PO Box 22, Newport, Isle of Wight PO30 1LZ.
For immediate 24 hrs info call the BANDIT NEWSLINE on

0336-411-277

Ring this number for 4 new companies looking for new talent each week. Operated in conjunction with the International Songwriters Association.

Calls charged at 39p/min cheap rate & 49p/min at all other times.

Email: John_Waterman@icsica.demon.co.uk.

1271

A & R LIST

OVER 1000 CONTACTS FOR ONLY £6.00

Including

- Contact Name
- Address
- Phone number and Fax
- Style of Music

Also available

- Fanzine lists £3.00, 450 entries
- Recording, rehearsal and venue lists + FREE GIG GUIDE, 800 entries, £5.00
- Musical Services List, 500 entries, £5.00
- The List, 800 entries, a budget priced compilation from all the TMR Lists, £4.50
- The Demo Guide, everything you'll need to know from making to packaging, targeting and follow up, £6.00

Many other services available inc:-

- DAT Duplication / Compilation
- Cassette / Video Duplication
- Demo Targeting
- Recording Studio etc.

Please write or fax for details
All lists updated regularly

Payable to Mr. M. Bell
TMR c/o Mr. M. Bell,
PO Box 3775, London SE18 3QR
Tel/Fax: 0181-316-4690

1393

RIGHT TRACK STUDIOS

Engineering midi and arranging courses in Herefordshire, beginners to advanced.
Contact David Etheridge on
01432 880442
for details
134

TUNESMITHY MUSIC
***NEW* LISTENING COURSE**

Listening Aural Practice for G.C.S.E., GNVQ and A Level. Rhythm - Drum Patterns, Intervals, Melodies and Chords, Real Instruments, Form and Texture Recognition, Spot the mistake in the Tune etc..

Cassette and Booklet £12.50 (+£1.50 P+P)
TUNESMITHY MUSIC
69 Lowdale Lane, Sleights, Whitby, North Yorkshire YO22 5AD 1471

POINT BLANK TRAINING

8 week practical course in latest studio technology including: Sampling, Sequencing, Digital Recording and Mixing. Based in East London. Free parking.
for information call:
0181 293 4909
1164

MIDI & RECORDING SOLUTIONS

Individual tuition and modular courses in:-
- *Sequencing, sampling, synthesis, drum programming*
- *Mixing desks, effects, multitrack recording, engineering*
- *Synchronization, mastering*

Problem solving of existing equipment or studio set-ups
Call outs in the London area
Tel: 0181-520-8827
1216

THE RECORDING WORKSHOP

Provides one of the most affordable comprehensive range of exclusive 2-8 months part time day/evening **practical** courses on all aspects of Sound Recording including Multi-tracking, Cubase and Sampling.
Beginners welcome, concessionary rates available.
Established since 1989, working 16 track studio based in West London with easy access and free parking. 653
FOR PROSPECTUS : 0181-743 2645

MEDIA PRODUCTION FACILITIES
Bon Marche Building, Ferndale Road, London SW9 8EJ
Tel: 0171 737 7152 or 0171 274 4000

RECORDING AND PRODUCTION TRAINING

Constantly updated full-time courses operated in association with the pro-audio industry providing unique access to the latest analogue & digital systems in our 24-track automated studio and digital programming suite:

One year full-time Diploma Course
ADVANCED SOUND RECORDING & PRODUCTION TECHNIQUES
Practically based tuition in small groups with theory from internationally recognised specialists supplemented with new technology from leading manufacturers.

Three months full-time Certificate courses
ANALOGUE SOUND RECORDING & PRODUCTION
DIGITAL SOUND RECORDING & PRODUCTION

One week full-time course
INTRODUCTION TO SOUND RECORDING & MIXING
An entirely practical foundation course (9th/16th Sept '96)

5 & 10 day full-time course
AUDIO FOR TV/FILM -
Practically based course, including multi-machine synchronisation and full mix-to-picture.

These comprehensive courses give the necessary skills & experience to gain employment in the audio-visual industries.

COURSES COMMENCE ON 23rd SEPTEMBER 1996

Extensive range of TV/video & Computer Graphics/Animation courses also available
1409

NEATH COLLEGE
(in association with
Welsh College of Music & Drama)

Principal R. J. Trebilcock
M.Sc, B.Sc. (Hons), M.Inst.P

Principal Edmund Fivet
MA, FRCM

ARE YOU LOOKING FOR A JOB IN THE MUSIC INDUSTRY

The
Higher National Diploma
at Neath College, in conjunction with the Welsh College of Music and Drama,
is designed to provide the essential skills and training for students in the highly competitive field of Popular Music. This 2 year full-time course includes Recording Techniques, Music Performance Techniques, Composition and Arrangement, Music for Media, Jazz, Business Planning etc. Successful applicants will automatically qualify for a grant (Mandatory Award).
For further details and an application form, please telephone or write to: Admissions Unit Neath College,Dwryfelin Road, Neath, West Glamorgan SA10 7RF. Tel: (01639) 634271. Fax: (01639) 637453.
869

"IT'S ALL THE PRACTICAL TIME THAT MAKES THE DIFFERENCE"

Don't listen to us! Listen to our students

C.Lausmann
SAE Graduate '92
Award Winning Sound Engineer

Call our college for a free colour brochure and a tour of our facilities:

LONDON 0171-609 2653 PARIS 01-4811 9696
VIENNA 01- 330 4133 ZURICH 01-445 2040
MILANO 02-8912 0540 AMSTERDAM 020-689 4189
BERLIN 030 - 456 5137 MUNICH 089-675167
HAMBURG 040-233676 FRANKFURT 069-543 262
GLASGOW 0141-221 3441 COLOGNE 0221-954 1220
STOCKHOLM 08-730 5100

Also in Sydney, Melbourne, Perth, Adelaide, Brisbane, Hobart, Singapore, Auckland, Kuala Lumpur

COURSES

HURRICANE STUDIOS

CITY AND GUILD SUMMER COURSES

The Institute of Music and Technology at Hurricane Studios is the UK centre for City and Guilds qualifications 2337 and 2338. Our condensed 7 week intensive courses in Sound Engineering and Music Technology are available from the 22nd July 1996. 32 Track Digital Studio, 24 Track Analogue and 3 MIDI Studios. Each training group is small so places are limited.

Phone now for details and a free prospectus

Tel: 0181-699 6945
Fax: 0181-699 5845

LONDON BELFAST DUBLIN 1415

I·M·W

Diploma Courses
in SSL G+/24 Track Engineering and MIDI Programming

For free brochure
Call 0171-608-0231
Big concessions for unwaged 1211

FRUSTRATED? Can't get the results you want?

TRAINING?

INTRODUCING A WEEKEND BASED INTENSIVE SOUND ENGINEERING COURSE...

...which will take place in the famous Ealing Film Studios and in the London College of Music using custom designed facilities. The course is designed to be very much "hands on" using the latest Digital and Analogue technologies. Subjects covered include - Hard Disk Editing, "The Mix", Equalisation and Microphone Techniques.

For more information and a application form telephone or write to us at the following address. SOWE AUDIO TRAINING, THE DOWN TO EARTH CENTRE BROADWAY, LONDON E15 1NS. TEL 0181 534 6666 or Mobile 0589 532 914

Produced with the aid and support of SOUNCRAFT and SPIRIT by SOUNDCRAFT and THAMES VALLEY UNIVERSITY.

City College Manchester

The Cutting Rooms

The Cutting Rooms

Intensive Courses in Sound Engineering.

A programme of short courses in a wide range of sound engineering skills. From beginners to advanced, engineering/production techniques and specialised topics. Please call for a brochure and course dates.

Paul or Mike on +44 (0)161 740 9438 1441

LIVE AUDIO TRAINING

LAE LIVE AUDIO ENGINEERING

Under real Concert environment

Practical experience in setting up, mixing Monitors and Front of House. Tutorials take place at top London venues.

For a brochure - Fax your name/address & tel no.

Fax: 0171 700 4600
Or phone **Tel: 0171 700 3271** 1097

STUDIO ACOUSTICS

ACOUSTIC BASS END CONTROL

TOTALLY, TOTALLY NEW, INOVATIVE, SIMPLE, AND BRILLIANT

- LIGHT WEIGHT BASS TRAPS, JUST TWO SCREW FIX TO WALL OR CEILING ONLY 4" DEEP.
- ADJUSTABLE FROM 70 HZ UP.
- REMAIN ADJUSTABLE FOREVER — TAKE THEM WITH YOU WHEN YOU MOVE.
- A RIDICULOUS CONCEPT — "BUY ONCE ACOUSTICS".
- TREAT OVERNIGHT-NO NEED FOR BUILDING WORK.
- NO NEED FOR "DOWN TIME"
- COST EFFECTIVE.
- THE ONLY ALTERNATIVE TO TRADITIONAL METHODS.
- DESIGNED AND MANUFACTURED BY absolute audio

THE PEOPLE WHO KNOW ABOUT BOTTOM

PHONE 01295 273405 FOR DETAILS

40 Clarendon Rd West, Chorlton, Manchester, M21 0RL

A New Control Room?

- Whatever the scale of your project, almost any control room can benefit from the design principles of the Early Sound Scattering room.
- Instead of relying on creating a reflection free zone, in this new configuration of room the unwanted reflections are masked by many randomized low level reflections from the front of the room, allowing consistently accurate response and imaging throughout the room regardless of equipment layout.
- This means that very different rooms can be made subjectively identical, providing the closest thing yet to absolute reference monitoring.

If you're serious about your new control room, you should be talking to

Andrew J Parry
on 0161 861 0857

ELECTROACOUSTIC SYSTEM SPECIALISTS 978

TUITION / PROGRAMMING

THE STUDIO WIZARD

Will Design, Supply, Build, Train, Install, Debug and save you money! So if you want a studio that works like magic call me!

0860 666532

FROM A LITTLE ADVICE – TO A COMPLETE CONSTRUCTION PROJECT – AT THE RIGHT PRICE!

Email: studio.wizard@paston.co.uk
Web: www.paston.co.uk/studio.wizard/homepage 140

Logic™

One-to-One Tuition

MAC • ATARI • PC

Peter Dudley

0181-923 8989 1410

CLUBS

ROC ROLAND OWNERS CLUB

The only International Roland & Boss

Courses for 1996

Courses & Seminars are currently running for Roland synths, samplers etc. designed to help you get the most out of your Gear

Call for further details

Hurry & Join Today!

- Full Technical Support
- Savings on Products & Services
- Club Magazines & News Letters
- Latest News on Roland & Boss Products
- Use of Roland Sample Copying Centre
- Mail Order Sample copying service

Tel: (01733) 233135 10am to 5pm Mon-Fri 1004

MMD

The MIDI & MUSICIANS DIRECTORY

The MMD is an expanding database of progressive individuals who use and abuse today's modern innovations in music production. Join the MMD network of musicians, producers, engineers, DJ's, drummers, vocalists, programmers, etc and receive quarterly membership updates and the MMD newsletter, free promotional / noticeboard space, discounted services, competitions, advice, contact lists, studio workshops, humour... Amateurs & Pro's welcome.

£10 / year membership guarantees 4 updates & 4 newsletters.

Phone Jules on 0171 328 0865 for details / info / application form

GENERALMUSIC

International User Support

Call us *now* for your *FREE* GENERALMUSIC Magazine

Tel: (+44) 01227 742780 Fax: (+44) 01227 742791

46 Hampton Close, Herne Bay, Kent CT6 8BZ. UK 1427

THE STUDIO DOCTOR

Analogue • Digital • MIDI
Installations • Patchbays
Wiring • Debugging • Training

PHONE IAN ON 0956 – 580332

ADVANCED SOUNDS LTD
(Service & Repairs)
SERVICE FOR:
★ Most tape Machines ★ Most keyborads
★ Hire & Sales division
LOW RATES / GOOD SERVICE
0181 462 6261 or 8621

REPAIRS + SALES
MONITORS, CD - ROMS,
DAT DRIVES, FLOPPIES
& HARD DRIVES.
LARGE STOCKS AVAILABLE
(NEW & REFURBISHED)
REPAIRS UNDERTAKEN ON
ALL THE ABOVE PRODUCTS
WOODVILLE LTD
28 WATFORD METRO CENTRE
TOLPITS LANE, WATFORD WD1 8SS
TEL: 01923 213350
FAX: 01923 211650
MOST MAJOR CREDIT CARDS ACCEPTED

DAT DAT DAT
DAT RECORDER SERVICE & MAINTENANCE
ALL MAKES OF DIGITAL RECORDERS
2 TO 8 TRACK
3-5 DAY TURNAROUND
FREE REPAIR QUOTATIONS
NATIONWIDE COLLECTION & DELIVERY
ProDigital Audio Services
01308 422 866

Studio design & build
We have the expertise and equipment to solve all your isolation and acoustics problems.
* Design only or ..
* Full construction
* Air conditioning
* Audio/video wiring
SM acoustics
Tele:01952 510508 Mob:0850 292440
email: 100714,2673@compuserve.com
Call us now for a complete solution or just a little advice!

PANIC
Panic Music Services
AUTHORISED HI-TECH
SERVICE CENTRE
FOR:
Roland KORG
YAMAHA AKAI E-MU
TEAC SANSUI
REPAIRS TO ALL MAKES OF
KEYBOARDS - SYNTHS MODULES - SAMPLERS
AND AMPLIFICATION.
ALL VINTAGE SYNTHESISERS REPAIRED
COMPUTERS - ATARI - MACINTOSH - PC'S
ALL WORK TO BS5750
QUALITY INSPECTED
CALL US ON 01954 231348

Alesis ADAT & Tascam DA88
Specialist Service Centre

Expert ADAT & DA88 Repair and Servicing for:
- Reliable and consistent machine operation.
- Record and replay data security.
- Fast and stable machine lock.
- Reduced Error Correction activity.

We deliver:
- Rapid and flexible turn around times.
- Manufacturer's 500 Hour Maintenance Programme.
- Collection and Delivery.
- Professional Quality Control and Service Warranty.

Call Aspen Media Service for details.
01442 399 949
ASPEN
MEDIA LIMITED 222 Maylands Avenue, Hemel Hempstead, Herts HP2 7TD

Hi-Tech Repairs
at the new look CIMPLE Solutions

YAMAHA Roland FOSTEX TASCAM ZOOM OPCODE Oberheim
AKAI AUTHORISED SERVICE CENTRE
E-MU
PEAVEY JLCOOPER ALESIS KORG ART
What does it take to maintain a healthy working studio
Cimple. We have the Solutions
As featured in the March & April '96 issues of SOS
Many other brands also repaired, please call.
WHILE-U-WAIT SERVICE @ NO Extra Charge
FOR ALL OPERATING SYSTEM SOFTWARE UPGRADES.
HARD DISKS AND MEMORY
EMU PROTEUS 1, 2 or 3 OWNERS
CIMPLE SOLUTIONS
Tel • 0181 904 4141
Mobile • 0973 723033
Fax • 0181 904 1200
Unit 2/17 Wembley Commercial Centre
80 East Lane • North Wembley • Middlesex • HA9 7UR
200 Yards from N.Wembley Station • Bakerloo Line

REPAIRS • REPAIRS • REPAIRS • REPAIRS

CENTRAL SOUNDS

THE FRIENDLIEST REPAIR & SERVICE CENTRE IN THE UK

FREE

5 STAR SERVICE

Years of Sound Experience

Amps, Keyboards, Samplers, FX Units, Mixers, Guitars, Drum Machines, DAT's, Expanders, Tape Machine, Sequencers, PC, Atari's, Drums & Hi-Fi's

E-MU

Main Service Centres

AKAI

The Only UK's Official Roland Owners Service centre

- Collection from Home or Office
- Location of faults
- Equipment test
- Estimates of repairs
- 3 months warranty and labour

JUST GIVE US A RING ON 01203 665665

OR FAX US ON 01203 666669

7 DAYS A WEEK

in-sync

in-sync service limited
Unit 6, 43 Carol Street, Camden Town, London NW1 OHT

Specialists in servicing Revox / Teac / Tascam / Fostex tape machines

0171 485 3447

Need Fast Efficient Service & Repairs?

G C ELECTRONICS PROVIDE IT!

0181 597 4184

Synthesiser Service Centre

Smallest ads
Greatest expertise
Best value
Need we say more?

0171 586 0357 / 7275

Unit 3, 6 Erskine Road, London NW3 3AJ

RECORDING STUDIO (SEE PAGE 253)

HOXTON STUDIOS

24 track (ADAT) Digital Studio with comprehensive Digital Editing (Soundscape - 8 trk). Trident 36:24:24 desk, Cubase (Mac/Atari/PC), C-Lab. Akai S3200 XL (16Mb) + extensive sample library. Pro effects (PCM70, 1960, etc). Neumann, AKG Mics. Tascam DA30 II + DAT-DAT copying.
Purpose built live room, daylight in every room + great atmosphere. Producers, Engineers + Programmers available.
Call for rates and info:

Tel: 0171 613 5003
Fax: 0171 613 5020

The Advertisers Index

ABC Music Company	0181 974 5505	227
Active Sound	01923 246282	192-193
Akai UK	0181 897 6388	199
Alchemea School of Recording	0171 359 3986	221
Andertons Music Company	01483 38212	87
Arbiter PLC	0181 202 1199	63, 102-103, 117, 195
Audio-Technica	0113 277 1441	33
Axis Audio Systems	0161 474 7626	141, 213
Babel Systems	0181 749 8222	167, 211
Behringer UK	01483 458877	85, 169, 219
Beyer Dynamic GB	01444 258258	159
Blue Systems UK	01799 584095	204-205
British Music Fair / Plasa	0181 426 0171	231
Brandoni Music	0181 908 2323	191
Carlsbro Retail	01623 645501	152-153
CC Music	0141 339 0566	113
Concert Systems	0161 927 7700	207
DACS	0191 438 5585	209
Dance Village	0181 440 3440	223
Dawsons Music	01925 632591	170-171
Digidesign UK	01753 653322	95
Digital Village	0181 440 3440	181
E-mu Systems UK	0131 653 6556	165
Eddie Moors Music	01202 395135	224-225
Emis	0117 956 1855	93
FJ Music	0181 374 1054	99
Gateway School of Recording	0181 549 0014	141
Gig Sounds	0181 769 6496	207
Harman International Industries (AKG)	0181 207 5050	53
HHB Communications	0181 960 2144	127
HW International (Shure)	0181 808 2222	201
Intasound	0500 515256	197
Kenton Electronics	0181 337 0333	141
Key Audio Systems	01245 344001	11, 89, 143, 217
Key Audio Systems (Quasar)	01245 344001	91
Keyboard & Drum Tech	0181 749 3131	99
Keys Musical Instruments	0161 627 0614	209
KGM Studio Specialists	01924 371766	188-189
Korg UK	01908 857100	OBC
MCMXCIX Distribution (Cpcode Systems)	0171 723 7221	1
Musical Audio Distribution (M.A.D)	0181 452 1009	77
Marks Music	01473 287872	145
Midiman UK	01205 290680	49, 51
Millennium Music Software	0115 955 2200	43, 105
Multi Media Music	01623 422688	129
Music Connections	01245 354777	54-55, 56-57, 58-59, 60-61
Music House Data Products	01438 833222	211
Music Lab	0171 388 5392	135, Loose Insert
Music Solutions	01438 750751	203
Music Village	0181 598 9506	108-109, 110
Musictrack	01462 733310	IFC
Natural Audio	0181 207 1717	101
Peavey Electronics Corporation UK	01536 461234	183
Pro Music	01284 765765	191
Project Music	0181 570 4444	97
Prosonix	01323 848808	191
Raper & Wayman	0181 800 8288	65
Rimmers Music	01772 433281	157
Rockbottom Music	0181 680 1042	227
Roland UK	01792 702701	107
School of Audio Engineering	0171 609 2653	185
SCV Electronics London	0171 923 1892	IBC, 71, 123, 125
Sound Business Studio Sales	0181 559 0373	151, 217
Sound Control	0800 525260	68-69, 162-163
Sound Division	0171 609 3939	73, 75
Sound Technology plc	01462 480000	9, 137, 139
Soundcraft Electronics	01707 665000	19
Sounds Live	0191 230 3422	37
Spirit by Soundcraft	01707 665000	15, 149, 179
SRTL	01243 379834	118-119
Stirling Audio Systems	0171 624 6000	86 - 87
Studiospares	0171 482 1692	161
Swan Publicity	01628 487820	211
Syco Systems	0171 625 6070	165
Systems Workshop	01691 658550	167
Tascam UK	01923 819630	45
Tech-mate UK	01206 793355	176-177
The Computer Warehouse (TCW)	0171 724 7104	5
The M Corporation	01425 480569	78 - 79, 80 - 81
The Synthesizer Company (TSC)	0171 258 3454	2, 3, 4
The Way Out West Music Company	0181 744 1040	47
Time & Space (Zero-G)	01442 870681	130-131, 132-133
Tony Larking Audio	01462 490600	115
Turnkey	0171 240 4036	22-23,24-25,26-27,28-29,30,173,229
Unity Audio	01920 822890	35
Washburn UK	01462 482466	215
X - Music	0117 973 4734	146-147
Yamaha - Kemble Music	01908 366700	21, 175

sounding Off

SOS reader, songwriter and freelance producer STEVEN ROBINSON has some strong opinions on the state of pop music today. In this month's stream of invective, he gets some of it off his chest...

Somebody has to write an epitaph to the semi-art form pop music — which, in my opinion, died sometime in the mid-'70s — somebody with the conviction to speak out against the complacent music business. The industry has descended into a barren, moronic inferno, sterile as an operating theatre and largely devoid of real talent. Much of the blame for this lies with UK record companies, who have been trying to outdo Josef Goebbels by brainwashing the public into believing that what they are given is what they actually want. I see companies cynically manipulating sales figures and applying every known trick to bulldoze the public into buying what I consider to be a fake product rather than the genuine article. Indeed, over the past 20 years or so, we've been fed such a monstrous amount of garbage — passed off as music, but unworthy of the title — that a whole generation has grown up believing that what they hear is the best there is. This view may upset the cloth-eared, pseudo-experts working for the record companies — but the truth hurts.

If pop music is losing out to computer games and other distractions, as we are told, the record companies only have themselves to blame — they don't seem to give a damn about the music, only short-term profit. How else do you explain the phenomenal success of re-releases and cover versions of classic pop songs such as 'Unchained Melody' — reported to be the biggest-selling single of the decade? The original versions of all these classics were created using relatively primitive gear, and would sound good played on just an acoustic guitar, whereas the gradually worsening trash of the past two decades has the benefit of improved recording technology and the 1001 sounds that synthesis and sampling have to offer. But it's still trash!

Anyone dismissing current 'politically correct' musical fashions tends to be castigated, or at best, labelled old-fashioned. Yet I am neither old nor old-fashioned, nor am I opposed to any new style of good music. But the secret of a good song is, as ever, a memorable melody capable of evoking emotion, supported by an accomplished performance. Such qualities engender longevity. Who will be playing the majority of today's pop music in two years' time, let alone 10? What today's hopelessly untalented songwriters fail to realise — along with their equally tone-deaf hype champions in the record companies — is that you can't just string together an almost random sequence of notes and call it a melody. Nor can you add moronic lyrics and call the result a song. That's why flashy, irrelevant videos featuring half-naked, nubile dancers are used to camouflage banal songs. Composing music which is meaningful to the human brain takes real talent and feeling, all of which is sadly lacking from the typical *Top Of The Pops* music scene.

The overriding fixation on the 'bottom line' — making money — is evident in the ruthless exploitation of TV personalities. The sniggering record companies treat the public like fools, and seem prepared to sign up any soap opera star, footballer, model, boxer or even Donald Duck if they think they can sell records. It's a sad fact that you can find better singers in many Karaoke bars, or even on the streets, than on *TOTP*. In fact, the musical content of an act is now a relatively unimportant part of its market potential, judging by a recent TV interview with a bunch of schoolgirl Take That fans. When discussing the merits of the band, there was much mention of nice smiles, attractive band members and nice bums, but precious little about the music. This shameless pandering to the lowest common denominator has resulted in the virtual disappearance of good songwriters and musicians.

Of course, computers haven't helped — they now seem to be the masters, not the slaves, churning out variations on three or four repetitive motifs which have already been done to death by the likes of Stock, Aitken and Waterman, the Pet Shop Boys, Erasure and so on. Where are the UK's equivalents of Whitney Houston, Tina Turner, Mariah Carey, Michael Bolton or even Michael Jackson? Now we have Sam Fox, direct from page three, Kim Wilde, and the award-winning (yes, really!), Jason Donovan — heaven help us! Even the old-school performers like Bowie and Elton John did their best stuff long ago, but the fact that they are still major names is a sad indictment of their would-be replacements, who've failed to deliver. Even the Brit awards have lost all credibility after a series of increasingly absurd nominations, and the tuneless meanderings of over-hyped 'darlings' such as Pulp, Blur, Oasis and Supergrass do little to inspire confidence. The late John Lennon would surely turn in his grave to hear Oasis described as the new Beatles; whoever coined that one could surely use some psychiatric help.

Unless the record companies can climb out of this mess of their own making, they should call it a day — they have no more idea of who to sign than a donkey has of how to play chess. No wonder the UK is no longer a driving force in world pop music. It must be demoralising for real performers and songwriters to realise that unless they jump the queue by first joining the cast of *Eastenders* and *Neighbours*, they just won't get a break. If, as all the evidence suggests, the record companies only want to make money, why don't they move into manufacturing toilet rolls? There'll always be a call for them, and they're just as disposable as the music currently on offer! SOS

If you'd like to air your views in Sounding Off, please send your ideas to: Sounding Off, Sound On Sound, Media House, Burrel Road, St Ives, Cambs PE17 4LE. Any comments on the contents of previous columns are also welcome, and should be addressed to the Editor at the same address.

THE LA AUDIO 4X4² FORMS PART OF THE NEW LA AUDIO LINE-UP INCLUDING
CLASSIC COMPRESSOR CLASSIC CHANNEL CLASSIC EQ 4G² 4C² V8 CB

LA AUDIO PROFESSIONAL TOOLS

Will your next Gated Compressor be this versatile

2 Independent Compressors

- Fully variable Threshold, Ratio, Attack & Release
- Switchable Hi/Lo filter for De-essing & De-popping
- Half band mode for selective compression techniques
- Feed from balanced XLR input and/or adjacent gate
- Proprietory FET gain circuitry for superior quality

2 Independent Noise Gates

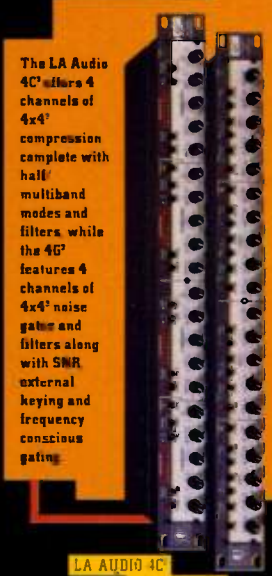
- Auto & Fast (50µS) attack modes for superb transients
- Multi function LED signals Threshold & Release rate
- External key input with Listen mode
- Balanced XLR inputs & outputs
- Use with Hi & Lo filters for frequency conscious gating

2 Independent Filters

- Top quality Hi & Lo pass filters
- Use independently or in conjunction with 4x4² gate
- Selective Noise Reduction removes hiss & hum
- Insert into gate sidechain for frequency conscious gating
- Dedicated input & output on 1/4" jacks

ALSO AVAILABLE

The LA Audio 4C² offers 4 channels of 4x4² compression complete with half² multiband modes and filters, while the 4G² features 4 channels of 4x4² noise gates and filters along with SNR, external keying and frequency conscious gating.



By incorporating all the above processors into 1U of rack space, LA Audio have made the 4x4² one of the most versatile analogue signal processors available today.
Indeed, Paul White of SOS described the original LA Audio 4x4 as "the Swiss Army knife approach to signal processing."
Balanced XLR inputs means it's ready for any professional environment.
The SIX processors are totally independent, yet can be switch-integrated to make the most powerful of gated compressors.
And features such as half band & multi-band compression; selective noise reduction (SNR); De-essing / De-popping are standard.
It all makes for some truly remarkable signal processing.
But then again the LA Audio 4x4² is a truly remarkable machine.

5 WARRANTY FIVE YEARS

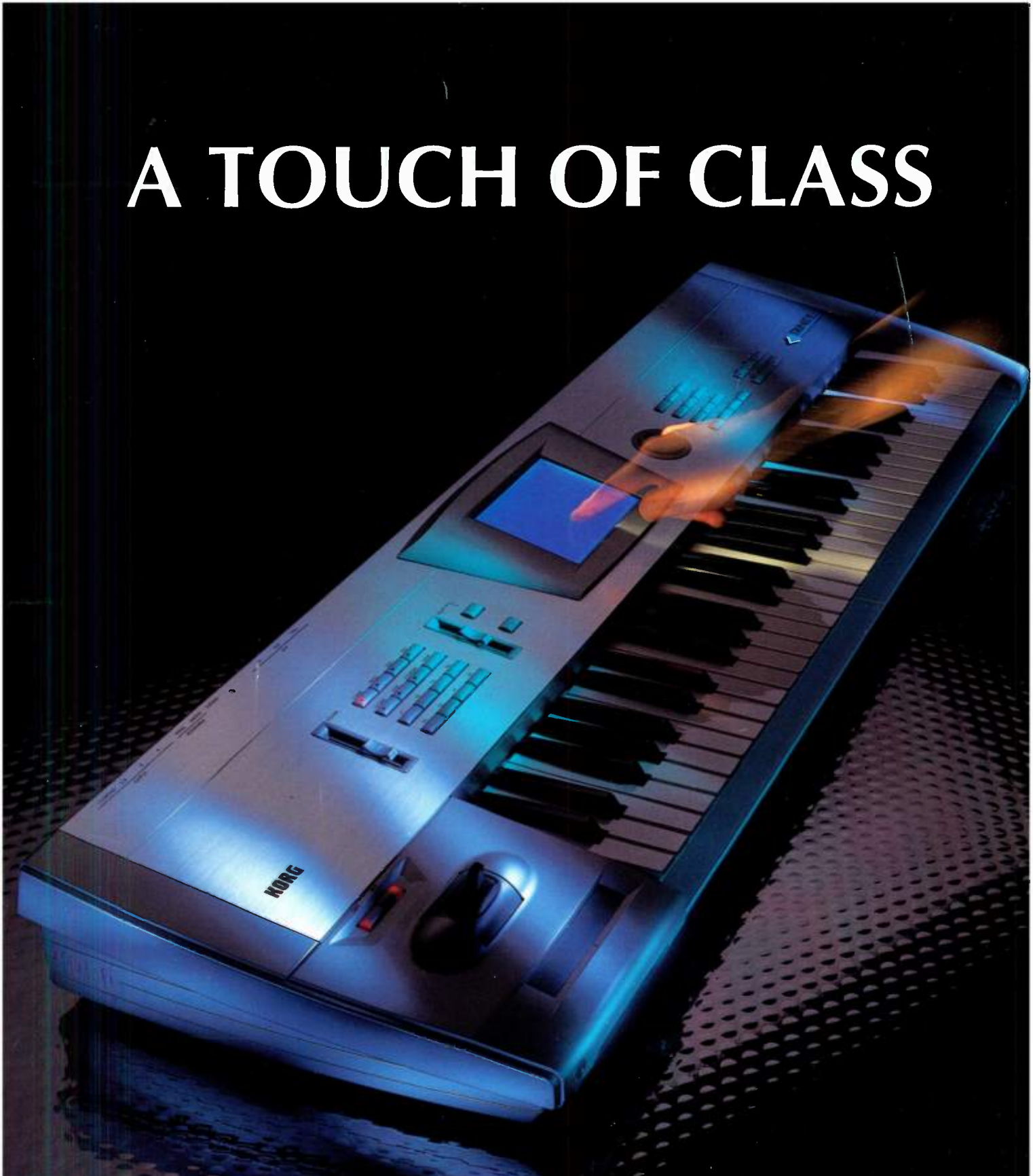
LA AUDIO

SCV LONDON 6-24 SOUTHGATE ROAD, LONDON, N1 3JJ. TEL: +44 (0)171-923 1892. FAX: +44 (0)171-241 3644.

SCV

WRH

A TOUCH OF CLASS



What puts Trinity in a class of its own?
Start with 24 MBytes of totally new PCM, sampled at 48K for better than CD quality.
Add Resonant Multimode Filters and up to 11 simultaneous effects.
Allow intuitive editing with Touchview™ graphical user interface. Then provide unparallele
expandability including Prophecy Physical Modelling, Flash Sample ROM,
Digital I/O and Hard Disk Recording.
The new KORG Trinity - a complete studio at your fingertips.

For further information write to,
KORG (UK) Ltd, 9 Newmarket Court,
Kingston, Milton Keynes. MK10 0AU.

KORG