

GOIN' ON, FEELIN' STRONG

here's a ritual that happens In The Mix office every month: we gather up all the latest hi-tech studio gear, we test it in studio conditions, and then tell you all about it. And then we promptly forget about it, as next month's even newer gear comes in.

Now, we're not the only ones to do this. Almost every consumers' magazine is fuelled by a constant stream of new equipment that must be tested and rated, and of course the emphasis will always be on the latest arrivals on the scene. And it's probably a bit harsh to say we 'forget' about gear once we've reviewed it, because we will always make reference to it, when relevant, in advice features and other reviews. But by and large, once a product has been launched in its blaze of publicity (or not), and reviewed, it sinks back into a fairly low-key existence.

Until now, that is. For this month, we start a new series that revisits products that may be several years old, but that are still as valid today as they were the day they were launched. These are products that defy the vagaries of fashion, and go onto be bestowed with that most coveted



of labels, 'industry-standard'. This is not a tag that comes easily, for it often takes time for users to realise that a product fulfils a purpose so perfectly that even advances in technology may not better its functionality. In some cases this may be a considerable time, as in the case of microphones such as Shure's SM57 or Neumann's U87, for example.

In other cases this may be achieved far more quickly, but the mantle may be lost

just as quickly as it was gained.

We're kicking off our monthly Modern Classic review slot with a synth module which you might not instantly think fits the tag, but which has actually been quietly creating quite a fan base over the last few years. In the notoriously fickle field of synths, the Roland JV1080 is still going strong and is valued among its legions of users as an essential weapon in their sonic arsenal. Time and again we speak to producers and musicians who use the JV day in, day out in their work, and the release of new cards means its functionality is still growing. Without blowing its trumpet too much (or clarinet or oboe, ho ho), the fact is that gear like the JV may be several years old, but it is still a viable option in today's marketplace.

So look out for some familiar kit over the next few months, as we pay respect to the equipment that has stood the test of time. Ironically, the Korg Trinity on this month's cover is fast becoming a bit of a modern classic itself...

Chris Kempste

Chris Kempster, Editor

ALSO AVAILABLE FROM US



The Min is the essential accessory for the recording studio. Our equipment reviews, written by working producers and engineers, give you an impartial opinion of the latest studio and recording gear, and our interviews get to the heart of the current techniques and issues in the recording industry.

The Mix CD helps you produce better music, by providing studio-quality samples and MIDI files, demos of the latest software and hardware, and audio tutorials demonstrating contemporary recording techniques.

CONTRIBUTORS TO THIS ISSUE



LAMBERT is general manager of Zip Dog Records, composes and

plays guitar and keyboards with breakbeat-dub guerillas Emperor Siy, has promoted gigs and club nights, toured the UK and Europe. lectured on music technology, and run courses on the music Industry. As a music industry journalist, he has rubbed shoulders with the big bosses of the biz, but this month he trawls the underground in his survey of production teams (p. 79).



OLIVER Mention the tag engineer/producer and we instantly think of Tim. He

cut his teeth (amongst other things) in Madchester working with the Stone Roses, Happy Mondays, M People and more. He's recently finished producing an album with The Other Two, and has been recording with New Order and Sinead O'Connor. In his snare time he likes to design biscuits and collect fish scales, Check out Tim's review of Digitech's \$200 multi-FX (p. 44).



MCPHERSON

is a freelance writer and critic specialising in music, theatre

ulure

and leisure. His teachers said he'd never make a living going to concerts, chatting to celebs, listening to free CDs and going on holiday. Reluctantly, Douglas admits they were right - he has to write the damn things up as well! His guilty secret? He's a country music fan. This month. Douglas deives into the secrets of Simply Red in his interview with producer Andy Wright (p. 70).



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SIMPLY RED

With Simply Red's *Blue*, Andy Wright entered the major league of producers. *Douglas McPherson* gets the inside story

PRODUCTION TEAMS

Somewhere between major record labels and bedroom musos there's a breed known as the Production Team. Stu Lambert meets three of them



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VIRTUAL RECORD SHOP

In the second part of our investigation of music on the net, *Gavin Starks* offers some tips for uploading your own efforts

STUDIO FILE

With a 30-year history, Eden is one of the most respected studios around. *Nick Serre* enters the garden

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Techno whizz kid Neil Landstrumm gets a grilling from Nick Serre in Brooklyn, New York



REGULARS

NEW

If it's music production, it's here. All the gear announcements, gossip and goings-on from a month in the biz

OPEN MIC

Industry squabbles, retailer rants... Here's a chance to have your say, and maybe win a fabby Shure jacket

ALBUMS

Read all about the best new releases this month, plus who's in the studio with whom, and why!

IOOTRO

News, tips, and new software for the computer of your choice — PC, Mac, Atari, and Amiga

A&R DEPT. Send us your de

Send us your demos if you think you're hard enough, and you could walk away with free recording media from HHB

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READERS' ADSLooking for a second-hand bargain? Look here first, 'cos it's the best free ads section anywhere

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REVIEWS

KORG TRINITY V3

Is Korg's latest version of the Trinity the best professional synth ever? *Nigel Lord* prepares to be impressed

YAMAHA MSP5

Everyone knows the ubiquitous NS10s, but will Yamaha's latest monitors find similar favour? Alan Branch lends an ear

CAKEWALK PRO AUDIO/DELUXE 8

Yet another upgrade is available for Cakewalk, and it's 20 quid cheaper than the last one. *Ian Waugh* had his cake and eight it

MODERN CLASSIC: ROLAND JV1080

Years old and still as popular as ever. Seb Pecchia gets sentimental over Roland's expandable synth module

DIGITECH STUDIO 200

Tim Oliver discovers the power of Digitech's latest multi-effects processor

RODE BROADCASTER

A condenser mic designed specifically for the spoken word – Trevor Curwen gives it a ride

dbx DDP

All the dynamics processing you need inside a box – Adam Crute gets his mitts on dbx's new digital darling

FOCUSRITE PLATINUM VOICEMASTER

Trevor Curwen fell in love with their Tone Factory, and it's the

Trevor Curwen fell in love with their Tone Factory, and it's the same story with Focusrite's new vocal recording channel

ARBORETUM HYPERPRISM

Hyperprism was one of the first major interactive audio plug-in packs. *Ian Waugh* investigates its latest incarnation

ALLEN & HEATH WZ16:2DX
Want a console with multi-effects, but don't want to go digital?

Bob Dormon may have the answer...

SOUND ADVICE

106

Problems in the studio? This is where our team of experts turn

audio agony aunts to find solutions to your technical hitches

RECORDING VOCALS

In the first part of this major new series, *Trevor Curwen* gets to the basics of great vocal recording







CD CONTENTS

Software TRACK 1

PC



Audition|T

A Windows 95 program that makes WAV sample auditioning a doddle. As well as its extensive searching and sorting facilities, Audition IT! converts files, calculates BPMs, loops, and more. Y2Kfix

Is your computer year-2000 compliant? Use y2kfix and find out. AudioFX1TrialVersion2

Demo of the Cakewalk Audio FX 1 Dynamics Processor plug-in which includes a compressor/gate, limiter, expander/gate and a dynamics processor.

Davesplugins_v300

The latest versions of these free VST PC plug-ins from Dave Brown. They include Tempo Delay, Sweep Delay, Tremolo and Compressor.

ProComp_demo_v110

A stereo compressor/expander plug-in from Dave Brown with all the features of the free Compressor plug-in plus full stereo support.

ProDelay_demo_v100

A stereo delay plug-in from Dave Brown with all the features of the free Tempo Delay plug-in plus full stereo support. Hyperprism

Demo of Arboretum's digital effects plug-in. Jiggle and wiggle your mouse around Hyperprism's Blue Window to create powerful, dynamically-changing effects.

Mac



Grainwave

A powerful software synthesizer for your PowerMac, capable of building fantastically complex sounds.

Listen Demo

An application for music ear training which features a wide variety of melodic and harmonic exercises in both matching and multiple-choice formats. You can change the level of difficulty at any time by choosing pace, scales, keys, ranges, chord sets, and many other options.

DavesPlugins_v200

The latest versions of these free VST Mac plug-ins from Dave Brown. They include Tempo Delay, Sweep Delay and Tremolo.

ProDelay_demo_v100

Another from Dave Brown. ProDelay is an advanced stereo delay plug-in including all the features of the free Tempo Delay plug-in plus versatile filtering and auto-panning. Also, ProDelayLite, a single-channel delay for use with VST 3.55 channel inserts. Hyperprism

Demo of Arboretum's digital effects plug-in. Jiggle and wiggle your mouse around Hyperprism's Blue Window to create powerful, dynamically-changing effects.

Atari



CD Writer

Demo version of Anodyne's CD audio recording software. See for yourself how easy it is to create CDs with this software.

Expand your horizons (or should that be verticals?) with the latest update of this 640 x 800 virtual screen driver for the STE and STFM.

ExtenDOS Gold

Update patch to version 3.0b for existing ExtenDOS Gold owners. Jay format

Disk formatting utility; will also format disks so that PCs and Macs can recognise them.

Minesweeper

Atari version of the classic and highly frustrating Windows game.

Runs in all resolutions including ST high and colour.

MIDI Share

MIDI programming development suite, includes source code, example programs and source (for both accessories and programs), and bindings (headers, libraries and so on) for Lattice C, Pure C, Turbo C, and Mark Williams. C.

Everything you need to start developing interesting MIDI software – possibly.

Amiga



GMPlay

A utility which can replay standard MIDI files without additional hardware. Essentially it's a software-based synthesizer, so a fast Amiga (68030 or better) is recommended.

About the Studio Series CD

Every month, the Studio Series CD brings you a selection of top-quality samples that you can collect to build your own sample library. Each CD is themed, with one instrument/ sound-type featured at a time, and using the colour coding system (right) you'll be able to locate samples quickly and easily.

MIDI files and synth sounds on the CD also follow the theme – this way you have instant production tools at your disposal. Need a drum track? Just go to the correct CD, load up the samples and corresponding MIDI files, and you're away...

Samples: Orchestral

TRACKS 14-24



Tracks 14-21

Solo instruments played in the key of C

14. Violin bowed, G3 - G5

15. Violin plucked, G3 - G5

16. Viola bowed, C3-C5

17. Viola plucked, C3-C5

18. Cello bowed, C2-C4

19. Cello plucked, C2-C4

20. Double Bass bowed, C2-C4

21 Double Bass plucked, C2-C4

Thanks to: Jane Bird (violin), Martin Cawte (viola), John Wayman (cello) and Wade Edwards (double bass) of Bath Argyle Orchestra for performing the solo samples, and Bath Spa University College String Group for the ensemble performances: Edward Burns,



Tracks 22-24

Orchestral ensemble

22. Unison, **G2** - G3 chromatic then A3, C4, E4 & G4

23. Octaves, D2 - D3 chromatic

24. FX, Dischord, Horror, Open Strings, Tremolo, Unison Scale

samples are also in WAV and AIFF



(Musical Director), Kathryn Elder, Louise Ashton, Vanessa Elcock, Maike Berndt, Nora Gregory, Gillian Clough, Elizabeth Filkin and Gareth Ballard (Violins), Lorna Johnstone and Nikki Larkham (Violas), Julia Amos, Charlotte Heritage and Emily Connor (Cellos).

Regulars — TRACKS 2-13

Commercial Track

2. Golden 'Passenger'

The latest project from Simply Red producer Andy Wright (feature, p. 70) is Golden, an Industrial indie groove-rock 4-piece from Stoke. The band and Wright recorded and mixed three songs in five days for their debut CD.

Demo of the Month

3. Headbound 'Recluse'

Eerie and evocative, yet suitably simple. Imagine Beck's mellower moments combined with a smattering of acid jazz.

Gear Demos

4-8. Roland JV1080:

The awesome 64-note poly expandable synth in action:

4. Puil (Demo by SAP of JV1080)

5. Ambient strangeness samples

6. Strings and Orchestra samples

7. Hip Hop 3 Grooves

8. World samples X 3

9. Focusrite Voice Channel

Vocal samples from funky diva Helen Bavester, recorded via the

Focusrite and an AKG SolidTube mic. Look out for more samples from this session on our next vocal sample CD.

10. Digitech Studio 200

Eight presets from Digitech's new multi-effects processor, and two sounds edited in real-time via MIDI.

11-12. Korg V3

For a taste of the power of the new V3 synth, check out these six programs from its MOSS 21 board:

11. Rhythm Junk 1, Siren, The Real Jungle

12. Almost Alive, Glock, Rhythm Junk 2

13. Hyperprism

Arboretum's new digital effects plug-in is put through its paces. (I) SpeechHarp: Speech vocoded with the harp. Speech using the Frequency Shifter to create undulating speech, then vibrating speech.

(ii) Rhythm gultar dry, then processed with the Sonic Decimator, gradually reducing both the sample rate and bit depth in real-time.

(ill) Drum loop dry, then processed with two different Echo Tranz settings.

(iv) Singing. Chorus used to produce stereo voices. Then Hall Reverb added in real-time, extending the reverb and shortening it. (v) Stream being modulated in real-time with the Pitch Time Changer to produce RoboSurf speech/conversation and then reverting to the stream again.

HEST! CONTENTS



Software TRACK 1

SYNTH EDITORS

The editors will work via MIDI or via the P/C-IF serial interface. If you are using the P/C-IF serial interface, you will need to use the Korg serial driver.

WinDry

Contains the Win (3.XX, 95 & 98) driver. Please follow the instructions in the readme.txt file.

N5N1Edit

Sound editor for the Korg N5 and N1 keyboard (Win and Mac).

Ne5redit

Sound editor for the Korg NS5R module (Win only).

X5-edit

Sound editor for the 05R/W, X5, X5D and X5DR keyboards/modules (Win only).

SYNTH SOUND SETS

Factory

The Factory folder contains MIDI system exclusive reloads of the original factory data for the Korg M1 and Wavestation.

- MID files are standard MIDI file versions with sys-ex data.
- SYX files are an alternative format version and can be used with Cakewalk, and many shareware programs such as SysexMan.

05-X5

The 05-X5 folder has some bonus sounds for the 05R/W, X5, X5D and X5DR keyboards/modules. You need to use the Korg editor to load these.

X3-N364

The X3-N364 are bonus sounds for the X3, X2, N364 and N264. The first 64 sounds can also be loaded into the Korg i3, i2, i4S, i5S and i5M.

All editors © Korg Inc.

Trinity V3 in action

TRACKS 2-11

Track 2-3: Trinity V3 – The Spirit of Z1; The Power of Trinity

Track 4: Trinity Options - Playback Sampler

Track Trinity V3 - A Dance Music Powerhouse

Track Trinity Options - Hard Disk Recorder

Z1 Synth - Multi-timbral Modelling Marvel;

The ZOOP Phenomenon **Z1 Synth - The Ultimate** Performance Machine

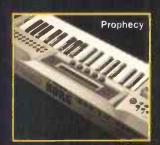
Track 9: Trinity V3 & TR-Rack - Orchestral & Film Music Masterclass

Track 10: Trinity Pro & Pro X

Track 11: Trinity Options - Digital Interface

Samples **TRACKS 12-20**









Track 12: MS20
(i) Bass1 (ii) DTLead (iii) DTune (iv) PWM

(v) ResBas (vi) Tooth

Track 13: DW8000 (i) 80Bass (ii) Bell1 (iii) Fatpwm (iv) Organ1

(v) Perc (vi) Rise (vii) Stab (viii) Wobble

Track 14: DS-8
(I) Bass1 (II) Bass2 (III) Chord (Iv) Reed

Track 15: M1 (i) M1 Preset 105 (ii) M1 Preset 151 (iii) EPStab (iv) Combi 117 (v) M1 Preset 116

Track 16: Wavestation

(i) 21st Century (fi) Deep Atmosphere (iii) Rock Organ (iv) Vox Concrete



(i) Analogue Pad (ii) Clav (iii) FreeFlyt Orchestral Brass (iv) Ohit (v) Porg (vl) Rwood

Track 18: X-Series

(i) BusyBoy, (ii) House

Track 19: Prophecy
(i) AEI, (ii) Clubas, (iii) ConChd, (iv) JngBas, (v) NWO, (vi) Rave

Track 20: Trinity V3

(i) Garage









New Emu samplers

Emu and Ensoniq announce new Ultra samplers, Proteus 2000 and Fizmo synth

his month comes news of some major new products from hi-tech heavyweights Emu and Ensoniq, now known collectively as Emu&Ensoniq. Emu themselves are launching a new range of samplers named Ultra, consisting of the E6400 Ultra, E-Synth Ultra, and the top-of-the-range E4XT Ultra.

On the surface, the new models look similar to existing EOS machines, but under the bonnet there's lots of important changes. Firstly, the new hardware platform uses the fast 32-bit 'Coldfire' processor, and the new V4 Software

■ 32 MIDI channels

■ Up to 128Mb RAM

■ 96Mb Sound

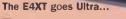
ROM/Flash RAM

■ 48-track sequencer

■ Dual 24-bit effects

New EOS
Version 4.0
software

■ Options include ADAT I/O



Brief Spec: Proteus 2000

■ 32-bit processing

■ 128-voice polyphony

■ 32 MIDI channels

■ 1024 presets

■ 512 user presets

■ 32Mb Composer ROM

■ 3 additional 32MB ROM slots

■ 6 analogue & 1 digital output

■ Dual 24-bit effects

Not to be outdone by their new sister company, Ensoniq have something of their own to shout about. Their new performance synth is appealingly called the Fizmo, and features a glut of knobs and controls across its colourful front panel. But if you think Fizmo is another in a long line of physically-modelled analogue synths, think again. The synthesis system used is said to create 'truly moving sounds', but that's all we're saying at this stage. To find out more about Fizmo, check out the next issue of Future Music, which has a world exclusive review of Ensoniq's latest creation

More from: Emu∻Ensoniq Tel: 01753 630808

includes new DSP algorithms (such as the innovative 'Beats' processor), more editing features and LFO waveforms.

Existing E-6400, E-Synth, E4X and E4XT users can upgrade to Ultra specs, and new options include an ADAT interface. Emu are stressing the speed, performance and compatibility of the Ultra range, while promising familiarity for Emu aficionados.

Brief Spec: Emu Ultras

- 32-bit Coldfire processing
- 128-voice polyphony

Another cool feature of the Ultras is the ability to author Sound ROMs (i.e burn your own sounds onto chips) for the new **Proteus 2000**, the most powerful Proteus sound module to date. Featuring the same 32-bit processing as the Ultras, the 2000 gives 128-voice polyphony across 32 MIDI channels, and ships with 32Mb of 'Composer' ROM as standard (you can add three additional 32Meg ROMs later).

Ensoniq's Fizmo. Yes, really.

For those who like to tweak their sounds, the 2000 gives you 17 6-pole filters, 'PatchCord' modulation architecture, and a dual 24-bit effects processor. Retail price is £999.



128 VOICE Expandable Sound Module

LI FILT ENU RATE LEVEL
Attack! 2/1 +100.





Proteus 2000: the most powerful Proteus yet

CLASSIC VALVE COMPRESSION

L Audio have launched their new Valve Classics series of processors with the C-1 stereo valve compressor. The C-1 replaces the original Classic Series C-1 model, with improvements including the milled aluminium front panel, circular backlit VU meters, gold-plated ceramic valve bases, and US military-approved General Electric valves.

Brief spec: C1

- Dual mono or stereo linked modes
- Fully variable control for input gain, threshold, ratio, attack, release, and gain make-up
- Switchable gain reduction/output level metering
- Mic, line and instrument inputs
- XLR and unbalanced jack connections

Price: £1,526 More from: TL Audio Tel: 01462 490600



Goodbye Classic Series C-1, hello Valve Classics C-1

How to improve your Vision

pcode's already acclaimed Vision software has just got better with the release of Vision DSP, an audio and MIDI sequencing package. At £299, Opcode are pushing Vision DSP as a one-stop package for Mac users. Compatible with Steinberg's VST audio plug-in architecture and ASIO software standard, it supports a range of audio cards including Lucid's PCI 24, Korg's 1212 I/O and Digidesign's Audiomedia III.

A one-stop package for Mac users

Largely based on Opcode's Studio Vision Pro, Vision DSP also incorporates TruTone pitch shifting, Adjust Audio Tempo, Time Scale compression/expansion, and customisable Audio Crossfades. Vision DSP is also the first application to come with Opcode's new parametric EQ. As if that wasn't enough, Vision DSP ships with 11 free Opcode plug-ins, Opcode's Galaxy universal patch librarian, Peak SE sample editing software, demo



Opcode's FUSION effects line, full working versions of audio plug-ins from Arboretum Systems, MacThuga visual audio interpreter, and a selection of sequences and samples at no extra cost.

versions of

Price: £299
More from: SCV
London Tel:
0171 923 1892

IN BRIEF...

Spirlt are taking their awesome 328 digital console (previewed in issue 47) on the road. Check it out at the following locations: 25/11: Academy of Sound, Norwich; 26/11: PMT, Oxford; 27-29/11: National Music Show, Wembley; 1/12: Sound Control, Newcastle; 2/12: Sound Control, Glasgow; 3/12: Dawsons, Warrington; 7/12: Digital Village, Barnet; 8/12: Digital Village, Croydon; 9/12: Digital Village, Cambridge, 10/12: Music Village, Romford; 12/12: Musical Exchanges, Birmingham. More from Spirit: 01707 665000.

New, innovative London company The Audio Workshop are flying the flag for Britishmade loudspeakers with the launch of their Cyclone 34 (£1,998). Intended for hi-fi and home theatre applications,



the 34s include bass/midrange and tweeter units with an integral crossover. The company say their design delivers sound reproduction which is far less 'boxy' than conventional MDF box speakers. More from Audio Workshop: 01375 379032.

Euphonix debuted their high-end R-1 digital multitrack recorder at this year's AES show. They say the 24-bit hard disk recorder is poised to replace the 50,000 traditional analogue tape machines installed in today's studios. With its attractive features, the R-1 was awarded the 'Best in Show' award from EQ Magazine. Look out for it in 1999.

TDK are looking to the future with the introduction of three recordable DVDs. Their DVD-R is a one-time recordable disk with a storage capacity of 3.95 Gb, while their DVD-RAM comes in both single and double-sided options, offering 2.6 Gb and 5.2 Gb respectively. TDK's Stephen Jean said "These new

entries simply represent the beginning of next-generation recording technology." More from TDK: 01737 773773.



Making advances

Advanced multi-channel recording and mastering

s this "the world's most advanced multi-format digital audio recorder"? That's what distributors HHB are saying about the new Genes GX8500. It's designed for multi-channel recording and mastering applications, and records in both linear and non-linear modes. Here's a look at the spec:

Brief spec: GX8500

- Records in AES/EBU, SDIF 2 and DSD formats ■ Compatible with Super Audio CD standard
- Up to 24-bit recording with optional internal A/D and D/A converters
- User-selectable sample rates up to 192kHz
- Up to 24-bit resolution
- 5.2 Gb onboard MO drive
- Records to remote hard disk or removable media drive via SCSI
- BWF/WAV file formats for crossplatform compatibility
- Comprehensive list of disk formats including UDF, FAT, MOFS, Genex
- Low-jitter clock ensures ultra-low distortion
- User-adjustable crossfades

The GX8500 is a product of the new Genex team, which was expanded after a major investment by HHB earlier in the year.

Genex MD Kevin Brown enthused about the launch "We have designed the GX8500 as the ultimate digital audio recorder. No other device is so comprehensively equipped to meet the

new demands now facing recording and mastering facilities, and no other recorder is as flexible.

Price: from £5,229
More from: HHB Communications
Tel: 0181 962 5000

Surround yourself with Air

eorge Martin's Air Studios have installed a "serious" 5.1 surround sound system in their Studio Two, which General Manager Malcolm Atkin claimed "provides us with the finest, most truthful surround sound mix room in the world."

The system consists of three 4-way Dynaudio M4M monitors for left, centre, and right monitoring, with two 18" JBLs in custom cabinets supplying the sub-bass. Power is provided by Chord and Chameleon amplifiers and six XTA digital system controllers feed the system.

Sir George commented "This new system will help to strengthen our confidence in the future of high quality surround sound."

More from: Air Studios Tel: 0171 794 0660



PICK UP THE PAICE

is the latest recruit to digital recording. A keen home recordist, the drummer and songwriter was 'converted' after seeing digital recording in action during sessions for the rockers' new album, Abandon. ian has put together a 16track system with a Tascam DA-98/DA 38 combination and Tascam RC-828 remote control to use with his Yamaha 02R desk. "i am very impressed with the speed and clarity of the Tascam units" he declared, before dashing off to Join the rest of the group on tour.



Masters of the future

Drawmer goes digital with new series of processors

rawmer have set themselves a modest goal with their new Digital Masterflow series: to "enhance creativity and solve the recording world's problems of today and tomorrow". The series comprises two processors - the DC2476 Masterflow Pro and the DC2486 Twinscreen Masterflow Processor - and the DC2496 A/D and D/A converter.

First to appear will be the DC2476 Masterflow Pro, a 24-bit programmable mastering processor, which Drawmer reckon can't be beaten for flexibility and sound by any other DDP currently on the market. It offers multi-band compression, EQ, limiting, tone-shaping, de-essing, and auto-fade, and an automatic gain management system which makes it impossible to clip a signal regardless of the type of processing applied. The PCMCIA memory card system allows the user to take individualized program settings from one Drawmer 2476 to another.

Next up is the DC2486 Twinscreen Masterflow digital processor, designed for mastering, tracking and mixing applications. It

has all the mastering features of the DC2476, above, with the addition of stereo or dual mono operation. Its two mic preamps have phantom power and phase reverse, and it offers a host of extra effects including frequencyconscious gating with variable Peak Punch circuitry, multi-band compression, expansion, and limiting, 5-band digital EQ, and tube modelling.

Rounding off the range is the DC2496 A/D and D/A converter. It has a dynamic range of 130dB and can output signals at 44.1, 48, 88.2 or 96kHz. It also has the unique ability to upgrade ADATs and Tascam DA88 machines to 24-bit recording, by using six tracks to record 24-bit stereo audio, while a 16/20 bit version can be simultaneously recorded to the remaining two tracks of the multitrack.

The DC2476 and 2496 will ship around the start of '99, with the 2486 to follow in the spring.

Price: DC2476: £1,968; others £TBA. More from: Drawmer Distribution Tel: 01924 378669



SWITCH

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(C) 2(C)

O5**O**

(C) #(C)

O²C

O2**O**

(a) (b)

(D) to (C)

On O

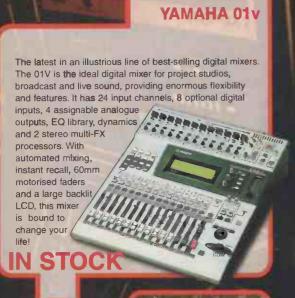
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Sound Control in Brizzul

rom small beginnings in the Scottish town of Dunfermline, Sound Control have grown into the largest music retailer in the UK. Two recent additions to the chain in Bristol (or Brizzul, as we call it in these parts) and Sheffield, take their tally of shops to 10.

The new Bristol shop, located in the city centre, was opened on 10th October by Sound Control main men Pat and Kip (pictured) and featured a rare appearance from Jimi Hendrix Experience's legendary bassist Noel Redding.

Noel also travelled to the opening of the Sheffield branch



on 24th October, where hundreds of fans turned up to see the great man play. Located in the city centre, the new Sheffield branch is ideally situated to serve the city's thriving music scene.

at and Kip: the guv'ners

More from: Sound Control Tel: 0114 221 3007

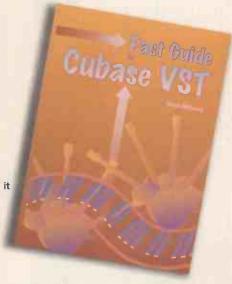
SPEEDING INTO VST

f you want to get into Cubase VST, there's a new book out from PC Publishing which will give you the lowdown on this ubiquitous MIDI sequencing and audio recording package. The Fast Guide to Cubase VST covers everything from Installation, recording, editing and processing audio, through to using EQ and effects, plug-ins, and soundcards. Tutorials are included on using the program for specific tasks.

Price: £19.95 More from: PC Publishing Tel: 01732 770893

Cubase VST: you can't fight it

We've got five copies of Fast Guide to Cubase VST to give away. Send your details on a postcard to VST Book, The Mix, Future Publishing, 30 Monmouth Street, Bath BA1 2BW, and you just might get one.





IN BRIEF..



The latest edition of The Source, Canford Audio's bi-annual catalogue, will be published in November. The free catalogue is fully referenced and illustrated and contains over 13,000 products tailored to the

recording, broadcast and live sectors. In its 22nd year of production, Canford's catalogue is known throughout the industry for the detailed information it contains. *The Source* can be obtained by phoning or faxing Canford: 0191 417 0057. Fax: 0191 416 0392.

Digidesign have released version 2.1 of their popular CD mastering software program, MasterList CD, which we reviewed back in September '96. This application will turn your PowerMac into a CD mastering solution with no image file creation needed. More from Digidesign: 01753 653322.

Key players in the DVD industry have launched the European DVD Developers Group (EDDG), aimed at leading the industry into a more mature, co-operative, and communicative era. The group hopes to provide members with a forum to discuss mainly technical issues relating to developing, testing and playback of DVD titles. Membership is open to any company which has developed at least one commercial DVD title. More from Sarah Bradley at Abbey Road Interative: 0171 266 7000.

FX Rentals now have the latest ProTools 24 system available for hire, along with their very own ProTools specialist Ade Cook, who has 25 years experience in the music industry. FX are also offering a new service called The Copyroom, offering safety copies and transfers for virtually any audio format, including RADAR, ProTools, ADAT, DA88, CD-ROM, Minidisc, and all analogue variations, as well as CD, cassette and DAT, of course! More from FX Rentals: 0181 746 2121.

SCV London has been appointed exclusive distributor of Genelec active monitoring systems in the UK and Eire. The company plans to capitalize on Genelec's respected reputation in the pro audio industry to tap into the emerging, and potentially vast, market in surround sound and sound installation.

GALLERY HANDS OUT NEW LINES

allery Software have produced more support software for DigidesIgn systems than any other company, including Digidesign! Here's another two for ProTools users.

ADRStudio (£1,169) is a one-stop solution for ADR/Foley spotting and re-recording. It communicates interactively with Pro Tools, extracting information – in the nicest possible way, we're sure – feeding instructions to ProTools and co-ordinating the re-recording session.

During spotting, a single key press prompts ADRStudlo to grab in and out times and lets you enter information about the cue. This is immediately entered into a list where it can be sorted, arranged and printed. During re-recording, ADRStudlo controls ProTools, automating aspects such as record-enabling tracks, generating beeps, muting/unmuting playback channels and interfacing with external units.

If you do post-production work it's easy to get swamped by large numbers of sessions scattered over lots of medla. PostTools (£1,052) consists of four software modules which will enable ProTools to compete head-on with other systems which have traditionally dominated the Film and Post markets.

SessionBrowser analyses and processes multiple ProTools session files. You can drag and drop session files and click on them to reveal the session contents, regions and dependent soundfiles. Processing includes a sample rate converter and varispeed.

The SessionCutter module opens multiple Pro Tools sessions into individual Edit windows, either horizontally scrolling or vertically in film style. Functions include copy and paste between sessions, and you can print vertical track sheets.

Module 009 is a general-purpose 9-pin remote control panel supporting any Sony 9-pin-compatible tape machine or VCR. It

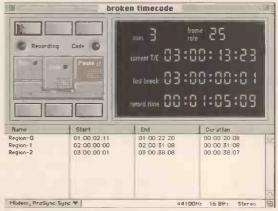
supports a variety of thirdparty serial cards and offers full track arming with userdefinable machine set-ups.

Finally, the
InstantLokRecorder provides
a solution to a common film
audio problem. It allows
ProTools III and AudioMedia III
hardware to record audio
timecode continuously, even
where the timecode is
discontinuous. This is
particularly problematic with
location recording.

particularly problematic with location recording.

Prices: ADR Studlo £1,169
PostTools: £1,052
More from Gallery Software
Tel: 0171 431 6260.

Web: www.gallery.co.uk.



PostTools InstantLokRecorder records continuous timecode even when the timecode isn't continuous

FREQue in flight

etropolis Studios' Chief Engineer Matt Howe is dead impressed with his new DACS FREQue ring-modulator based processor (£600), which he has put into use on sessions with young rockers Flight 16. "I loved the range of results you could achieve, from really subtle to really outrageous, and all in between" he said. The FREQue has two ring modulators and two oscillators, and allows internal frequency modulation, external CV control of frequency, and simultaneous up and down frequency shifting.

More from DACS: 0191 438 5585



Sample frenzy

This latest crop of sample CDs will cater for tastes from drum'n'bass to ambience, and more

urveyors of fine sample CDs Time+Space have a few new releases hitting the shelves soon. From the team behind the fine Treasure Chest CD comes The Beats, The Whole Beats, And Nothing But The Beats, an eclectic collection of everything from hip hop breaks to rock grooves. It's a two-CD set and gives an impressive 144 minutes of pure beats. (£69.95)

Cuckooland Ambience continues the fine tradition of the Cuckooland series with atmospheres, pads and drones, all looped in AIFF and WAV format. If it matches the quality of its predecessors, it's destined to be another winner for all genres of sample activity. (£19.95)

Hot on the heels of Jungle Frenzy



Atmospheres, pads and drones

comes Jungle Frenzy 2. A resource for drum'n'bass aficionados all over, it includes breaks, basses, pads, fx and vocals. (£19.95)

More from: Time+Space Tel: 01837 841100



Frenzied loops a-plenty

Yamaha have released no less than six new CD ROMs for their A3000 sampler. The FUEL series ROMs are license-free libraries of grooves and loops in a variety of styles, from ethnic timbres to dance grooves, and effects. All the titles are in the same key and tempo, so mixing and matching samples should be a doddle. The FUEL sample libraries are available through all Yamaha Hi-Tech dealers, with a retail price of £79 each.

More from: Yamaha Pro Music

Tel: 01908 366700

DIGITAL VILLAGE

nother chain of music shops on the increase is Digital Village, who have just opened another branch in Gunnersbury Lane, London, next to Acton Town tube station. This adds to their existing shops in Barnet (Herts), South Croydon, Chadwell Heath (Essex), and Cambridge. Specialising in all things digital and hi-tech, Digital Village stock all the major brands and, like their other stores, the new branch has a large area in which many products are permanently on display, ready for hands-on use. Special promotions coming up in the next few weeks include previews of the new Mackie 8-Buss and Spirit 328 digital mixers, and also Akal's new \$5000 and \$6000 samplers.

More from: Digital Village Tel: 0181 992 5592



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١	34	2.75	2.51
	48	3.09	2.81
S.	64	3.29	2.99
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	124	4.21	3.83



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CD labelling Kit Includes Software, Applicator and Labels		24.95

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Plug-in pile up

Software developers unleash a plethora of plug-ins

sers with a Digidesign TDM system have lots to spend their money on. From Digidesign (01753 653322) itself comes Maxim (\$445, £TBA), a peak limiting and sound level maximising plug-in for TDM and AudioSuite systems. Unlike hardware-based limiters, Maxim preserves attack transients and intelligently reduces peak gain Instead of clipping, making limiting cleaner and more transparent while preserving the dynamic range.

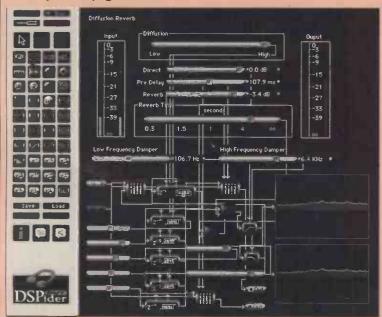
Metric Halo Labs has announced SpectraFoo $\sqrt{3}$, pronounced "radical 3" (£468.83 from Music Lab: 0171 388 5392) for TDM. It's not a hi-tech gadget from a Charlie Chan film, but a low latency, real-time FFT-based audio analysis tool. $\sqrt{3}$ adds over 20 new features to SpectraFoo including real-time impulse response measurement, measurement of acoustic parameters and sum/difference monitoring for all instruments.

WaveMechanics (distributed by Unity Audio: 01447 785843) has released the SoundBlender TDM plug-in (£394). It combines the PitchBlender and the TimeBlender to offer classic pitch shift and reverse pitch shift effects previously only found in expensive outboard gear. Functions include micro pitch shift, two-voice intelligent harmonising, diatonic arpeggiation, backwards pitch shift and many more.

McDSP's Filter Bank for TDM and AudioSuite (\$495 and \$195 for AudioSuite version only; contact www.mcdsp.com) boasts that it's "Every EQ ever made". Using double-precision 48-bit processing, it offers a minimum of 22 bands of EQ per DSP chip. Users have full control over critical equaliser and filter parameters enabling Filter Bank to emulate any EQ – tube-driven, solid-state, vintage or modern, fat or thin. The parametric EQ has an extra-wide five-octave bandwidth.

Generator X from Cool Stuff Labs (+1 650 366 8648) is a new plug-in for TDM and AudioSuite. It's a 24-bit signal generator with 48-bit internal precision capable of generating

Create your own plug-ins with the DSPider





Classic pitch-shifting effects - no outboard required

sine, square, triangle, sawtooth and other waveforms from within ProTools. Generator X can only be ordered on line from http://www.coolstufflabs.com and it costs \$70. There are downloadable demos here, too.

Waves (available from SCV London: 0171 923 1892) has announced that its Renaissance EQ (£239) for TDM and AudioSuite is now shipping. Using 48-bit internal processing, it features filter curves based on vintage analogue equalisers, real-time EQ graphing and resonant shelves. Waves has also announced support for Digidesign's Pro Toolsl24 Mix system.

The Aureal A3D Pro for TDM (\$499) from Aureal (+1 510 252 4273), of course, is a complete interactive 3D source positioning system. It offers true 3D positional audio, automated real-time parameter controls with variable environment sizes, and a choice of 12 surfaces.

There's one developer who has not forgotten the PC. Antares' AutoTune (£269 from Unity Audio) is now available as a DirectX plug-in. It's a real-time pitch correction plug-in which detects the incoming pitch of a voice or solo instrument and, if necessary, corrects it to a desired pitch.

And if none of these plug-ins are quite what you want, you can create your own with DUY's DSPider (£1169 from Syco Systems: 0171 625 6070). It's the first ever plug-in creator for TDM and consists of over 40 modules that can be linked in countless different ways. It includes over 170 presets.

DUY has also announced SynthSpider (£TBA) for TDM, a totally programmable software synth consisting of 36 separate modules enabling users to build their own synth.

Finally, good news for Mark of the Unicorn Digital Performer users. The MotU Audio System (MAS) has been updated to support Digidesign's new Direct I/O software. This enables users with lower-end Digi systems to run MAS 32-bit plugins in real-time. The update is available on the web: http://www.motu.com.

Phew!

NET NEWS: Sound FX go to the dogs...

eature film sound designers

Sound Dogs have posted a large portion of their diverse and extensive sound effects library on their website for purchase and royalty-free use.

The user friendly sound database is

extremely wellorganized by category,
sub-category, unique
quality, and filename,
and most sounds are
tagged with a oneparagraph description.
The price is
determined by a
combination of sound
quality and length,
and sounds are
available in a variety
of formats including
AIFF, AU, and WAV.

The website includes detailed information on setting up your browser

optimally for auditioning and downloading sounds, as well as a host of other frequently asked questions, and Sound Dogs offer a money-back guarantee if users are not satisfied with the quality of the sound effects library. Check it out at www.sounddogs.com



THE TAPE FORMERLY KNOWN AS AMPEX

uantegy have launched a new analogue mastering tape which they are describing as the "sweetest sounding tape you will ever wrap your ears around." Two years in development, the GP9 Grand Master Platinum was created in response to consumer demands for "fatter, hotter and clearer" tape.

Listening tests at studios round the

UK, including Air, Strongroom and Roundhouse, drew rave responses from those present.

Quantegy have also released a new ADAT mastering tape and the new DAU digital mastering cassette (replacing the 467 DA cassette), and added MDR (minidisc recordable) to their product line

Price list / More from: ProTape Tel: 0171 323 0277



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Write to us: Open MIc, The Mix, Future Publishing, 30 Monmouth St, Bath BA1 2BW
Or email us: themix@futurenet.co.uk

Commercial concern

It was pleasing to find the wiring for the Atari serial port MIDI cable given away on your *Help File* page. Perhaps I can now work for *The Mix* doing Paul Mac's job for free — he seems to want to do mine! However, he left one or two questions unanswered.

- 1) The question was how to gain extra MIDI outs on the ST, and who could supply the necessary hardware? Answer: One of your paying advertisers, Keychange Music Services. Do your contributors ever read your magazine? Is Paul Mac so short of editorial?
- 2) He proceeds to describe how to make your own cable, missing out one or two necessary components. And what use a few centimetres of MIDI cable will be I don't know. Our cable is two metres long, minImum.
- 3) He will, of course, take full responsibility for any damage caused by ST owners making and using this cable, and also give his home tech support telephone number in the next issue.
- 4) He will also be telling pirate Cubase users where to steal the MROS driver from

and how to install it, won't he? Not!

5) Incidentally, where is channel 17, Paul? 16 channels + 16 channels = 32 channels doesn't it? No, you prat! There are currently only 16 MIDI channels. What any MIDI expander provides is more tracks using the same 16 MIDI channels over more MIDI outs. Please stop disseminating falsehoods.

Barrie, Keychange

Technical editor Paul Mac replies...

I described an alternative that we've run several times before (with diagrams) with no complaints. The Mix is here to inform readers, not leave them with just one option — that of an 'advertised' product. And it's impossible to mention every manufacturer of a type of kit every time. Let's take the other points one at a time...

- 1) Pierre Tubbs asked for details of the 'Export' device, or an alternative method of adding an extra MIDI port to his Atari. We advised ExtraPorts (Cimple Solutions, 0181 904 4141), or the DIY option.
- 2) I could do the sarcastic 'Wireless MIDI' reply, but won't. What we actually said

was: "A few centimetres of single core and two core cable." Yes, it would be a short lead, but for the fact you use a female MIDI connector, and plug another lead into it! Thus you don't need a long, fragile cable hanging about, and you could use the Atari and 'stick-on' cable ties as strain relief.

- 3) If you make the extra MIDI port as described it will work. I accept that a warning might have been appropriate, but we assumed that readers realise the potential for failure here. Knives don't usually come with a label warning "If you use this wrongly you might cut yourself." And no, you can't have my home number.
- 4) An Atari specialist such as yourself should be aware that the MROS driver is free, and actually on the Cubase master disk (unless we're meant to keep that quiet as well?). Just rename the EXPORT.DR file as EXPORT.DRV and you have it. An FTP site at Manchester University details the modification we described last month, with diagrams. Ironically, the mod' is described by a Steinberg employee. The site has loads of Atari and MROS bits; just point your browser to ftp://ftp.mcc.ac.uk/pub/music/
- 5) 16 MIDI channels on one port, and 16 MIDI channels on another port makes 32 MIDI channels. They may not be numbered as such (no one mentioned channel 17!) but they are 32 individually addressable MIDI channels. Otherwise there would not be much point in the interface, would there? You might want to visit a rather good site entitled 'A Beginner's Guide To MIDI' (http://www.chadales.demon.co.uk/pages/



Be careful, it might blow up

midi1.html), where it describes the possibility of "hundreds of channels" in basic terms. Or even the Manchester site, written by the Steinberg man, or... well there's oodles of it. Tracks, on the other hand, are the 256 possible things you find in the Cubase arrange window – where the MIDI message-men live...

Paul Mac

Do you want the 'DIY' option? Has anybody used channel 17? Anybody else want to have a go at Paul Mac? We'd like to know what you think

Down the plughole

Why do Radio One producers see pluggers? [Industry term for radio promotions people]. As part of the BBC, there should surely be an ethos of ignoring purely commercial considerations and focusing on quality. Yet marketing people for record companies take it for granted that they will easily be able to have meetings with those who decide what will be played on our most important contemporary radio station and persuade them to play the record they have been hired to promote, or play it more frequently.

So, the fix is in. A 'popular/well-known/respected' plugger is able to charge more for his or her services, so wealthy record companies have the best chance of getting attention from Radio One. Pluggers are on hand when artists go to Radio One shows, everyone becomes more matey, and the circle tightens.

I think Radio One is our best station by miles and I don't think all programming decisions are made to suit record companies. But the clean thing to do would be to ban pluggers from the station altogether and use trainee producers to assess the suitability of new releases for different shows and make recommendations. Ideally, records would be 'blind tested' for their sheer suitability – no guaranteed plays for anyone. That would reduce undue influence. Records great and small would have an equal chance.

The pretext that pluggers keep producers informed of artists' activities for potential features doesn't work. All that could be found out after a new release has been added, having been selected impartially.

I've used Radio One pluggers myself. You have to try to compete, and a record release involves many people who may not share my outrage. But I'd gladly take my chances on a level playing field if everyone else did (Hah! Dream on!).

Yours, simultaneously idealistic and cynical.

Stu Lambert, Zip Dog Records

The DIY kid

Being 14, but with an avid interest in music production and engineering, I do my best to build up a useable studio from as little cash as possible. My next purchase will (hopefully) be a multitrack. I have built my studio from second-hand kit, with things like

a 12-channel desk, and so on. With my fairly advanced knowledge of electronics, I have retro-fitted most of my equipment, and made some, and can also fix it when it goes wrong. I am just about to start working on a meter bridge for my desk. I think people who take the view of 'Too Expensive, Too Bad', like our friend Jack Elgood should try their hand at making some stuff. It's worked for me.

James Jackson, Herts

Impressive. Audio electronics is a popular pastime with many people. Do we have any 'mad scientists' in our readership? Tell us your tales of the weird and wonderful – kit, techniques, and sound generation.

Greedy blighter

Having read *The Mix* for 12 months, I had become disheartened to find that there was never any Amiga content covered. I find this understandable, though, as the Amiga is hardly the latest tool in audio production.

Then I picked up the August issue of *The Mix* and was amazed and astounded to find not just a brief column mentioning the Amiga, but an entire page! I would like to thank *The Mix* for recognising the Amiga can be used in a professional environment.

I use an Amiga 4000 to control my MIDI suite and, with a few extra bits of hardware, I have a machine that can match any PC or Mac in the studio, with professional results.

I would like to see *The Mix* carry this a little further. Have a look at the latest Amiga software, like Sound Probe 2, which gives a 128-band EQ, Resonant filter, Vocoder, FFT display, and umpteen effects; Samplitude Professional; and Pro Station – due for release (visit http://www.audiolabs.it). I think you'll be surprised at what you find, and as a reader I would like to see how these applications compare at a professional level.

Also, for fun, check out a program called 303 Tracker. It's like an old style tracker program with a near perfect 303 emulation. Stephen Bancroft, email supplied

Y'see what happens? Give 'em a page and they want the whole bloomin' mag! Well, just you wait until the editor hears about this...

Look, why don't all you Amiga owners just trash that obsolete piece of crap and buy a real computer? Only joking! Of course we'll look at any Amiga software and hardware that warrants it. Honest.

STUDIO SERIES

SAMPLE CD

The Mix'd reaction CD

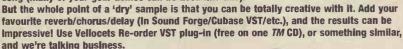
Chris Kempster, Editor

Letter of the month

Sample negative (continued)

We've had several comments on our Studio Series sample CD, especially the Male Vocals volume...

I suspect the reason for various readers' dissatisfaction with your sample CD (Male Vocals) could well be the fact that the samples are 'dry'. Many sample CDs are packed with treated and effected samples ready to take and drop directly into a song (many of your gear demos can be used like this).



Adding global reverbs to your piece (hall, small room etc.) will also sound more convincing without the sample having some contrasting effect on it. I have only been involved in home music and PC music since last summer; I then started reading *The Mix* and other magazines. I was initially disappointed listening to your early sample CDs – until I actually used them!

Phil Simm, Newcastle upon Tyne

Thanks for that, Phll. We've had quite a response on this issue, and your letter does suggest a need for guldance in this area. Watch this space. Anybody else want to chip in? What do you think of the whole CD content, from software to commercial tracks

and demo tracks?
Get yourself heard. Write to *Open Mic*, *The Mix*, 30 Monmouth **St**, Bath, BA1 2BW. Or email us: themix@futurenet.co.uk.



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REVIEWS



This month... the monster Trinity V3 from Korg, Focusrite's Platinum Voicemaster recording channel, Allen & Heath's new analogue console, and much more

Who tests the gear

Our team of equipment reviewers are all audio industry professionals, experts in their chosen fields – engineers, producers, musicians, software specialists and audio journalists. This means that you can trust the opinions expressed in their reviews.

How the gear is tested

Wherever possible, the gear we test is used in actual sessions. Indeed, some of the biggest-selling records this year will have acted as testbeds for our reviewers.

We believe that to truly evaluate kit properly, it needs to be tested in studio conditions – not a dark room!

Impartiality

Reviews in *The Mix* are in no way blased towards certain manufacturers. We will deliver an impartial verdict on a product whether or not a manufacturer advertises in this magazine. Our first duty is to you, the reader, and our goal is to give you the best possible advice on buying equipment. We will not hesitate In exposing sub-standard equipment.

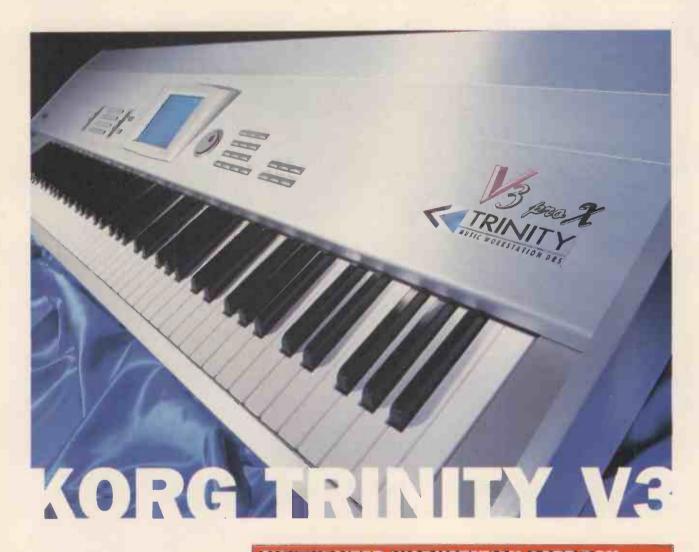
Products that are judged to be outstanding by our reviewers are awarded the 'Editor's Choice' tag. In a standard review, this means that the product offers exceptional performance for the price it retails for. In group tests, there may be two awards – 'Best Performance' and 'Best Value'.

The 'Best Performance' award will go to the product that offers the best performance irrespective of price.

The 'Best Value' award will go to the product that offers the best price/performance ratio.







With an injection of MOSS synthesis from the Z1 synth, the Trinity V3 takes the workstation concept further than ever.

Nigel Lord meets the daddy of the

Check out the free Korg Fest! CD this month for an extensive taste of the V3's capabilities

range, the ProX



SYNTHESIZER WORKSTATION ESEE BOX

ver since it single-handedly transformed the fortunes of the workstation, the Korg Trinity seems to have been on a mission to prove how adaptable it is. In the three years it has been around, there have been several versions of this most enigmatic of instruments: the Trinity, Trinity Plus, Trinity Pro and the Trinity Pro-X, each offering features designed to optimise it for different applications and different types of user.

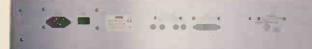
In the normal course of events, it would now be reaching the end of its production life, but this capacity to re-invent itself (coupled with the inspired design work which made it such a fascinating machine in the first place) has kept it looking and sounding remarkably fresh – and selling well. Of course, the major price cuts it has been subject to haven't exactly harmed its fortunes, and neither has its sheer sonic complexity. Any synth with the capacity to carry on surprising you every time you decide to dig a little deeper is bound to make it easier to keep your credit cards in your pocket.

But I suspect even the most avid Trinity fan would find themselves pretty gobsmacked by the latest incarnation of the machine – the V3. It's a simple enough concept: take a large flagship instrument and feed it the guts of another, smaller instrument; in this case, the Korg Z1. There's something a tad ghoulish about the idea of big synths swallowing little synths, but that's effectively what's happened.

Not that the average Z1 owner would consider it a 'small' instrument; and at around £1,500, it certainly isn't an inexpensive machine. But this only adds weight to the decision to incorporate it into the design of the Trinity and makes the whole exercise very different than, say, adding a General MIDI module to a synth or a plug-in sound board.

Overview

As existing Trinity owners will be delighted to hear, the Z1 is actually contained on a separate board, and consequently is also available to them as an upgrade. But its inclusion has been made a fundamental part of the V3's multi-synthesis



KORG



Back panel has plenty of room for the options available to V3 owners

capabilities; in fact, it's a remarkably elegant integration of the two machines.

That said, it should be made clear that you're not actually getting a complete Z1. Only one of the Z1's two MOSS (multioscillator synthesis system) boards is fitted, so the polyphony is halved. It's not multitimbral, either, although this perhaps wasn't to be expected at the price.

Of course, all this talk of adding things to the Trinity won't mean an awful lot if you're not already familiar with what was there in the first place. So here's a brief outline of the world you enter when you switch on Trinity and peer into that large blue screen...

Trinity basics

The basic machine is a 61-note workstation based around a PCM tone generation system known as ACCESS, or Advanced Control Combined Synthesis System. It contains some 24MB ROM that stores 375 multi-samples and 258 drum samples, all recorded at 48kHz. These are routed through a multi-mode filter offering high-pass, low-pass, band-pass, and band-reject filtering with resonance.

You get a basic palette of 256 sound programs to work from – 128 in each of two banks A and B (with two further banks, C and D, available to those with the Flash ROM upgrade installed). Programs can also be assembled into a further 256 'Combinations', a term Korg established some years ago to describe complex assignments of programs (up to 8 on the Trinity) and keyboard set-ups such as splits or layers. As you might imagine, these are particularly useful for performance, as it means you can save and recall a large amount of data with the push of a single button.

Trinity's comprehensive effects section offers both Insert effects (100 programs, including time delay, modulation and EQ), which are added as part of the sound creation process, and also Master effects (a further 14 programs including reverb, chorus, and other time delays), which can be used to create an overall ambience; much like those connected through a send and return loop on a mixing desk.

Trinity has a rather idlosyncratic way of determining the way effects are combined. Basically, programs are categorised by size (one, two, or four, depending on the kind of processing power each demands) and how many it can combine for use in Program, Combination, or Sequencer modes. In Program mode, you can combine up to three effects with a total size of four in series (increasing to four effects in series/parallel for Drum Mode programs).

In both Combination and Sequencer modes, you can connect three effects in series for each Timbre or Track (or four in series/parallel for those containing Drum Mode programs), up to a maximum of eight effects with a total size of eight for all Timbres/Tracks.

Sounds complicated? Yep... but the effects list shows you the 'size' of each effect, and Trinity will let you know if you're exceeding its limits. And as you'll hear If you switch them out, effects play an enormous part in many of Trinity's

sophisticated sounds, just as they did on the M1, the very first machine to bear the workstation title.

Reflecting its current flagshlp status, Trinity's range of synth parameters and editing functions is truly mind blowing and needs to be approached with a certain degree of caution if you're new to this kind of synthesis and don't want to overface yourself. Indeed, a glance through the 185-page Parameter Guide is enough to send the novice scurrying for the safety of a GM sound module—

A rolling Trinity gathers some MOSS

Korg are keen to stress that the V3 isn't a cut-down Z1 and a Trinity tacked together, rather that the MOSS facility of the V3 is an important addition to its already impressive sonic armoury. But to clear up any confusion, we've listed on the left what you don't get on the V3 compared to the Z1, while on the right we've ilsted the advantages of the MOSS implementation on the V3 compared to the Z1.

- Six voices instead of twelve (or eighteen given that the Z1 could be fitted with an additional MOSS board)
- Haif the MOSS programs (though an additional 64 programs are available if you upgrade with the PBS-TRI Flash ROM ontion)
- No 'MultiSet' multi-timbrality; each MOSS program can only be assigned to a single Trinity part
- No Multi-effects (though access to the Trinity effects is compensation enough, particularly as a means of integrating the board into its new environment)
- No polyphonic arpeggiator one of the major sacrifices and difficult to get round, unless you fancy programming the sequencer
- No assignable front-panel controls. Trinity is a different kind of performance instrument to the Z1 and 'hard' parameter controls aren't included.

- + Access to the disk drive
- + Easier programming via large TouchView
- + Access to the built-in sequencer.
- + Access to the many expansion options available to Trinity, such as SCSI, flash ROM, digital audio recording, and so on
- + Ability to combine MOSS sounds with Trinity's ACCESS sounds.
- If you prefer playing your MOSS sounds using 'proper' keys, the ProX version of the V3 has a full, 88-note, weighted keyboard

▼ More than a Z1? There's none of the control knobs on the V3, but there are other advantages (see above) to its own MOSS implentation



TRINITY & BEYOND

The Trinity family offers a complete range of models and upgrades. Here's what's currently available...(all prices inc VAT)

THE MODELS

- Trinity with 61-note standard keyboard £1,499
- Trinity V3 with 61-note standard keyboard and MOSS board £1,899
- Trinity Pro V3 with 76-note semi-weighted keyboard and MOSS board £2,099 Trinity ProX V3 with 88-note weighted keyboard and MOSS board £2,899

THE UPGRADES

- MOSS-TRI: The Z1 board available separately as an upgrade for the standard Trinity £599
- HDR-TRI: Digital audio recording board offers 2-track record and 4-track playback with SCSI port and S/PDIF in/outs £475
- **SCSI-TRI:** SCSI port for connecting external drives £269
- PBS-TRI: 8MB flash ROM sample playback board £489
- DI-TRI: 4-track ADAT interface £109

TouchView screen or no TouchView screen.

That said, ACCESS synthesis does provide a reasonably friendly environment for anyone familiar with conventional analogue synthesis, insofar as you're dealing with oscillators, filters, LFOs and envelope generators. Of course, because this is sample-based synthesis, you're not actually working with anything as crude as sine or square wave oscillators, but for the most part, the analogy holds good.

In sequence

Though by no means a rival for Cubase or Logic, the Trinity's onboard sequencer is capable of very respectable performance with its 80,000-event capacity divided between a maximum of 20 songs. Each of these can use up to 100 patterns, drawing from a palette of 16 sounds across 16

tracks. To these you can add up to 8 Insert Effects for processing the output of individual tracks and a further two Master effects for processing the combined output of all the tracks.

A maximum timing resolution of 1/192 ppqn is possible, and recording may be carried out in either real time (with no fewer than six overwriting and overdubbing options) or step time with extensive event editing functions. The Trinity sequencer will read and record Standard MIDI files and can be played back through external MIDI synths or sound modules.

If you decide you can't live without some form of audio recording, an optional HDR-TRI module is available that places four digital audio tracks alongside your existing 16 MIDI tracks, together with the requisite volume and panning controls, plus analogue and digital in/outs. Again, it would be wrong to imagine you're getting the kind of facilities you'd find on a typical direct-to-disk recording system, but in synth workstation terms, there's little to compare with it.

Having sald that, one of the main criticisms of Trinity (and other large workstations) is that its design carries no acknowledgement of the fact that most people are likely to want to use it within some form of extended studio set-up, perhaps with a computer at the heart of it. There is, of course, the digital interface option which allows Trinity to converse with other digital audio equipment, but one can't help wondering how some dedicated software might ease the V3's integration into an existing studio environment.

Big screen

Fortunately, Trinity's famed TouchView display and user interface offers a pretty generous compensation package. With its graphical control and huge 320 x 240 screen, it really does remain a model of what can be achieved through LCD technology. It can be a little touchy (yes of >



Uncluttered control surface to the right of the TouchScreen



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GIGSOUND London SW16 Tel: 0181 769 5681

THE GUITAR & AMP CENTRE Brighton Tel: 01273 676835

THE M CORPORATION Nottingham Tel: 0115 9474070

THE M CORPORATION

MUSIC VILLAGE

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Romford Tel: 0181 598 9955

MUSIC VILLAGE Cambridge Tel: 01223 324536

Q MUSIC Birmingham Tel: 0121 643 4655

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SOUND SOLUTIONS Southwater, Sussex Tel: 01403 732606

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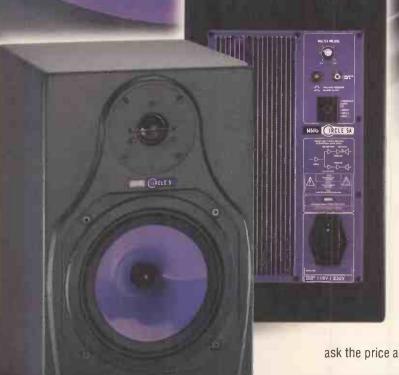


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British sound at its best

MOSS's OSC's

There are thirteen oscillators on the MOSS-TRI board. Here's a brief description of what you'll hear from each...

- Standard: Simulates the oscillator of a conventional analogue synthesizer (including effects such as pulse width modulation)
- Comb Filter: Creates a pitched sound from noise or an impulse. Used in a wide range of synth sounds from filtered noise effects to strings.
- VPM: Modulates the phase of two oscillators and uses filtering to create rich overtones.
- Resonance: Uses four tuneable filters set up in series to create 'ethereal' sounds from noise
- Ring Modulation: Multiplies modulator and carrier signals to produce characteristic ring mod effects.
- Cross Modulation: Frequency modulates a carrier signal

- Sync Modulation: Simulates the sound of two oscillators modulating each other, a common effect on early analogue synths and useful for producing metallic sounds and gong-like effects
- Organ Model: Simulates the sound of a draw-bar organ with each of the three draw-bars, using one of four waveform types
- Electric Piano Model: Simulates a warm, vintage electric piano sound
- Brass Model: Simulates brass instruments such as trumpets and trombones
- Reed Model: Simulates wind instruments such as saxophones and flutes
- Plucked String Model: Simulates a plucked string instrument such as guitar or bass guitar
- Bowed String Model: Simulates bowed string instruments such as violins and cellos

course it was a pun) about how and where you place your finger, and those with large dabs can find it rather tricky, but if you've been used to a two-line display and a handful of multi-function buttons, it'll come as a revelation.

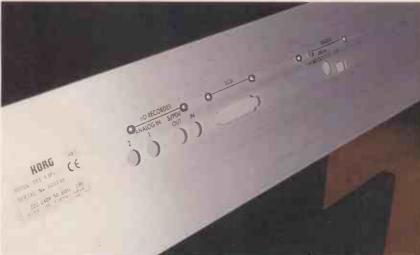
In fact, multi-function button pressing doesn't play any real part in the user interface of the Trinity, which makes it very different to the workstation experience of a few years ago. It's still not the machine for those who like having all their performance controls in front of them though. Needless to say, there's a pitch-bend/modulation control (though it would be more accurate to describe this as a joystick, as it operates within two axes), and also a ribbon controller, which combines left/right movement with downward pressure.

In addition, there's a pair of push-

buttons that may be assigned to various functions in Program Edit mode for instant switching. But the Trinity isn't a performance machine in the same way as, say, a Roland JP-8080, or the Korg Z1. This has to be born in mind by those who may be planning to buy the V3 because of its Z1 MOSS board.

The 64 sounds available from the MOSS-TRI board (128 with the Flash ROM upgrade) are routed to their own special bank 'M' on Trinity. This invalidates bank S on those machines previously fitted with a Solo board, but as Korg point out, entries in the various manuals and parameter guides still apply to the new bank of sounds. So the transition for existing users should be relatively painless.

Because it isn't multitimbral, the MOSS-



The options are the key to exploiting the Trinity's full power

TRI board sounds are only assignable to one timbre in Combination mode, or one track in Sequencer mode. Oddly, if you don't apply an insertion effect to the bank M programs, the output is reduced. Why this should be is a mystery, but it was a bit of a nuisance at times.

It's no MOSS-tery

MOSS tone generator parameters cover five broad categories: Voice, EG, LFO, Effect and Control. Voice parameters cover both the oscillator and filter sections of the synthesis process. You can choose between 13 algorithms (see MOSS' Osc's) using two oscillators per voice, a sub oscillator, and a white noise generator.

Outputs from all four sources are mixed together (along with feedback from the amplifier section) and fed to MOSS's two multi-mode filters. Each of these may be set to low-pass, high-pass, band-pass, dual band-pass, or band-reject, and configured in either series or parallel. Needless to say, you're given a pretty comprehensive range of parameter controls to play around with, including resonance, keyboard tracking, and cut-off frequency modulation from a variety of different sources.

The amplifier EG (Envelope Generator) section should hold few mysteries to anyone familiar with analogue synthesis. You can control attack, break, and sustain levels, plus attack, decay, slope and release times, as well as apply modulation for control of various parameters from a list of over 30 sources. Included in this list is a set of four general-purpose programmable envelope generators that you can use to create time-variant changes in sound. They're controlled through exactly the same parameters as the envelope

SPEC SHEET

	and the second s
Programs:	256 (ACCESS) 128 (MOSS)
Combinations:	256
Multi-timbrality:	8-part Combination mode,
	16-part Sequencer mode
Polyphony	32-voice (ACCESS)
	6-voice (MOSS)
Effects:	100 Insert programs,
	14 Master programs
Sequencer:	80,000 notes;
	100 patterns/song;
	16 tracks;
	20 songs;
	192 ppqn resolution;
	SMF compatible
Display:	320 x 240,
	touch-sensitive LCD
Disk drive:	3.5 Inch DD and HD floppy
1	The state of the s



If you've got the cash, the monster V3 ProX is the model to get

generator in the amplifier section, and may themselves be modulated from other sources in the list.

Reflecting the sophistication of MOSS synthesis, you're given four separate LFOs to work with, each offering no fewer than 17 different waveforms. As well as the usual selection of sine, sawtooth, and square waves, you can sample such delights as step sawtooth, step triangle, exponential saw (up and down), and random vector. No, we won't attempt a description of how they sound. However, you should know that they include both individual and collective note-on synchronisation, and also MIDI sync, via external MIDI Clock messages.

To round things off MOSS-wise, the Program Basic section allows you to make entries for program name, category, scale, key assign and keyboard settings, together with assignments for the joystick (pitch bender) and ribbon controllers.

Whatever you're doing with your MOSS programs, doing it through Trinity's large TouchView display will make pretty light work of it. As mentioned, you need to be fairly accurate about where you place your finger, and you'll almost certainly find yourself nudging the wrong parameter on occasion, but this is due to the sheer amount of information Korg manage to include on each page; and that has to be better than having it spread over multiple pages and constantly having to switch between them.

In use

Before ever switching on the Trinity V3, someone at Korg (who's opinion I'd normally value in these matters) said that the integration of the MOSS board had given it more of an edge. After several days prodding and poking around, it became obvious what he meant. It has not been as easy as it sounds trying to make Trinity sound a little less 'polite', but that becomes much easier with the MOSS-TRI board installed (You could do worse than check out the free Korg CD with this issue

to get an idea of what the V3 actually sounds like. Let's face it, a sound is worth much more than a thousand words!).

This may come as something of a surprise to those who had always believed physical modelling synthesis to be the more well-mannered, but that's certainly the impression it left. Of course, by developing the Trinity V3 whilst both the standard Trinity and the Z1 are still in production, Korg may seem to be placing potential buyers in something of a quandary, particularly when you start comparing the prices. It has been said that the V3 gives you half a Z1 for roughly half the price. You could look at it in this way, but you'd probably be making a mistake.

In fact, to talk of a merger of the two machines is very misleading (which, to be fair, is not a claim made by Korg themselves). No one in the market for a Z1 should imagine they're going to get anything like the same instrument In its V3 incarnation. They'll certainly be getting a very powerful machine, possibly the most powerful synth workstation on the market today. But as far as the Z1 is concerned, too much has had to be sacrificed to Integrate it with the Trinity for anyone to believe that this is some kind of two for one deal.

So where does that leave us? It leaves us with the Trinity receiving a major new upgrade – nothing more, nothing less. The broader range of physical models on the new MOSS board offers a significant improvement on the older, Prophecy-related Solo board, and even though it may only offer 6-voice polyphony, at least it is polyphony. Nostalgia for monosynths (even the classic machines) tends to evaporate the moment you sit down to play them and remember how unnatural they feel.

Verdict

If you already own a Trinity, the new MOSS board represents excellent value for money as an upgrade, even if it means scrapping your existing Solo board. In fact, Korg are

making a disc available with the Solo's sounds re-programmed for the new board, so it really is a no-lose situation. Speaking of upgrades, there's still the broad range of options available to Trinity owners, not to mention a choice of four machines with different keyboard options (see *TrInity And Beyond*).

As regards choosing between the Trinity and rival workstations, the decision is more difficult to make. Much will depend on the kind of sounds you like your synths to produce, and clearly, that's something only you can decide. But in terms of usability and sheer adaptability, the Trinity has once again proved it's well ahead of the pack.

More from: Korg UK, 9 Newmarket Court, Kingston, Milton Keynes, MK10 0AU. Tel: 01908 857100

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POWERED NEARFIELD MONITORS £450

Question: Does a decent set of active nearfields have to cost over £1,000? Yamaha say no, and Alan Branch has the proof...

amaha have for sometime enjoyed a monopoly (of sorts) on nearfield monitors in all kinds of studios around the world. This is mainly due to their highly publicized NS10s. These white and black contrasting speaker cones are familiar to most of us. As with all speaker types, monitor preference is a personal thing, and there are some people who would never use NS10s and can't understand why anyone else would, while others swear by them.

However, many manufacturers have tried, and failed, to capture this same market. The NS10s remain an 'industry standard' due to their sound and looks. That said, if someone were to sit around and try to redesign the NS10 with better sound and better looks and at a nice price, they might come up with something resembling Yamaha's new MSP5.

Yamaha have looked at what else is available in this area of the market and set out to design something of high quality, giving great sound, but at a really competitive price. Most speakers currently manufactured for this market are much more expensive or much more compact, like the SMS1Ps from Sony. The MSP5s are priced at £450 a pair. Yamaha's Alan Johnson told us "We have priced them very aggressively because we want them to become the industry standard small powered monitor".

Overview

At first glance the MSP5 looks very different to the other nearfields currently on the market. Finished in sexy matt black and measuring just 169 x 279 x 222mm, these new Yamahas are very compact indeed.

The front of the speaker shows off the dual ports and recessed volume control, with a green LED giving power indication. The custom-designed 5" woofer and 1" titanium tweeter are protected by a cover—the woofer being enclosed in a tough metal grill and the tweeter being protected by a plastic cover. As any mobile engineer will know, woofer and tweeter protection can be a premium concern; dented speakers don't sound too hot! The grill also has another purpose; it disguises how small

> the woofer actually is. The case is made of a tough plastic, designed with a slight angle on the top and bottom towards the front. This means that the monitors lean slightly forward when they're sat on a flat surface.

When looking at the rear, what stands out is the gigantic heat sink. The speakers have two separate amplifiers, carrying the woofer and the tweeter, giving a somewhat low 40 watts to the woofer and 27 watts to the tweeter.

Any type of nearfield monitoring has to be designed to give a very accurate representation of the audio being recorded or mixed. By having self-powered speakers, not only is the clutter of leads, patch bays, and constant amplifier hum done away with, but also the amps will have been designed by the same manufacturer and are ideally suited to both the speakers and the cabinet.

Below the 'mother of all heat sinks' is a 4-position EQ switch for the low frequency and a three position EQ switch for the high frequency, enabling customisation of the sound to desired effect. This is a brilliant feature, which should be included on all speakers, given the wide variety of personal tastes. The low trim setting on the 4-position EQ allows for the addition of +1.5dB or -1.5dB or -3dB at 60Hz. The high trim setting gives +1.5dB or -1.5dB at 15kHz. Also included are two line inputs, one via XLR, one via 1/4" jack.

Mains comes in through a hard-wired lead and is switched on the rear. The speakers themselves are bi-amped, which means there are two separate amplifiers, with the crossover frequency at 2.5kHz this provides maximum quality of signal for each separate frequency range as each has its own amplifier. Yamaha quote a flat frequency response up to 40kHz, ideal for listening to your latest dog whistles sample CD. But seriously, all that extra on top will come into use if you ever get a 96k DAT machine or start using the new 24-bit computer products.

The recessed volume control on the front has indents, so lining up the two speakers identically should be no problem. The dual ports are designed to help with the bass response. At full blast they shove out enough air to dry your hair with (expensive hair dryer, though!). Using this bass reflex type of design extends the bass response of the speaker.

SPEC SHEET

Frequency Response:	50	Hz -
	40	kHz
Maximum SPL:	10	1dB
Output Power:	67 watts (per cab)	
Dimensions:	169 x 279 x 222mm	
Weight:	7.	6kg

In use

While testing the speakers on a songwriting session for a new album, the initial reaction from the others present was an instant attraction to the compact size and smart black sleek look.

Using a variety of audio material and speaker- destroying test discs (only kidding, Yamaha!), the quoted maximum SPL of 101dB gave the impression of being powerful, while in comparison with other speakers they have a relatively smaller amp. The HF driver and MF driver worked quite effortlessly to give a smooth overall sound, but with a small increase in mid-range. Playing around with the trim adjusters for the LF on the rear, the bottom end changed quite a bit from the neutral sound to sounding quite boxy, especially when pushed.

Although the trim switches are adjustable for the 60Hz range, they did sound like they affect higher frequencies than that. The 3-position high frequency EQ control worked well, allowing cut and boost at 15kHz, so brightness could be easily adjusted.

With complex and noisy material, the speakers worked effortlessly throughout. The woofers handled extreme bass and kick drums very well, but as a compact speaker always lacks any sub-bass, it is begging for an add-on sub unit. The titanium tweeter uses a 'wave gulde horn' which helps the image spread up to 120°. This extra detail with the added bonus of the adjustable EQ gives flexibility at the top end. The stereo image was rather large and the fine detail of HF certainly added to the overall presence.

The amplifiers have been well-built, and while lower in power than others on the market, they couldn't have put any more power through the compact speakers. Adjustment and alignment of the two volume controls on each speaker is quite easy because the controls are indented. Both speakers are magnetically shielded, permitting easy placement near computer monitors and so on. As ever, this is always a big bonus but is sure to become an industry standard now.

Interestingly, you can also purchase MSP5s individually, so you could buy five for a surround system.

Verdict

With a price tag of £450 for the pair, and the features of the bi-amplification, adjustable EQ and volume control, these speakers are aimed at the professional/semi-professional market. However, the woofer on the review pair lacked a bit of punch on kick drums and bass. When the bass was there, it seemed somewhat unconvincing, maybe because of the reflex port design. Perhaps Yamaha should have used a larger speaker to achieve better bass response, though this would mean a larger case and amp; and



EO switches enable sound customisation

compact is what they seem to be after. If, however, they do come out with a sub-bass unit to match, it could be a different story.

While the MSP5 is a very low-cost powered speaker, there are plenty of alternative monitors available in the same price range, albeit un-powered. This makes the MSP5s not quite a perfect buy. That said, speaker choice still comes down to personal preference. Sound and features are usually the main considerations, but size and looks are still given much consideration by some. Given Yamaha's record of studio domination, it will be interesting to see what effect the MSP5s have around the globe.

More from: Yamaha-Kemble, Sherbourne Drive, Tilbrook, Milton Keynes MK7 8BL Tel: 01908 366700 Fax: 01908 368872 Web: www.yamaha.co.uk



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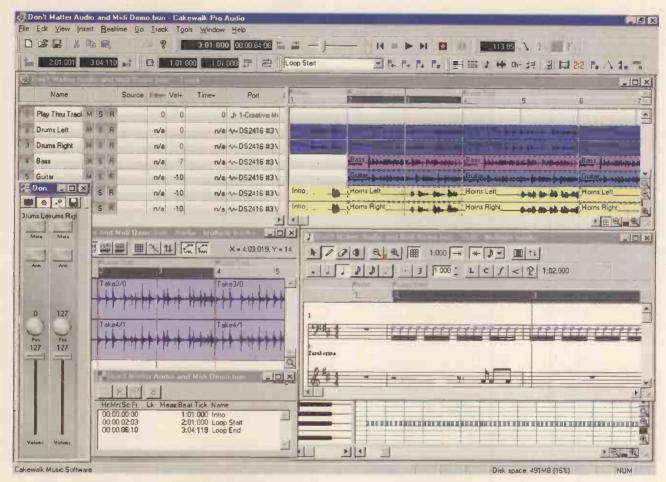






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CAKEWALK PRO AUDIO/DELUXE 8

MIDI/AUDIO SEQUENCER FOR PC £279/£339

Always a popular package for PC, Cakewalk has just been upgraded to version 8. *lan Waugh* tells us what's new

hat's going on?
Cakewalk Pro Audio
7 was released and
reviewed only two
months ago in our
November issue, and
before you can cough up enough change
for the upgrade, here's version 8. Not only
that but the price has come down again —
they've lopped another twenty guid off it!

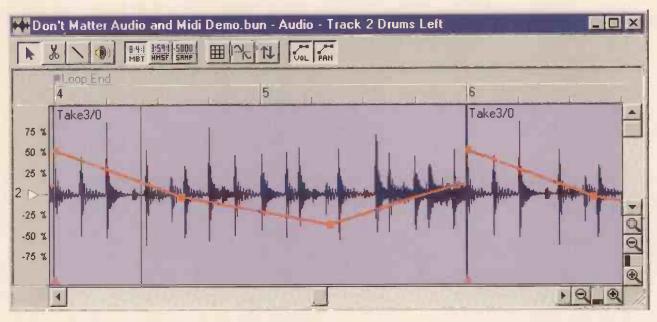
Cakewalk had to do an update, of course, so much has been happening in the digital recording world over the past few months. Cakewalk Pro Audio 8 claims to be the first 24-bit digital audio and MIDI software for Windows 95/98 and NT. It probably is but it won't be alone for long because all the other major developers are

rushing to release updates, too.

It supports 18-bit, 20-bit, 22-bit and 24-bit recording at sample rates from 11.025kHz up to 48kHz and 96kHz, so it can easily converse with a range of digital audio cards and outboard equipment, including the latest generation of 24-bit digital audio cards. 24-bit seems to be where we're heading without a doubt.

The software also has support for several dedicated audio hardware systems including Digidesign's Session 8 and Audiomedia III, Soundscape's HDR1, and Digital Audio Labs' V8. You simply select these from an Audio Hardware window.

Cakewalk Pro Audio 8 is also the first integrated MIDI and digital recording software to support the Yamaha's DSP



You can draw pan and volume envelopes directly onto audio waveforms

➤ Factory (see 'Cakewalk and the Factory' box). With the Factory installed, Cakewalk's Console View automatically shows the DSP output channels and you can insert Factory effects into channels, as usual, by right clicking in the effects area and selecting the effect you want to use from the pop up menu. You can use DirectX effects here, too, mixing and matching the two types of effect. It's the best of both worlds.

Automatic viewing it may be, but setting up the program to use the Factory was not quite straightforward, however, and for some reason you must enable an input driver even though you may not want to use it. The manual could be a wee bit

more helpful here.

The best that can be said about the DSP Factory effect interfaces, however, is that they are functional. There are no graphics at all, the parameters are little more than a text list and they must be selected individually and adjusted with a single slider. There are no bypass buttons in the Multi-effects unit. It looks like the interface was put together rather quickly and one can only hope that the next release will include interfaces more suited to the effects, perhaps a little like those used with Cakewalk's own Dynamics Processor.

The main limitation is that you can only use DSP Factory effects as Master effects, not as Inserts or Aux effects. The program ought to pop up a message telling you as much when you try to insert them in these places. Instead, it just sits there and does nothing. However, you can route channels to the DSP's outs and so use the effects with virtually any audio track as long as you remember there are only eight such channels. Using the Factory effects with the program is superb as you can add all these effects and still have all your CPU power free for DirectX effects and playing audio tracks.

NEW FEATURES

Support for 18-, 20-, 22-, and 24-bit audio

Support for 96kHz sampling

Support for Yamaha DSP Factory

Improved audio streaming

Pan and Volume envelopes for audio

events

Anchors for audio events

Video support

MIDI effects

Zoom enhancements

Metronome enhancements

Event List display filter

Record drop-down list in Record Toolbar

Tempo list in Tempo View

Patch browser

Show/Hide gradient background

New pop-up menus

Loop and Punch markers

Many Console View enhancements

Audio configuration

Audio users have more configuration options. They include the ability to set the disk buffer size, which helps to optimise the streaming of audio data from disk. There are several other settings in the Audio Options box such as Wave Queue Buffers and Wave Buffer Size, and while it's nice to have options, it does mean you need to know what they all do in order to set them up correctly. In other words, unless you thoroughly investigate these options you may not be getting the most out of your system. There are a couple of boxes here that didn't even make it into

the on-line help.

Now for the first time, you can draw pan and volume envelopes directly onto audio waveforms. It's done in the audio editor and you simply click and drag the envelope around the waveform. This is a useful alternative to mixer automation and it has the advantage of letting you see how the volume or pan is going to change before it actually does. Unfortunately, the envelope doesn't appear in the main Track View, which limits its usefulness a little.

Also for the first time, Cakewalk has the ability to play video alongside the music. It supports popular video formats such as AVI, QuickTime, and MPEG, and includes sample-accurate synchronisation of video to audio. Now you can write a score to accompany a movie, modify a soundtrack and save audio tracks back to a new video file. Features include the ability to scrub audio and video in sync and loop them. It's surprising that Cakewalk has not included this feature before now but perhaps not many users actually work with video in this way.

Also new is the use of Anchors. These are positions within audio samples that are used as the "snap to" point when moving and quantising. Anchor points default to the start of the event and this is where you'd normally want them – to snap a riff to the start of a drum loop, bass line, or whatever. Sometimes you may want to use a point a little way into a file, say if a riff doesn't start on the beat, if it starts with a reverse cymbal, for example, before the main downbeat. It's also useful for video, to line up sound effects that may not occur at the start of a bar or on a beat with a video event.

MIDI plug

Another new feature is real-time MIDI plugins. They work on the same lines as audio > plug-ins - only with MIDI Data, of course, and they can be applied in situ to a track or in real-time from the Console. To this end, the MIDI channels in the Console have an area for you to insert MIDI effects.

They include an Arpeggiator, a Chord Analyser, Echo Delay, MIDI Event Filter, Quantise, Transpose and Velocity. All the parameters have these cute horizontal sliders beneath them. If you click on + and - buttons on the extreme left and right of the slider, you change the parameter by one. However, if you click on the slider itself a larger version of it pops out showing the maximum and minimum values of the parameter. You can drag left and right to change it. This is a great little addition to the user interface and it actually appears in other controls throughout the program, too. Nice.

The MIDI effects are very interesting too, with lots of variables, making them capable of producing a wide range of results. The Transpose effect, for example, doesn't simply perform a straight transposition - although it can. You can specify a diatonic transposition to keep the notes within the scale and you can create your own key maps that convert one note to another.

There are over 60 preset mode maps supplied including the usual Ionian, Dorian, Phrygian modes, along with Spanish 8 Tone, Prometheus, Indian, Bop, and Byzantine. A veritable feast of delights for the experimenter; changing the mode of music lines often creates new lines that are still melodic and harmonic.

The Delay effect includes decay, delay, a number of echoes, transpose, and swing settings. You can create echoes that range

CAKEWALK AND THE FACTORY

e had a first look at Yamaha's DSP Factory in our November issue and we'll be covering it in greater detall in a later issue, so here's a very brief description. Apart from offering 24-bit digital audio processing and lots of Ins and Outs, it includes on-board processing, which does not require any of the host

computer's CPU power. This means you can run the software on a minimal PC system and use the Factory to supply the real-time effects. So vou don't have to rush

out to buy

Yamaha DSP Factory Equalizer [DS2416 #2 WAVE OUT] _ 🗆 × Y B F Presets Peaking Band Pass Bypass Q:7.0 Q:10.0 Freq: 21 Freq 20 Gain 0.0 Gain: 0.0 Peaking Peaking ■ F Bypass Bypass Q:10.0 0:10.0 Freq: 20 Freq: 20 Gain: 0.0 Gain:0.0

that 450MHz Pentium II after all. Be aware, however, that as of writing there are no **DSP Factory NT drivers.**

The Factory has three built-in effects: Dynamics Processor, 4-band parametric EQ, and a Multi-effects unit. There are four EQs in the EQ effect, each with Q, Frequency and Gain controls. Each can be set to one of 12 EQ types from Hi and Lo Shelf to

Band Pass.

The Dynamics Processor can be set to one of six types, including hard and soft compressors, a gate, and an expander. It's really good to see dynamics effects here as they tend not to be top of the list of built-in effects, but they are one of the most useful.

> The Multieffects unit contains two effects, which can each be set to one of 39 types. They include reverb, delay, echo, pitch

phasing, tremolo, ring modulation, and distortion, plus combinations of effects such as reverb and chorus, delay and reverb, distortion and delay, and so on.

The Factory has no software to access its effects. That's down to the host software, which is one reason for the upgrade to Cakewalk Pro Audio 8.

from sounding "real" to rhythmic parodies of the original line. The Arpeggiator also has several settings to determine the swing factor, the rate, the note range, and so on.

Both the Quantise and Velocity effects give you creative control over the music.

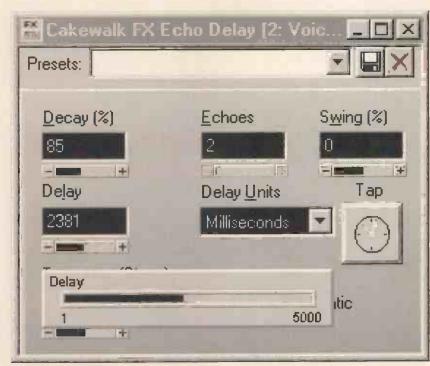
Quantise has strength, swing, sensitivity, and tuplet settings along with a randomise function. Velocity includes a scale function, the ability to limit the velocity range, and there's a randomise function, too.

So far, the only MIDI plug-ins are Cakewalk's, although the way the effects are integrated into the program suggests that there could be scope for third party effects. That would be nice, but unless the MIDI plug-in is adopted as a standard, like DirectX, it's unlikely to happen.

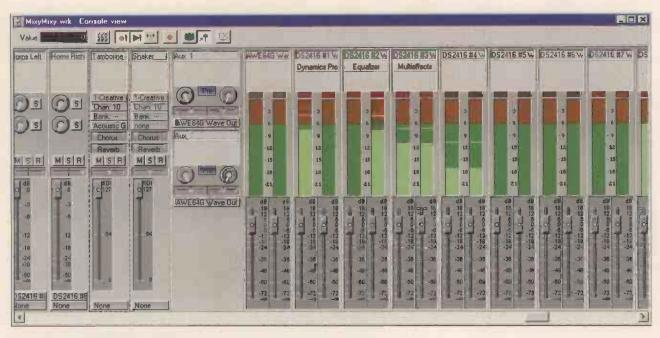
Another neat MIDI function is the Patch Browser, which is accessed from the Track Properties window. It lets you search for patches that contain specific text. Not much call for it if you're a GM sort of person but if you have a lot of sounds in your list, it could be very useful.

Channels in the Console window can now be shown or hidden more easily by checking and unchecking boxes in the Module Manager. If you have much more than a dozen MIDI and audio tracks, it's likely they won't all fit on the screen. The Module Manager makes the whole thing more manageable.

In case you're wondering what you get for the higher-priced Cakewalk Pro Audio Deluxe - you get two CDs that make up Musician's Toolbox III. They contain a collection of video clips, audio and MIDI loops and riffs, and a few utilities. Of even more interest, perhaps, is a set of multimedia tutorials that help newcomers become acquainted with the program and



Echo Delay is one of the new 'MIDI plug-ins'



The Cakewalk Console, showing which effects are In use

show old hands how some of the new bits work. Shame you have to pay so much extra for them, though.

Verdict

While the additional features are most welcome and push the program a further step up the big league ladder, operation remains the same and not all aspects of the program are intuitive. Newcomers in particular will need to read the manual carefully in order to assimilate the modus operandi and to grasp the convolutions of the Console, routing, mixing, effects processing, and so on.

Unfortunately, we have to report a number of crashes. Whether this was due to the software, the DSP Factory or the combination of both is unclear. Once the software and card were properly set-up, however, problems did diminish.

Version 8 maintains the tradition of

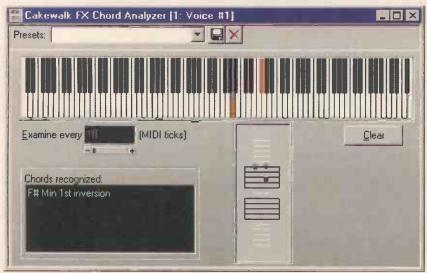
including a complete printed manual with each new version of the program. Well done! At the risk of being picky (some people are never satisfied) a few more illustrations would be helpful, but hey, it's a manual, so easy on the complaints.

If you've just bought or upgraded to Cakewalk 7 you may be a bit miffed to see version 8 appear on the shelves, but fear not. You can upgrade to 8 for a nominal £17.50, and if you bought it after 1st September you'll get the upgrade totally free of charge (aside from the postage charge). Can't say fairer than that. Eagle-eyed readers may also notice that the price of the DeLuxe version has dropped by £30. Although the price is coming down, an extra £60 is still too much. Maybe the two CDs should be chucked in with the standard version and have done with it.

Cakewalk is obviously committed to developing the program and keeping users

as up to date as possible as quickly as possible, an aim the company seems to have well achieved over the past year or so. This must encourage users, both old and new, knowing that their software will be as leading edge as it's possible to be. In all, a well-priced upgrade for version 7 users, and long may the upgrades continue.

More from: Et Cetera, Valley House, 2 Bradwood Court, St. Crispin Way, Haslingden, Lancashire, BB4 4PW Tel: 01706 228039 Fax: 01706 222989



Another of the included MIDI plug-ins





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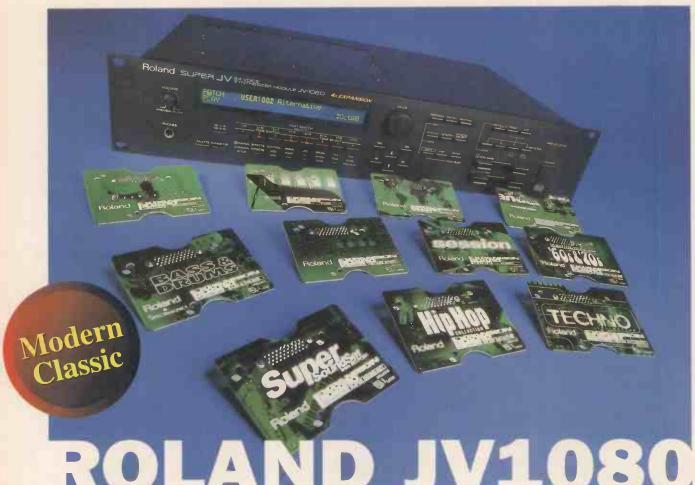
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ROLAND JV1080

SYNTH MODULE £829

In the first of a new series of reviews, we revisit gear that's been around a while but is still available new. Seb Pecchia waxes lyrical about Roland's enduring JV1080

Check out some of Seb's favourite things - cards, internal sounds, the glory of the 1080 is all here



hen referring to classic pieces of equipment we may be forgiven for thinking of the golden oldies such as the Minimoog, the Wurlitzer piano, Oberheim and Linn, not to mention all those other timeless Tangerine Dream legends. But with today's light speed technological advances it also becomes all to easy to forget that classics are still being created, pieces of equipment that are just so good, even the most discerning of ears take notice. Okay, so we might be looking at micro chips, expansion boards, DSPs, and MIDI compatibility instead of telephone exchanges, valves, and Bakelite knobs, but don't let that fool you into thinking that today's gear may never be classic.

We have decided to track down some of these modern beauties, and the bonus is that they are for the most part still commercially available. But where do you start with such a mine field to choose from? Well obviously you go to the top... Roland. Yes that's right, throw away your

Space Echo and 808, make way for the Super JV-1080... Hooray!

It's strange to put such a recent module into the category of classic, but if you've never tried one of these before then you don't what you're missing. This module houses all those infamous sounds that really have become synonomous with synth history, plus an avalanche of new stuff, and a price drop to boot. That's as good a reason as any to have a close look at it.

Overview

At first glance what we have here is just another 2U, 19" rack-mounted module, not dissimilar to a whole range of others. A well laid out front panel allows the user to gain quick and easy access to the many functions the 1080 has to offer, and a clear LCD display, which although small, is easy to read and control. Well laid out function keys provide the main interface controls for the user, and a volume knob allows the user to audition any sound just by giving it a push, not to mention the all important PCM and Data card slots.

On the rear of the unit there are not one

but three sets of stereo outs, and all the usual MIDI ports, so integration into an up and running system should not be too much of a problem.

The 1080 has got the lot; 64 notes of polyphony, stacks upon stacks of incredible and inspirational sounds, an effects section that makes you weep, and that's without even mentioning the four expansion board slots that allow the user to put in a whole array of amazing cards giving a vast number of patches to play with. In total, the basic model has 640 preset patches, 128 user slots, eight drum kits, and two user kits, not to mention the 96 performance patches, all of which have been masterfully crafted into very accessible banks.

Sounds good

The sounds just scream Roland at you. From the word go a wealth of refined

sonic delight hits you; just playing through the first few banks: beautiful symphonic pads to alien filters and string quartets, basses that are so low even Giant Haystacks would run for the hills, Piano's... wow... who needs a Beckstein? Then an array of acoustic sounds, brass sections, and more leads than Columbo. All of them are very usable, and some can't be left alone.

Of course, Roland don't forget their infamous history either, so they provide bank after bank of classic bleeps squeaks and bumps that will keep even the biggest fan of analogue amused for months. If you do ever find yourself getting tired of the basic sounds, then simply load up a few hundred more from one of the many expansion boards, or edit and store your own patches. As far as usability and programming are concerned it does not come much easier. Just flick

through banks of sounds using the INC and DEC buttons, or easier still, scroll through with the value wheel; it doesn't take long for something to take

As far as programming is concerned, fill your boots by selecting up to four tones for every patch, this is great fun; get your Rhodes piano sounding like a weird percussion instrument or what ever your imagination decides. Edit and adjust the layering for each one, filter, octave shift, or simply turn the volume up and down; all at your fingertips. Certainly no degree in rocket science needed here.

Edit city

The parameter button and the function select keys combine for editing and customizing things to your own liking, guiding you through multiple windows for quick changes to the Tones EFX section

EXPANSION BOARDS - THE COMPLETE LISTING

Expansion boards — The complete listing All 13 expansion cards for the JV-1080 cost £255 each. If you've got an SR-JV80-06, hold onto it because they've been discontinued. The cards are compatible with Roland JV-1080 and JV-2080 modules, plus the XP-80, and XP-60

Roland keyboards. SR-JV80-01 Pop 224 waveforms of sounds that are widely used in commercial pop songs, acoustic instruments such

SR-JV80-02 Orchestral Realistic and typical strings, woodwind, and percussion. Also brilliant brass ensembles and a host of other realistic classical instrument sounds.

as pianos, saxophones, and strings, not to mention

synths, persussion, and a host of kits to play with.

SR-JV80-03 Piano 73 waveforms reproducing all those amazing piano sounds, from acoustic keys to clavs, you name it, this card has it all. It's a must for a wide variety of musical genres

SR-JV80-04 Vintage Synth Contains all those renowned Roland synthesizers, including waveforms from the SH1000 and D50. A real corker if you like your old skool keys.

SR-JV80-05 World Loads of waveforms and patches that are very diverse and offer a huge variety of ethnic instruments, including percussion samples from all over the globe

SR-JV80-07 Super Sound Set Waveforms, patches, and rhythm sets. A great all-round card for those moments you need some ideas. Includes banjos, mandalins, and great orchestral sounds, allowing you to readily cover classical music as well

when inspiration seems to be lacking and

nylon string guitars, and other powerful instruments. The piano sounds are particularly sexy

SR-JV80-10 Bass & Drums Samples from the guys at Spectra Sonics makes this card sound great. Masses of bass sounds and phrased drum loops and grooves. Highly expressive and creative

> SR-JV80-11 Techno Collection Fits in with the latest techno and dance music sounds very well. Includes loads of phrases, loops, basses, and plenty of weird and wonderful beeps and bumps.

> SR-JV80-12 Hip Hop Collection Perfect Hip Hop and dance grooves. Raw material for funk, R&B, Jazz, Reggae, and soul. Packed with usable waveforms and patches; some pretty cool vocal samples as well.

SR-JV80-13 Vocal Coffection Over 90 waveforms with up to 5-stage velocity switching for exceptional expression. Includes Jazz scatting and various choir

variations. Designed for film, theater, live performance. SR-JV80-14 World Collection "Asia" Over 100 waveforms from coutries like China, Indonesia, Japan, Korea, and India. Sounds include 'weeping' strings, Er Hu (China), Jegogan and Jublag (Gamelan – Indonesia), Tabla and Dhol (India). A veritable feast from the East.



SR-JV80-08 Keyboards of the 60s and 70s Follows on the heels of the Vintage Expansion card, but this contains all those vintage organs and electric pianos that defined a lot of the music that was produced during that period

SR-JV80-09 Session A wide range of pianos, strings, choirs,



Window on the world: A little LCD with a big job

and numerous other areas. It's an ideal platform to create your own sounds from. There is a rather cool Analogue Feel parameter, allowing very discreet pitch fluctuations that give great analogue depth or make the sound very natural.

Editing the structure of the tones opens up another world of noise, and by selecting the waveform that serves as the basis for a tone you can begin to change parameters such as wave gain, tone switching, or frequency modulation, then combine two waveforms together to create an original third waveform. Add a low frequency oscillator (very *Ready Steady Cook*), one of the many filters, some excellent effects, and hey presto custom sound! Okay, it's a little more in depth

SPEC SHE	ET
Polyphony:	64 voices
Multitimbrality:	16 part
Presets:	640
User patches:	128
Performance patches:	96 (32 UER,
	64 PRESET)
Preset rhythm patches:	8
User rhythm patches:	2
Effects:	40
Display: 40 cha	racters, 2 line
	backlit LCD
Connections: Headphone	s, stereo mix,
2 extra	a stereo outs,
MIDI In, 0	Out, and Thru.
Power:	Internal PSU

than that, but the fact is that the flexibility is there if a little time is spent exploring the 1080's inner sanctum.

The effects section provides just about everything a person could need. Although of course you can edit each area, there's a plethora of reverbs, dynamics, modulation, distortion, you name it and the 1080 probably has it, 40 in total. Mix, match, and see what the result is (this is where that nifty audition button comes into its own.) The Stereo EQ holds up endless possibilities with low frequency adjustment between 200Hz and 400Hz, and high frequency adjustment between 4kHz and 8kHz. Each has its own gain parameter, and you can edit specific frequencies and bandwidths using the Peaking controls. Spectrum filters, Phasers, and enhancers are all there as well, so there is scope for creating some weird and wonderful stuff.

On the MIDI side of things the 1080 has the standard spec 16 channels, and hooking it up to a sequencer is straight forward enough. It also supports GM, which is quite handy, but frankly, GM sounds never impress so they will probably be the last bank of sounds to be played with; especially if you've got expansion cards.

It also allows you to use different MIDI controllers to make modifications in real time; useful if you're using this module as a live performance instrument. Besides all of this you also have the ability to store your sounds onto DATA cards for future use, and that involves just sticking the card in and using the utility function to save your patches.

Verdict

Roland did a very impressive job with this module, its expandability alone justifies it becoming an all-time classic. It has the all round capability to produce great music in good hands. The basic sounds are fantastic, especially the performance based patches. Everything is there – just add more if you're bored.

The expansion cards are most impressive, especially as they include vocal samples and loops that mean you can get creative super quick. There are also so many of them that film score writers sound designers, producers, and a whole host of other people are going to really benefit from such a unit for a long time.

If there is anything to fault, it would have to be the small LCD screen; you have to scroll through dozens of windows with figures and abbreviations all over the place, which is a pain for an experienced user and a real problem if you've only just begun to play with synth modules.

Also another slightly annoying quirk is that there is no quick access to effects. Again, you have to scroll through a load of windows... boring! However these are both problems that Roland have revised in the next generation, the JV-2080, so no real complaints here. Editing and selecting sounds is very logical and it's not long before you're all-singing and all-dancing.

As the central brain of a MIDI studio, the JV-1080 is a must (scratch the bottom of the barrel to fault it). Bar having a sampler on-board it is more versatile than it's competitors in the same price range; coming in at a cool £899 for

The JV-1080 comes with three stereo outputs for extra versatility



THE TOP 4 EXPANSION CARDS

e tried out all 13 expansion cards for the JV-1080, and had great fun doing it. As a way of enhancing your sound library, while at the same time saving some cash, these are 'the fantastico.' The JV-1080 can take up to 4 cards at once, so here's some comments on our favorite four...

Keyboards of the 60s and 70s consists of a huge array of juicy organs, classic Rhodes, and Wurlizers, along with Clavichords and harpsichords. It's all very retro, and although the sounds are very good, one could get a bit brain dead going through all the patches. On the other hand, the chaps at Roland have done some nice things with the preset effects , using distortions and phasers to give depth and a bit of variety. In all you get 136 organs, 54 electric pianos, 49 Clavs, and 16 'way out man' patches. If it's retro keys you're after then this is the baby.



Hip Hop Collection has some great sounds, but what stands out is that there are not only great patches, but loads of complete loops and vocal samples. If you're after those Fugee style funk breaks then this card is incredible. All the drum loops come in loads of styles, some with vocal licks, some just sounding like dirty old LP's, others are processed to the max. You get a rather useful BPM chart with the

something this good? Bargain. It looks good and it sounds good, and will probably last longer and sell better than most of its peers in years to come.

More from: Roland UK, Atlantic Close, Swansea Enterprise Park, Swansea, West Glamorgan SA7 9FJ Tel: 01792



card as well, so no foot tapping and tempo guessing, just get stuck in and groove. This card also has some pretty rocking guitar licks, brass sections, scratchy record effects, and piano's to boot. It's worth every penny.

World offers a nice alternative to what one might be expecting from a synth module. Like the hip hop card it has loops and samples all over it, making for very interesting library addition. The instrument patches are very original and usable, with many mysterious instruments, but there are Tibetan bells, ethnic basses, vocal loops from around the globe, and a very saucy didgeridoo sample. Even the bagpipes are great. So if you're into those 'Mosque reeds' and like to shake your 'Bendir' around, then you would be well advised to get your 'Big ole logs' into this one.

Bass and Drums is a slightly different card to the others in that Spectrasonics the sample library guru's have been brought in to assist the chaps at Roland. It all adds up to a very useful combination as it happens. The sounds are all created by well known musicians and range from Basses that are slapped, fingered, picked, dropped, punched, and kicked, through to drum phrases and patterns that are well laid out and sound great. The Samples are all taken from the Bass Legends, Burning grooves, and Liquid grooves sample CDs.

Orchestral is simply beautiful. Yep, it's the Royal Philharmonic in a box, or pretty close. There is not much more to be said about this card because you just have to hear it. It is a mighty powerful tool though, for anybody with an inkling for the ensemble, and should be on all film and T.V writers' Christmas lists... Er... Did I mention Christmas?

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ROLAND JV1080

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WHAT WE LIKE

- Great sound
- Huge flexibility with loads of expansion cards to choose from
- Great, manual

WHAT WE DON'T LIKE

- Small display screen
- No direct access to effects section

OVERALL

Still sounding great after all this time, Definitely a modern classic!

January 1999 The Mix • 43

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It might look like its predecessor but the \$200 has a lot more under the bonnet, as *Tim* Oliver discovers

Hear the \$200 In action on this month's cover CD



MULTI EFFECTS PROCESSOR £300

ou might remember the Digitech \$100 (reviewed issue 49), which, at £180, had praise heaped on it from all sides for quality over cost. Digitech have been swift to follow it up with the \$200, a box that does much the same thing but with many improvements. The big question you really want answered Is whether it's worth paying the extra 120 notes. Here's the evidence m'lud...

Overview

There's no denying the S200 looks fantastic. It's modern without being quirky, it's minimal without being fiddly or lacking controls, and it feels solid, a lot more so than units twice the price. But it looks exactly the same as the S100, except for the new LCD display. While the metallic blue livery is very attractive, a different colour would have made the two more distinguishable. Having said that, it's the

S200's LCD display which is where the main difference and big advantage over its little brother lies. It's the window to its soul; but more on that later.

Let's do some moaning first. Whoever thought of putting the input level control on the back of the S100 needs shooting, and as for the people who decided to keep it that way on the S200, you're just as bad, if not worse, because you didn't listen to all the moaning that came with the S100 reviews. Why couldn't it have been one of the discrete selector buttons on the front and controlled by the main parameter dial?

Imagine this scenario: you've set up a mix sending several channels to the S200 via an auxiliary bus. The auxiliary master is up full, which is where it works best from a noise point of view. You're about to print the mix to DAT when you notice a bit of hiss coming from the S200 (and there is some, especially the compressor programs). You then realise the S200 is being underdriven so you need to turn the

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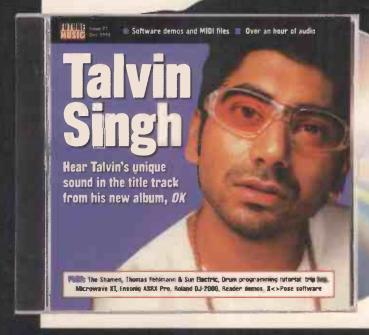
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Long arms required: the input level control is found 'round the back of the \$200

Effects Stage, room, hall, plate, Reverbs: chamber, cathedral, arena, gated, reverse Delays: Mono delay, stereo delay, 2-tap, karaoke Modulation: Chorus, flange, phase, tremolo, panner, rotary speaker Pitch shift, detuner Pitch shifters:

SPEC SHEET

Ring modulator, Misc: compressor, vocoder, de-esser 20Hz to 20kHz Frequency response: S/N ratio: <0.008% THD: 46.875kHz Sampling rate: 20-bit, A/D & D/A converter: 128X oversampled 24-hit Internal signal path: 2 x 1/4" unbalanced, max

Inputs:

Outputs:

input to the unit up and the output down. The auxiliary master's full up, which is what the \$200 designer is passing the buck to, so you have to get round the back of your rack to turn the input up. Either that or turn up each individual aux send and risk losing the balance. After a long day's mixing I'd want to kill the designer. OK, it's a long moan for a little thing, but there's not much else to go on about. They probably left it like that on purpose just so there was something for us lot to pick up on.

That aside, this unit is superb, both from editing features and a sound point of view. To tell you the basics, it's a stereo in, stereo out multi-effects processor with comprehensive external control from footpedal (program up and down, bypass, rotary speaker on/off, delay time tap and repeat hold) and MIDI (full control of all parameters and programs). The dream LCD shows at a glance what's going on inside, making it one of the most intuitive user interfaces around. Any change is made with the one big program/data dial, and you select what you want to change with the neat (if a little fiddly for fat-fingered folk) buttons

The internal architecture is exactly the same as the S100. There are two effects engines that can be arranged in any stereo/mono, parallel/serial configuration you want. If you use a single engine, the quality's going to be marginally better, but the best thing about the \$200 is trying out parallel effects such as compression after the reverb, or flanging ring-modulated drums, which you can hear on the CD.

As well as the effects engines, there's a 3-band EQ and noise gate. The EQ has fixed top and bottom shelving curves with a bell mid band, all with 12dB of cut or boost. The GUI (Graphical User Interface) really comes into its own when editing. As vou change a parameter, a graphical representation changes with it. In the case of the EQ you get to see the curves grow; with the noise gate and de-esser you see a graph with thresholds and so on; and with reverbs you see decay times and predelays. Most others are just rotating pots, but it's enough to make you feel involved.

SO WHAT'S NEW **ON THE S200?**

+18dBu

+18dBu

2 x 1/4" balanced, max

Every parameter of all the effects, EQ and noise gate can be controlled over MIDI using control change messages. Program change, bank select and effects bypass can also be controlled using program change messages. **LCD Screen** Biggest area of improvement. The screen

lets you into the machinery. **Preview button**

Brilliant idea that gives you a snare hit with the selected effect. Saves a lot of time when trying to get the reverb decay right, for example, or just finding the right effect preset.

Built-in power supply No wall wart! **Improved factory presets**

The range of effects is vast (see the spec sheet for a rundown). There's all the usual ones you'd expect to find, plus some interesting ones like the vocoder, which is pretty good (hear it on the CD), and rotary speaker effects. There's one called Karaoke, which one would presume makes you sound drunk, too loud, and out of tune. Actually, it doesn't, it's just a combined reverb and delay.

The reverbs aren't what you'd call expensive-sounding, but there is a character to them that in certain circumstances is ideal when you need a dense effect rather than a true sense of space. The duller ones are better, because there's quite a metallic resonance to them as you bring up the high frequencies.

The delays are a bit limiting because with only four parameters to play with there isn't control of separate left and right delay times for true stereo delays. The stereo delay on the \$200 refers to input, with both channels delayed by the same amount. The compressor does a good job of dynamic control for vocals and acoustic instruments, but without a release parameter you can't get any vicious pumping going on. You can, however, set up the two engines as two mono delays in parallel with different delay times, but that uses up all the processing.

A great aspect of the S200 is the MIDI implementation. Every parameter of the effects, the EQ and the noise gate can be addressed using Control Change messages. It took very little time to make up faders in Logic's environment to do real-time edits. Response time is a bit slow, but there's always delays to move the sequencer tracks early. You can hear the results on track 10 of the CD.

Verdict

All in all, the modifications on the \$200 do justify the price rise, but if you don't need the added control or can't spare the extra cash, the S100 sounds exactly the same.

More from: Arbiter Group, Wilberforce Road, London NW9 6AX Tel: 0181 202 1199 Fax: 0181 202 7076 Email: arbiter@compuserve.com Web: www.arbitergroup.com











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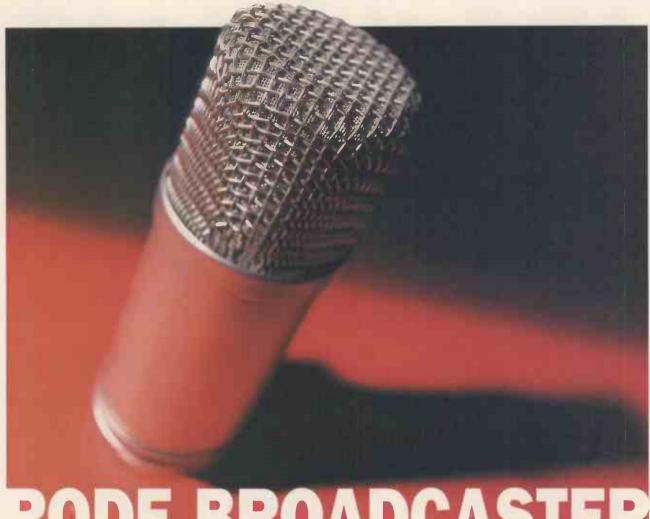


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RODE BROADCASTER

Is there any originality left in microphone design? Possibly. Trevor Curwen rides the new Rode into town

and tips his hat at

the broadcast boys

LARGE DIAPHRAGM CONDENSER MIC £269

y providing high-quality condenser recording microphones at bargain prices, Australian company Rode have rapidly established themselves as a brand to be reckoned with in this country.

The three currently available Rode microphones - the NT1, NT2 and the Valve Classic - have now been joined by the latest addition to the range, the Broadcaster, which is rather unusual in that it is designed to fill a specific niche. The name gives it away really; this is a microphone aimed directly at radio people, announcers, and DJs, although it could also find its place with anyone specifically

Overview

recording the spoken word.

Many of the microphones used for broadcast are dynamics. Rode believe that these have their limitations and that a better choice would be a large diaphragm condenser. The Broadcaster is a true large diaphragm condenser, but is an end-fire

design (you talk into the end of it) rather than the more conventional side fire designs that proliferate. This gives it the advantage of presenting a lower profile to the announcers field of vision. The polar pattern is a fairly tight cardioid.

With the same rugged good looks as its immediate family, the Broadcaster is compact, with a body machined from highgrade stainless steel. The capsule surround is a grille constructed from two grades of mesh. The outer layer is a tough open weave while the inner layer is a fine mesh, which acts as a pop shield.

Internally, the Broadcaster boasts a 1" gold sputtered, pressure gradient transducer supported by a rubber assembly, which provides a good degree of isolation from the microphone body. The electronics sit on an nice thick PCB, and a 3/4" thick piece of foam further protects the capsule.

The microphone's mount is a solid affair with 180° of adjustment in the vertical plane, and firmly clamped in place at the end of the mic's body by a knurled ring

SPEC SHEET

Transducer:	1", gold sputtered,
Frequency Response:	20Hz-20kHz
Noise:	14dB (A)
Sensitivity:	18mV/Pa
Max SPL:	135 dB
Low-Cut Filter:	75Hz 6dB/Octave
Output Impedance:	200Ω
Power Requirements:	+48V DC
	Phantom
Current Consumption:	5mA

➤ that screws into place. A plastic pod on the mic's body holds the low cut filter switch (75Hz at 6dB/oct) and the built-in on-air light. This switch is perhaps a little hard to get at when the mic is mounted, but there's no way it's going to be accidentally knocked.

The most unusual aspect of the Broadcaster, the on-air indicator, is a feature not normally seen on microphones. The indicator is a small red LED and acts as a cue light for when the announcer is on air, or in the case of recording, when the tape is running.

The LED can be switched on and off from any switch on the console, as long as

it is wired to pins four and five of the 5-way output connector. The LED does not interfere with the audio circuit in any way. The microphone does not mute when the light goes off, but if the LED was connected to the mic channel mute switch, this would effectively kill both the audio and light the LED at once, if desired.

The first thing to note about the Broadcaster is its low profile. Being relatively compact with an end fire design and internal shock mounting (eliminating a suspension mount), not much of this microphone gets in any announcer's line of sight. The on-air LED is immediately obvious to anyone using the mic and as such, wired to an appropriate switch, is a tremendously useful feature. The mic's mount is stable, yet easily adjustable, and stays firmly in place.

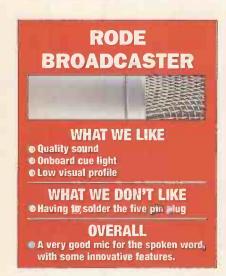
The microphone performed extremely well; rich and clear with a punchy presence, flattering to most voices. The foam barrier and wire mesh grille seemed to do their job, and the shock mounting provided an adequate degree of isolation.

Verdict

This mic certainly does what is was designed to do, and will find a home in many broadcast applications. Alternatively,

it will make a fine mic for anyone recording the spoken word, be it for voice-overs, narration, audio books, and the like. The on-board cue light is an innovative feature and will certainly help to speed up communication and get work done more quickly in many situations.

More from: HHB Communciations Ltd, 73-75 Scrubs Lane, London NW10 6QU Tel: 0181 962 5000 Fax: 0181 962 5050 Email: sales@hhb.co.uk Web: www.hhb.co.uk





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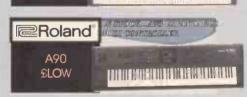
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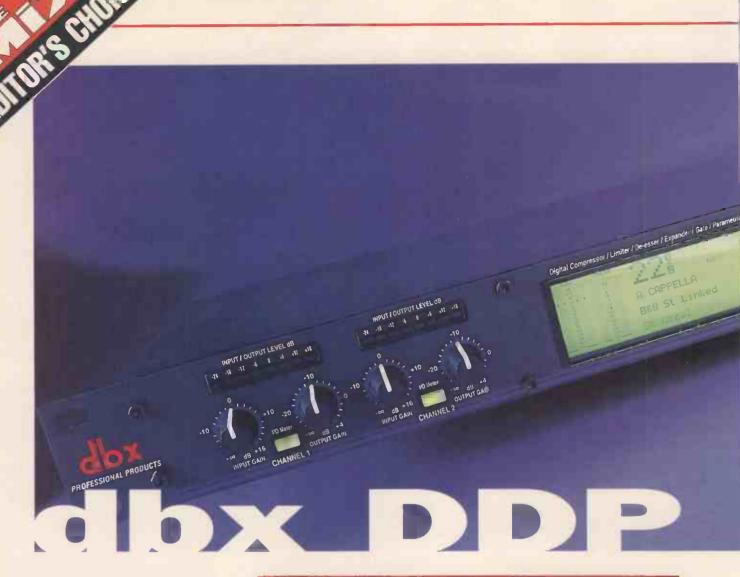
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DIGITAL DYNAMICS PROCESSOR £600

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he new dbx Digital Dynamics
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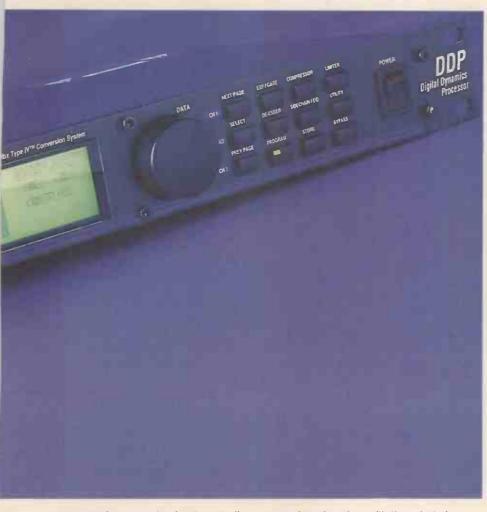
Overview

Starting with the input section of the front panel, each channel has a pair of pots for controlling input and output gain. The gain range runs from ⊸ to +16dB. The two 8-segment level meters (one for each channel) display the channel's input or output level, depending on the orientation of the channel's Meter Select button.

Next up, and taking up a fair proportion of the unit's front panel, is the LCD screen. The display is a hybrid affair split into three distinct sections. The first section is dedicated to displaying the internal digital levels, at both the input and output stages. Each channel's peak and RMS levels are displayed simultaneously.

The central core of the bargraph displays the peak level, whilst the outer portion shows the RMS (average) level. The central area of the screen displays text-based information such as program name and number, setup details, and edit parameters.

Another high-resolution area resides at the right hand side of the screen. Here we are presented with two more bargraphs, displaying each channel's overall gain reduction, and the Curve Window. In program mode, the Curve Window displays the threshold meter. Anyone familiar with the dbx 10 Series processors will be familiar with this display (more on it later for those without a 100 Series). When editing effect blocks, the curve window displays graphical information, which depends on the current block, either a



compression curve showing the overall effect of all compression-related effects, an EQ curve, or a de-esser curve.

After the wonderful excesses of the display, we find the obligatory data wheel and a matrix of 12 LED-equipped buttons, used for navigating your way around.

On the back panel there are the usual array of connectors. Analogue signals are fed into and out of the DDP through balanced XLR and unbalanced 1/4" jacks. A pair of 5-pin DINs provide MIDI In and Out/Thru. An optional digital I/O card can be fitted, which provides both AES/EBU and S/PDIF connections (although the review unit didn't have the option installed). Mains power is supplied through a standard IEC socket.

In use

After connecting up the DDP and switching it on, you find yourself in program mode. The middle section of the display shows the program name

and number along with the selected channel and the details of the setups in use. A setup is the name given to a chain of basic effect blocks and their respective parameters. Each program can store either a single linked, or two dual mono setups.

As already mentioned, when in program mode, the right-hand section of the screen shows the threshold meter. This consists of a group of letters (representing each effect block: C for compressor, G for gate, and so on), each letter being followed by various '+' and '-' symbols. When a given effect block's threshold is reached, the '+' sign will become black, giving extremely useful visual feedback as to what is happening inside the DDP – a welcome addition!

Browsing through the programs, with a drum loop being fed into the unit, it quickly became apparent that dbx have really delivered with this one. It is, seemingly, impossible to clip the A/D converters. This is thanks to dbx's TSE

(Tape Saturation Emulation) system, which works in conjunction with the converters (see boxout for more details on Type IV converters and TSE). The output from the unit has the clarity you'd expect from a digital unit, yet it still manages to capture some of the warmth of analogue systems. No preset program is going to suit straight from the box, so let's start tweaking.

Editing the programs

Pressing the CH1 or CH2 buttons allows you to start editing the corresponding setup. In linked operation, only channel one is available (any changes being copied to channel two automatically). You select the setup you wish to use from the library of up to 100 mono and 100 linked setups, depending on what operating mode the program is in. Once you have found a suitable setup, you can start to change the parameters of the individual effect blocks.

As with everything on the DDP, editing is a very simple and intuitive business. Each effect block has its own selection button, which lights so that you can tell at a glance what it is that you are actually editing. Once a block is selected, the middle section of the screen displays the first page of parameters, the Next Page and Prev Page buttons scroll through the available pages whilst the Select button scrolls through the (up to) three parameters on each page. To allow you to see the effect of any changes visually, the curve window portion of the display switches to the relevant graph.

Each effect block has the normal selection of effect on/off, threshold, ratio, make-up gain, and so on, but a few less obvious parameters present themselves from time to time. It is when editing the gate that the first of these appears. The TCM, or Transient Capture Mode, delays the signal by between Ous and 30us (Oms 3ms). This allows the DDP time to catch fast attack transients without any risk of them being cut off by the gate. The maximum delay of 3ms is enough to allow the TCM module to do its thing reliably without causing any noticeable phase problems. Although the TCM is located in the Expander/Gate block, its effects are global, giving noticeably smoother compression, limiting, and de-essing.

A press of the Compressor button reveals its parameters. The OverEasy parameter is a variable compression knee control. A setting of 'off' provides the hardest compression knee, whilst the maximum setting of 10 gives the softest compression knee and subsequently the gentlest transition between no



dbx TYPE IV CONVERSION AND TSE

ven after living with digital audio technology for over a decade, the analogue-versus-digital argument still rages. As is well known, one of the problems with analogue tape is its limited dynamic range (typically 55dB from 3%THD to RMS noise floor). Although this can be improved to 75 to 85dB with the use of noise reduction (such as dbx Type I and Type II), it still can't get reach the 96dB (or thereabouts) available with digital systems.

However, looked at from a different angle, the results of overloading analogue tape are at worst, bearable, and at best, beautiful. Compare this to the disgusting noise produced when overloading an A/D converter.

As we have become used to working within the confines of the digital OdB FS (full scale – the point at which clipping occurs in a digital system), we have also become used to recording lower signal levels and metering peaks as opposed to RMS (average) levels. The practical upshot

of all this is that digital systems rarely provide their potential 96dB or so of dynamic range, as we are all too busy making sure those red meters get nowhere near to lighting and quiet sections enter the realm of poor quantisation.

Enter dbx's Type IV conversion system. The response of most digital systems can be said to be linear, in that a point never arises where compression takes place, as happens with analogue tape saturation. With the Type IV converters, however, whenever a signal reaches a level of -4dB FS, it enters a logarithmic region. In this way, it is (allegedly) impossible to overload the converters.

This is also where the TSE (Tape Saturation Emulation) starts strutting around making, "What's all this, then," sorts of noises. By taking this top 4dB of signal and treating it in much the same way as analogue tape would, it is possible to recreate that good of analogue warmth. And not a valve in sight.

compression and full compression. Plainly this is a very useful tool, but why dbx chose to call It after a fried egg is anyone's guess. The auto attack, hold, and release work well here, as they do in the other effect blocks. Slightly disconcerting is the way you can access these parameters (regardless of the condition of the auto setting) without being supplied with any quick visual reference as to their condition. A minor quibble, though.

The limiter produces another such criticism. Because of the way the digital output meters work, they appear to display a significant overload even if it has only been one sample that has got past the limiter. Bringing the TCM into bat here will eliminate this problem under most circumstances but, as with most things in the studio, leave the final judgement to your ears. The de-esser does its job well, too, with a useful graph displayed in the curve window, plotting frequency against cut/boost.

Depending on what program and setups you are using, the EQ section of the DDP can be located in either the main signal path or the sidechain path. The EQ Is a 3-band parametric affair, and controls are provided for centre frequency (25Hz to 20kHz), Q (.25 to 16) and cut/boost (±12dB). When using a program that

incorporates a sidechaln EQ, a Monitor On/Off parameter becomes available. This allows you to monitor the signal being fed to the sidechain. Here is where we get our hands on the TSE (Tape Saturation Emulation) controls. Although there can never be anything quite like the real thing, the TSE system does an admirable job.

Setup creation

Building up a setup from scratch is as easy as everything else on the DDP. Pressing and holding the program button will take you to the Config Setup page. When working from a linked program, you are able to select a single linked chain, and when working from a mono program you can select two mono chains. You can then apply settings to the various effect parameters from scratch.

This is where the DDP starts displaying a darker, more sinister side. The more astute amongst you will have noticed that there is no dedicated external key input to the unit. No doubt this is because the cost of an extra A/D converter to handle the key input makes it prohibitive. The ability to place the EQ block in the sidechain path improves matters, allowing you to hone in on particular frequencies of the input signal for the sidechain to key from. Getting an external key signal into the DDP



The obligatory data wheel and the 12 LED-equipped navigation buttons

means dedicating one of the input channels to the job, effectively turning the DDP into a single channel mono processor. Oh dear. Even more surprisingly, it seems that the addition of the digital I/O doesn't free up the analogue inputs for external key signals (or vice-versa).

Setups and programs have to be written to memory separately. Storing a program does not store effect and setup parameters, only the setups in use by the program. The effect parameters are saved with the setup, which can be stored in the same way as the programs.

Finally, there's the utility functions. As well as the usual display contrast-type settings, the utility menu also gives access to the sample rate of the unit. Currently, the DDP only uses 44.1kHz and 48kHz sampling frequencies, but there are plans to include other options as technology progresses. If you have the optional digital I/O installed, the output sample rate is locked to the input sample rate.

The utility menu is also where the various MIDI parameters are located. Every editable parameter has a MIDI controller

SPEC SHEET

0. 20	
Innete	D-1
Inputs:	Balanced XLR and 1/4"TRS jacks
Max. input level: >-	+24dBu balanced or unbalanced
Outunts	
Outputs:	Balanced XLR and
	1/4"TRS jacks
Max output level:	>+21dBu
	alanced/unbalanced
	$-2k\Omega$ (+20dB/600 Ω)
A/D Conversion:	24-bit, dbx Type IV
	Conversion System
Dynamic Range:	109dB typical (A-
	weighted,
	22kHz bandwidth)
Type IV Dynamic Range	Up to
	122dB (transient
m	aterial, A-weighted,
	22kHz bandwidth)
THD+Noise: 0.00	02% typical (+4dBu,
1kH:	z, input gain at OdB)
Frequency Response:	20Hz to
	20kHz (+0/-0.5dB)
Interchannel Crosstalk	<-85dB
(1kH	z, input gain at OdB)
D-A Conversion:	24-bit
Dynamic Range:	105dB typical (A-
	weighted,
	22kHz bandwidth)
THD+Noise: 0.00	02% typical (+4dBu,
	z, input gain at OdB)
Interchannel Crosstalk	, , ,
	z, input gain at OdB)
(1811	-,par gain at oub)

Each channel has a pair of pots for controlling input and output gain

assigned to it. Other settings, such as setup chain information, can be accessed via system exclusive messages. Naturally, a bulk load and dump option is provided for backing up the DDP's memory, settings, and so on.

LCD display

A great deal of thought has gone into this area of the DDP. By splitting the display into three distinct areas, dbx have succeeded in providing a large, high-resolution display without seriously affecting the price of the unit.

The digital level meters display both peak and RMS levels simultaneously, showing exactly what signal levels are being fed to the converters. The central area, which takes care of edit menus and program details, is always easy to read.

However, the *piéce de la resistance* of the display has to be the curve window.

This is where the DDP displays contextsensitive graphical information. In program mode, we are presented with a set of threshold meters. When editing a compression-related effect, the curve window displays a standard compression curve graph. This shows the overall effect of all compression-related effects, any edits being immediately represented by the graph. Learning to fully understand the data being presented in the graph takes some time, but is well worth the effort.

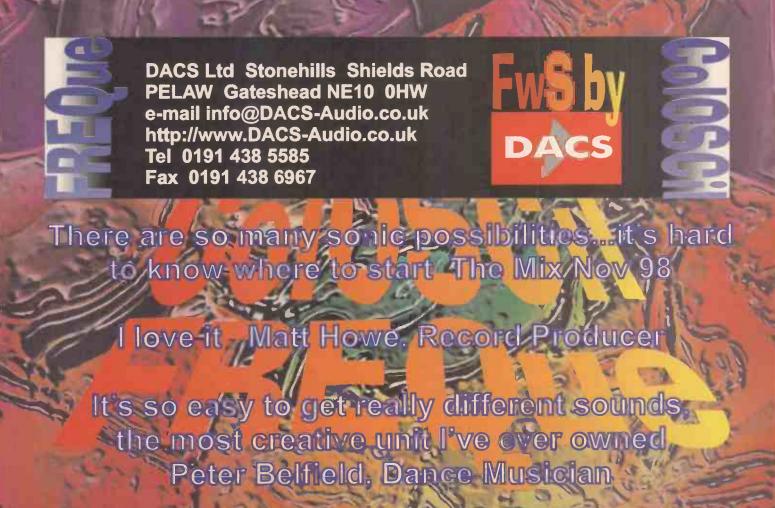
The EQ window appears when editing the EQ block. Here, as normal, frequency is plotted against cut/boost. One very helpful aspect is the visual feedback the EQ window gives of the Q setting. Rather than having to take an educated guess at the effects of using a Q setting of 1.4 as opposed to 1.9, you can see at a glance. The de-esser benefits from a similar graph, showing frequency plotted against level.

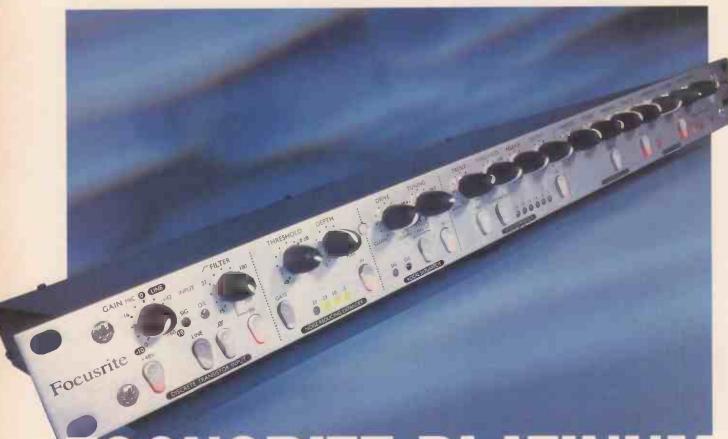
Verdict

It really is hard to find fault with the DDP. Yes, there are a few questionable aspects to its operation, but given its quality, versatility, ease of use, and stunning LCD display, the criticisms largely fade into the distance. That's without mentioning its reasonable price tag of £599.95. If you've got any Christmas cash left over, the DDP may be the perfect place to spend it.

More from: Arbiter: 0181 202 1199







FOCUSRITE PLATINUM VOICEMASTER

Focusrite's latest
Platinum processor
is dedicated to
recording vocals.
Trevor Curwen
investigates

Check out our demo featuring vocal samples recorded through the Platinum Voicemaster



VOCAL RECORDING CHANNEL £399

he Focusrite VoiceMaster is the sibling of the Tone Factory, and while both machines have some abilities in common, the VoiceMaster is optimised for use with vocals while the Tone Factory is designed more for use with instruments.

Overview

Inputs are on the back panel and comprise an XLR mic input, and a quarter-inch jack line input, which will take both balanced and unbalanced jacks. No dedicated instrument input is provided, although it is possible to plug instruments with a higher output into the line input. An insert point, directly after the pre-amp, is available on a stereo jack.

Output is provided on an unbalanced jack at 10dB, and there are two +4 XLR outputs, one post and one pre the de-esser. This is a particularly useful feature as the worst effects of vocal

sibilance are most often apparent on any reverb or delay applied to the vocal. With two outputs the vocal can be output as a normal dry signal, while a de-essed version could be sent to a reverb unit.

There are six separate sections in the VoiceMaster's signal chain: it has a discrete transistor input stage, noise reducing expander, vocal saturator, optocompressor, EQ, and de-esser. Each section is specifically optimised to work with the human voice, and each can be switched in and out of the signal chain.

The input stage is switchable between the mic and line inputs, and has switches for phantom power and phase reversal. Two separate LEDs indicate when signal is present at the input, and the onset of clipping. Low frequencies can be cut by a high-pass filter, which takes the form of a rotary control variable from 15Hz up to 320Hz, allowing a greater degree of flexibility than the usual 100Hz fixed frequency switch found on most units.



The two XLR outputs are a particularly useful feature for vocal recording

Noise reduction on this unit actually works in two different modes. In normal mode it operates as a downward expander with a gentle noise-reducing effect, but can be switched, with the Gate switch, into the more aggressive noise gate mode. Two rotary knobs control the operation; Threshold controls the onset of noise reduction while the depth control determines the amount of the noise reduction applied to the signal. A meter with four LFDs indicates the amount

The next section on the front panel is the vocal saturator. This might be thought of as an unusual addition to a vocal pre-amp, as it introduces distortion into the chain. Most stand-alone preamps aim to produce the cleanest signal possible, but some of the valve-based ones encourage the introduction of a little of that valve distortion. This circuit is Focusrite's solid-state answer, and attempts to simulate both valve and analogue tape distortion.

A rotary drive control determines the amount of saturation applied. Turning up the drive overdrives the signal more, adding harmonic rich compression and creating, according to Focusrite, a rounding effect. The adjacent signal LED indicates that saturation is being applied. A separate overload LED warns when you have overcooked it.

Two modes are available for applying saturation. It can either be applied full bandwidth where the whole signal is saturated, or a secondary knob can be brought into play to apply saturation only to specific areas of the spectrum. This tuning knob is continuously variable from 1.4kHz to 7.2kHz, and only the frequencies around the selected frequency saturate, allowing part of the vocal through unaffected.

The compressor in the VoiceMaster is of the same optical design as that in the Tone Factory. Threshold is continuously variable but the compression ratio is not, instead being switchable between two values, with the hard ratio switch bringing

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Mic input:	Balanced XLR (0dB to +60dB gain)
Line input:	TRS jack
	(-10dB to +10dB gain)
THD:	0.002%
Noise:	-96dB (unity gain)
Mic EIN:	-134dB
Frequency response:	10Hz to 20kHz (-1dB)

in a higher ratio. Two attack times are also selectable, the fast switch bringing in the faster of the two while release time is continuously variable. A 6-way LED meter shows the amount of gain reduction applied (up to 24dB) and the output level of the compressed signal can be turned up with the output knob to compensate for level lost through gain reduction.

The one unusual thing about this compressor is a rotary treble control, which can add high frequency to the signal to compensate for any perceived loss of treble through compression.

The fact that the EQ section of the VoiceMaster is optimised for vocals is immediately apparent in the naming of the controls, where Warmth, Presence and Breath are subsituted for the more conventional Bass, Middle and Treble. Breath is a 10kHz shelf EQ for the breathy or air part of the vocal; Presence controls the high mid area, and hence the cutting edge of the voice; and the Warmth control takes care of the lower part of the voice. The final EO touch is the nicely-named Absence switch, which you use to reduce the volume of frequencies that make a vocal sound coarse or harsh.

A de-esser is the final piece of processing contained in this unit. The amount of de-essing is set by a threshold control, while the rotary frequency knob selects the frequency to be cut. This is variable between 2.2kHz and 9.2kHz, which covers all the active sibilant frequencies. An LED lights when de-essing is taking place and becomes brighter as more de-essing is applied.

In use

Put to work both in recording vocals and processing some previously recorded vocals, the overall impression was that the VoiceMaster provided some very effective processing, much of it gentle and subtle, with nothing there to produce any really over-the-top effects. The quality of the preamp was very good, producing a clear, clean and detailed sound that worked well with both dynamic and condenser mics. The expander is one of the best - easy to set up and unobtrusive in operation. In gate mode it was a lot more vicious and probably not best suited to vocals, however, some might find a use for it on other sounds at mixdown if not deterred by the lack of envelope controls.

The vocal saturator added more of a presence and shape to a voice, rather than any real discernible distortion. This was characterful enchancement. In full bandwidth mode the effect was very

satisfying, but using the tuning control to saturate just the high end of the voice to give it an edge was especially effective.

Compression was smooth and seemed particularly suited for vocals; optical compressors do seem to have that quality. The slower attack setting gave the most natural sound, and bringing up the treble control added subtle tonal variation. Much more tonal variation was available in the EQ section with each tone control affecting a designated area of the voice with a very natural sound. Each tone control did actually work on the area that its name suggests. The absence switch really needed a voice with a harsh peak in it to have any real effect. On other voices it was subtle in operation.

Finally, the de-esser worked really well. It controlled sibilants without fuss once set at the correct frequency. There was little of the lispiness produced by other designs.

Verdict

If you work with vocals regularly and would like a reasonably-priced unit with all the necessary functions to get the job done, then the VoiceMaster is ideal. All of the six sections pull their weight, with plenty of control for treating sounds, but not so much to get the inexperienced user into trouble. Recording musicians will find this very straightforward to operate; you don't need a great technical knowledge to get results from this, and what's more, it sounds great.

More from: Focusrite, Lincoln Road, High Wycombe, Bucks HP12 3FX Tel: 01494 462246 Fax: 01494 459920



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ARBORETUM HYPERPRISM

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Pitch-Time Changer

Sonic Decimator™

Arboretum's
Hyperprism was
one of the first
major interactive
audio plug-in
packs. Ian Waugh
investigates its
latest incarnations

There's both software (Mac and PC) and audio demos of Hyperprism on this month's cover CD



PLUG-IN PACK FOR MAC AND PC £276

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Tue, Oct 20, 1998, 11:21 pm

Tue, Oct 20, 1998, 11:31 pm

rboretum's Hyperprism seems to have attracted an aura of mystique, as if it was software for the enlightened few rather than the many. It did appear a little alternative when first released, but the world has had time to grow accustomed to waggling its mouse around inside the infamous Blue Window.

This latest release is available for both Mac and PC and operates as a plug-in on both platforms. For the PC it's DirectX-compatible and works with every major piece of digital audio software. For the Mac there are actually over ten installs to cater for popular software such as Cubase VST, Logic Audio, Digital Performer and Studio Vision. There are TDM, Adobe Premier and

AudioSuite versions, too, plus one for NuBus-based Macs with Audiomedia cards.

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There is also a stand-alone version for the Mac (£233.83), which uses HyperEngine, a shell program designed to run Arboretum plug-ins in real-time. This means you don't need a high-end digital audio program to process sound files and if you simply want to process one file, in many ways it's the best option.

Versions

So what's it about, eh? Hyperprism is essentially a collection of digital effects. The actual number of effects you get varies from version to version, and the version numbers of the different, er, versions vary, too. For example, the latest PC version is 1.5.2 while the HyperEngine

SPEC SHEET Processing: Realtime, non-destructive Filter processes: Low pass, high pass, band pass, band reject, low shelf, hi shelf, parametric EQ **Modulation effects:** Vocoder, frequency shifter, z-morph, phaser, flanger, chorus, ring modulator, tremolo, vibrato Delay and reverb processes: Single delay, multi delay, echo, echo tranz, hyperverb, medium room reverb, hall reverb Stereo processes: Pan, auto pan, quasi stereo, stereo dynamics, more stereo, M-S matrix Miscellaneous processes: Pitch time changer, pitch changer, vari-speed, noise gate, compressor, limiter, sonic decimator

> version is 2 and the TDM version is 2.1. There are typically from 20 to 27 effects although the DirectX version has 30 while the HyperEngine version has 36. It does make keeping tabs on the thing a mite difficult, so we'll concentrate on the Macbased HyperEngine version here.

The effects are divided into four main categories: filter, modulation, delay and reverb, and stereo, and there's a miscellaneous section, too. All versions and all effects share a similar interface the Blue Window - along with various sliders that control the parameters. Band pass, for example, only has two parameters: centre frequency and Q. You can adjust these with the mouse as you'd expect, and in this way all the effects act just like any preset effects unit. You can save and recall any settings.

But here's the clever bit: Each parameter can also be controlled in realtime by a vertical or horizontal movement of the mouse. Let's say you decide to control the centre frequency with a horizontal mouse movement. During playback, as you move the mouse from left to right in the Blue Window, you increase the frequency of the filter. Rapid movements produce a sweep effect. You can then link the Q to vertical movement so the higher up the window you move the mouse, the more severe the filtering.

Many effects have several parameters and you can link any of them to vertical or horizontal mouse movements. It gives you real-time control over the effects and you can 'play' them, almost like an instrument. In the above example, judicious wiggling, particularly in the lower left of the window, can produce sweep and wah effects.

What's more - and this is the really,

really good bit - you can automate the process by recording the mouse movements you make in the Blue Window. You can wiggle away and do your own thing or use line, rectangle, and circle drawing tools to create more symmetrical changes. During playback, the cursor traces out the path you drew as it applies the effects. Well, it looks cute.

Make mine a Mac

The Mac versions of Hyperprism TDM and Hyperprism VST also allow you to record and replay the dynamic gestures you make in the Blue Window. Automation is not currently possible in Windows, however, and although the sound changes as you move the mouse, the movements cannot be recorded. There, don't you wish you'd bought a Mac?

You can apply as many effects to a file as you wish, processor power permitting. Each one appears in a list below the waveform window, and you can change the order in which they appear in the processing chain. In all, you can create some pretty complex effects.

You can process sound coming into the computer, effectively allowing you to use Hyperprism live (if you dare) or you can process a sound file on disk. All processing is non-destructive until you decide you want to create a processed file.

Special effects

There's too many effects to look at individually, but before the Ed calls time. let's look at a few of the more off-the-wall effects. The Vocoder modulates one audio file with another. It can be used to create robotic vocals à la Kraftwerk and it can create great effect with drum loops. Z-Morph works in a similar way by 'morphing' one sound onto another, but the frequency bands are not fixed. It produces a different sort of vocode effect.

The Frequency Shifter shifts the frequencies in the sound up or down the spectrum by an equal amount. The result is a little like ring modulation but the frequency components are left relatively unchanged, so the result is much more intelligible. Again, this is great with vocals and drum loops.

Echo Tranz adds echo but it allows you to make rapid changes to the delay time, which results in undulating pitch transpositions. Yep, very weird indeed. This is one effect which works particularly well when you draw in real-time changes with the mouse

Ouasi Stereo is an easy one. It produces a pseudo stereo output from a monophonic input using combifilters. Some of the effects in Hyperprism only work with stereo recordings and this is a neat way of making a mono file stereo in order to use such effects.

Stereo Dynamics positions the sound in a virtual space in front of the listener

moving it from front to back and from left to right. It's not 3D, but you can create some interesting moving pans with it. There's also More Stereo, which widens the spacial image.

With the Pitch Time Changer you can vary the playback speed (the duration) and the pitch independently. We'll leave the boffins to work out how it does this (how can you increase the pitch and slow down the duration at the same time?) but it can be used to create some superb grungy and rhythmic sounds. The Industrial brigade will love it.

Finally, the Sonic Decimator reduces the sample rate and bit depth. At moderate settings you can recreate the sound of early samplers. More severe settings add noise, distortion, and aliasing.

Verdict

You can use Hyperprism as a straightforward set of effects; it's not as flexible or as graphic as some dedicated plug-ins but good, usable effects all the same. Viewed like that the program is good value for money, but it really comes into its own when you use the Blue Window to record dynamic changes. This is without doubt the most exciting aspect of the program and you'll spend hours experimenting with it.

Hyperprism is an effects package with a difference. It's capable of applying subtle changes to your recordings but it's more at home being utterly and outrageously OTT. If you're into sampling and manipulating sounds, it's an essential addition to your sonic sound kit, a superbly creative program that lives up to its hype.

More from: Unity Audio, The Elms Barn, Baythorne, Nr. Halstead, Essex, CO9 4AB Tel: 01440 785843 Fax: 01440 785845



TECHNOLOGY



There are many companies in the market place offering multi-channel audio PCI cards, but for most, this is where it ends. Most companies can at best just 'put chips on boards', but from Soundscape Digital Technology there is an unbeatable combination of software and hardware... mixtreme.

The mixtrome PCI card has a completely different concept, as not only does it provide 16 channels of 24 bit digital I/O via two industry standard 8 channel TDIF (Tascam Digital Interface) ports, but it also has 24 bit custom digital mixing and realtime DSP effects plug-ins from some of the worlds' leading audio companies. mixtreme performs like you expect, without the annoying in/out delays that make native mixing and effects impossible to use in real time.

You can connect two Soundscape \$\$810-3 8-Channel TDIF to Analogue interfaces to mixtrome, for a full 16 channels of 20 bit analogue input and output, or you can connect the TDIF directly to a digital console or Tascam DA-88.

For ADAT users, there is the SS8IO-2 TDIF to ADAT converter, and you can connect two of these, or combine one ADAT and one Analogue interface. Optional SPDIF completes the range of Digital Connections available.

With standard Multimedia drivers for Windows 95 and Windows NT, plus VST compatible ASIO drivers, mbctreme can be used with most PC based MIDI/Audio sequencers or PC based recording/editing software.









SS8IO-3 Interface

- 8 channel TDIF to unbalanced analogue I/O (cinch/RCA connectors)
- 20 bit AD/DA Converters
- Wordclock/Superclock in/out

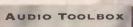


SS8IO-2 Interface

- 8 channel TDIF to ADAT 'lightpipe' conversion in both directions (simultaneously)
- Wordclock/Superclock in/out







Soundscape Version 2.0







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TC WORKS APHEX

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AUFNETENT WZ16:2DX

Can't bear to go digital, but fancy some of the extras? Allen & Heath's MixWizard WZ16:2DX may well be the answer, as Bob Dormon finds out

16:2 MIXER WITH MULTI-EFFECTS £960

hen it comes to seeing who can P the highest, digital seems to win. The lengthy list of P(arameter)s that they can deliver may make fascinating reading, but when it comes to ease of use, the analogue world still has a lot going for it. Those analogue knobs never disappear when you press a button, they're real, not virtual. As for the faders, you know that they've got just one job to do and won't suddenly leap to represent some other function with tireless precision.

Making your choices can be tough though, but one area of digital console design that has continued appeal (regardless of the operating methods used) has been built-in multi-effects. Allen & Heath, like Spirit, have recognised this 'effects for free' punter perception and

applied it to their analogue consoles. In Allen & Heath's case, what you get is the instant gratification of the analogue console, with a dual multi-effects processor thrown in. Enter the MixWizard WZ16:2DX – a name that looks more like a DOS command string, and is a bugger to type at the best of times!

Overview

Allen & Heath make no secret about the WZ16:2DX's intended home. It's ideally suited as a live console, yet it has comprehensive interfacing and six aux sends to enable it to perform as a basic recording console. The back panel indicates how this and many more applications can be achieved.

Looking every inch a rack-mounted console, all the interfacing, bar the front panel mounted headphone socket, appear on the back panel. Remove a couple of screws and this block of analogue

> interfacing swings round ninety degrees (from its rack mounted position directly underneath the WZ16:2DX's front panel), to a perpendicular stance that props up the console at an angle and enables convenient access to all the connectors from a table top.

The top row comprises of sixteen TRS 1/4" jacks providing inserts for all channels. A pair of insert jack sockets for the left and right mix are also here. These are all post pre-amp and pre-EQ. The 16 inputs below appear on balanced TRS jacks and balanced XLR connectors. The latter have front panel switchable phantom power that supplies all XLR inputs simultaneously. However, plugging in a jack defeats the corresponding XLR input.

The fourth and final row of sixteen connectors are 1/4" balanced jack sockets that deliver a direct output for each of the channels. The direct signal is post EQ/post fader, but can be changed to pre EQ/pre fader using internal jumpers within the console. This added flexibility appears to be a trademark of Allen & Heath consoles and the WZ16:2DX is no exception. Several internal jumper options exist for different aspects of the console. The only drawback for changing the operating status of the direct outs is that every channel needs to be changed

individually, but then again, in some circumstances that could well prove to be an advantage.

At the end of the rows of channel interfacing are two XLR male outputs for the left and right mix. Just down a bit from here are additional outputs A and B. Besides offering a 'control room' mix, these TRS jack balanced outputs A and B can be configured to perform a number of additional functions combined with front panel switching, which we'll look at shortly.

The array of six aux sends, again, appear on balanced TRS jacks with the pre/post status of these sends being either switchable from individual channels on the front panel, or in some cases, from internal jumpers. Auxiliaries five and six send directly to the built-in multi-effects module, though you can switch that off and use sends five and six for external devices. Alternatively, you can send to both the internal effects and use the external send jacks too. Incidentally, because the built-in effects can function in single or dual mode, sends five and six will access different effects if used in dual mode.

Two pairs of TRS jacks provide the inputs for two stereo effects returns. Use just the left input for mono sources. Return ST1 shares the same front panel controls as the effects. Hence both the effects and

SPEC SHEET

Maximum output (LR):	+27dBu
ir	nto 600Ω max load
Internal headroom: +23	BdB (Mic to output)
Peak LEDs:	turn on 5dB before
	clipping
Meters: Pe	eak reading (OVU =
+4	dBu at L-R output)
Frequency response: 20	OHz to 50kHz (+0/-
	1dB)
THD: 0.008	3% (+14dBu, 1kHz,
	channel to mix out)
Crosstalk: <-	90dB (measured at
	1kHz)
L-R residual output noise:	<90dBu (-
	94dB S/N)

a stereo input can occupy the same return. There is a mute switch and you can silence the effects by using their associated bypass feature.

In the centre of the back panel lies a MIDI input. In the review model this was quite recessed so that any overlarge MIDI connectors would have a difficult time making contact. More run-of-the-mill MIDI connectors actually appeared to benefit from some support given by the panel hole itself, making it harder to unplug with just a tug. The MIDI control is for the multieffects only. It's a pity that MIDI muting had not been considered as an option.

Alongside the MIDI input is another jack socket for footswitch control. Presumably an afterthought, this feature doesn't appear in the brochures although its TRS connections make it capable of switching the multi-effects to bypass and between the two banks of effects presets. In the bottom right corner is the IEC mains input and power switch. Conveniently, the WZ16:2DX automatically switches to the appropriate voltage within a 100 to 240V range, making life easier for any small touring outfits with designs on distant shores...

Pots and pans

The 16 channels are identical and hold few surprises as far as appearance goes. At the top of each channel is a 30dB pad switch and beneath it the input gain control providing a range from -60 to -20dBu (-30 to +10dBu with pad in). The EQ section below has a 100Hz low cut filter switch, which among other things is favoured in both live and recording environments to reduce mic popping. Filter aside, the equaliser comprises of four sections: Two shelf EQs (±15dB at 12kHz and 60Hz), and two sweepable mid range EQs, covering 500Hz to 15kHz and 35Hz to 1kHz with ±15dB of cut or boost. Unlike the 8-buss MixWizard WZ20:8:2 (see The Mix, issue 38, July '97) there's no EQ

CONTROL FREAK

he WZ16:2DX's pre-release manual makes a passing mention of the MIDI control aspects relating to the built-In multi-effects and doesn't really give much away other than selecting presets using program changes. Further investigation revealed that you could not only alter (for presets such as reverb) parameters for predelay, reverb time, damping, and level, (using control changes 16 to 19 respectively), but new effects algorithms could be accessed that weren't even available from the front panel selections.

The effects can behave as single or dual effects. In single mode, auxillary five is used solely to send to the effects. In dual mode, both auxiliaries five and six are used independently to access two different effects engines that return in stereo to ST1. If you want to edit the effects with MIDI, then the second half of dual mode uses control changes 20 to 23 to change parameters like those mentioned above. Putting together a mixermap to control these from a sequencer is child's play.

However, the intended use for the WZ16:2DX leans more towards the sound reinforcement environment than the studio sequencer, so a MIDI controller such as the Lexicon MRC would do the trick. If you're resourceful,

you won't even have to buy a controller, as a MIDI keyboard can do the work for you. Using a Yamaha SY22, the effects were tweaked using the SY22's joy-stick that sends out data for controller 16 and 17. in effect, (excuse the pun) the predelay and reverb times were readily adjustable with other relevant alterations to delays and phasing effects parameters. Selecting a synth patch sends a program change that changes the effects preset. Easy huh?

The MIDI info suggested that control change 31 would access new effects algorithms, but attempts to do this failed. However, program changes from 99 downwards did bring to the fore the dual pitch change algorithm, vibrato, autopanner, pseudo vocoder, and some very nice dual mode effects that were all editable through control changes.



in/out switch. Its absence may well be a cost-cutting measure needed to subsidise the built-in multi-effects.

Next in line are the six auxiliary sends, essential for a flexible live sound set-up. Auxiliaries one and two are configured for prefade use, although you can change this assignment using internal jumpers as mentioned earlier regarding the direct outputs. The physical position of these jumpers is just below those for the direct

outs, and if you need to alter them they need to be changed on all the individual circuit boards for the relevant channels.

Auxiliaries three and four even have a switch to change them both over to pre or post fader. Auxiliaries five and six are post fader and are hard-wired to the built-in multi-effects, although they can function as external sends too. It's a pity that these sends don't have pre/post switching too, as the multi-effects could then be used in a more creative manner.

There's no groups on the WZ16:2DX; the only buss is the left/right mix bus, so the final section of the channel strip merely comprises of a panpot and a mute/on switch below it that illuminates an adjacent green LED when the channel is active. This is followed by a red PFL solo button with a red LED that glows steadily when PFL is used and doubles as an overload/peak indicator at other times. The long throw 100mm faders have light, smooth, and positive touch.

To the far right at the top of the mixer reside both the headphone socket and recessed phantom power switch. There's a handful of these blue recessed switches dotted around the console. Having a pen handy is essential to access these switches and customise the W716:2DX as required. Maybe Allen & Heath should provide a plastic dummy pen that could -perhaps live in the headphone socket or some other unused jack socket until it's needed? Unfortunately, one of these switches when pushed in didn't return to fit the panel hole when pressed again to pop out. Instead, it veered under the panel and a bit of wiggling was required to get it back in place. This can be easily dealt with and as these switches aren't intended for daily prodding it shouldn't be too much of a problem. Nevertheless, it's a shame, considering the rest of the console is built to a high standard. In fact, David Kirk from Allen & Heath claimed to be able to walk on one, adding he'd rather reviewers didn't



Back panel can be rotated for either rack or desk-mounted operation

try this at home though!

Below the phones socket are the two stereo returns (ST1 and ST2). ST1 has the benefit of Aux sends one and two while ST2 has just Aux send one. ST1 also has its own mute button that will knock out the effects and any source plugged into ST1 from the back panel. Several LEDs follow with the stereo output's 12-segment LED read-out on the right and the eight stage LED effects selection indicator on the left. The effects are selected by repeated presses on the Select switch, which scrolls through the numbers one to eight, This changes to nine to sixteen when the Bank switch is pressed. No LED indication means the effects are in bypass mode. Helpfully, the effects relating to these numbers are written on the front panel.

Down from here are the six aux masters, the PFL/headphone level control and the monitor switch bank comprising of auxes 1 ~ 6 and ST1 and ST2. If none are depressed the L/R mix is heard. Convenlently, you can depress aux pairs and hear a true stereo output.

The A/B master volume and the mono button sit above the master faders and are surrounded by three more recessed buttons. One determines whether the main output monitored by A/B will be pre or post fader, another changes the effects status from single to dual mode. The remaining one can configure the A/B output to mono so that it can feed centre-fill or sub-bass speaker systems and the like. Even the pre-release manual goes to great pains to explore the applications of the WZ16:2DX providing six examples, among them PA with live recording, stage monitoring, and 'house of worship' configurations.

Verdict

The WZ16:2DX was a pleasure to use, particularly as Allen & Heath haven't forgotten some of the simpler traditions, such as the coloured pots that make engaging the console so much easier. Too

many digital consoles favour bland finishes, involving 'hunt the parameter' when just a few colours would help. The multi-effects produced a few surprises, which would involve buying a MIDI controller of sorts to get the best out of them, as apparently Allen & Heath have neglected their full potential.

Having two sweepable mid range EQ sections certainly helps mould the sound with all sections providing sufficient 'bite' to satisfy the frequently unsubtle demands of sound re-inforcement. Overall, the console, looks good, sounds fine, and certainly has more to it than meets the eye... Or should that be ear?

More from: Allen & Heath, Kernick Industrial Estate, Penryn, Cornwall TR10 9RU Tel: 01326 372070 Fax: 01326 377097 Email: sales@allen-heath.com Web: www.allen-heath.com



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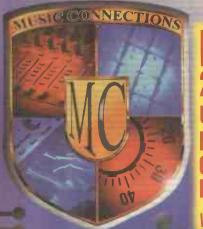


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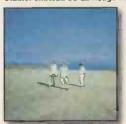
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NEW RELEASES

MANIC STREET PREACHERS THIS IS MY TRUTH TELL ME YOURS (SONY)

Producer: Mike Hedges, various Engineer: Ian Grimble, various

Studio: Chateau De La Rouge Motte, France



wo years on from 1996's hugely successful Everything Must Go, the Manics' fifth album is perhaps their most accessible work yet. There's still no escaping the Welsh trio's sta-

dium rock tendencies - tracks like 'Ready For Drowning' and 'Nobody Loved You' certainly have their share of dodgy power chords - but compared to early Manics outings like 'You Love Us' and 'Repeat', This Is My Truth... is lacking a bit of spirit. That said, it's a surprisingly sensitive album that shows just how far the band have progressed from their punky origins. 'Tsunami', 'Born A Girl' and 'You're Tender And You're Tired' are all brilliantly melancholic. 'My Little Empire' is simple, dark, and underlined by a cello; subdued vocals from James Dean Bradfield make for the album's sexiest moment. To add to the mix, they've also brought in violas, Hammond, Wurlitzer, and Mellotron. This time around, the Manics have gone for melodic subtlety instead of good old mayhem and chaos. If you can forgive them that, then This Is My Truth Tell Me Yours is one of the most unique and moving albums of the year. . Gabrielle Stackpool Verdict: This truth doesn't hurt......7/10

PLACEBO WITHOUT YOU I'M NOTHING (ELEVATOR/HUT)

Producer: Steve Osborne Engineer: Various Studio: Real World



ithout
You I'm
Nothing
is the second
album from Brian
Molko and his
twisted friends, following the eponymous 1996 debut
that made Placebo
the biggest goth

poster band of the decade. The trio are sticking with the sonic formula that took the snarling 'Nancy Boy' into the top ten - all discordant riffs, syncopated rhythms and Molko's sleazily androgynous warble. But Without You I'm Nothing touches previously-unseen elements of the band's psyche, with bassist Stefan Olsdal and drummer Steve Hewitt coming more to the fore. 'Pure Morning', the first single, hit No.4 in the charts with its queasily sinister tale of gender confusion. The slow-building title track is another obvious single, while the wonderfullytitled 'Brick Shithouse' is an impressive taste of Placebo at full tilt. The production is clean and full, with Steve Osborne (at the controls of Peter Gabriel's Real World studios) showing a restrained route through the mutant rock minefield. Ultimately, Without You I'm Nothing is a fine product. There are no real surprises here, but you didn't really want any, did you? . Brett Caines Verdict: Predictably twisted......7/10

TOMMY GEE VORTEX PHENOMENON (R&S)

Producer: Tommy Gee Engineer: Tommy Gee Studio: Dreams Studyroom, DK



ard-as-hell hip- hop seamlessly melts into jazz and drum 'n' bass on this eclectic offering. Straight outta the Blg Apple, you'd think. In fact, it's straight outta that land not

known for it's trendiness, Denmark. But it doesn't matter one iota. Tommy Gee's slick, and often misogynistic (with tongue firmly in cheek, I hope) lyrics are easily the most sincere I've heard from a quadmire of sub-standard offerings lately. Erstwhile vocalist Lance Link does an admirable delivery of said lyrics, and, in a mid-session interview, gives his opinion of Tommy Gee as "futuristic, mystic, crazed, bugged-out... right?'. As trite as that may seem, it's pretty damn accurate. 'Xpansion' is as gritty as hip- hop can possibly be, while maintaining a kind of rare solidity. The tabla riffs and gritty bass make it an anger-invoking anthem that can only be saluted. 'U Say, We Fly', is more in the Roni Size or James Hardway vein of jazzy drum 'n' bass. Tommy has been with the renowned R&S label for five years or so, in various quises. Pumping yet mellow, Vortex Phenomenon sees him absolutely confident in his vision. . Nick Serre Verdict: Dreamily disparate......8/10

MILESTONES



JEFF BECK BLOW BY BLOW (CBS/EPIC)

Producer: George Martin Engineer: Denim Bridges Studio: Air

uitarist Beck had been a much in-demand member of pop supergroup The Yardbirds during the '60s but, by the start of the '70s, Jimi Hendrix, Eric Clapton, and group spin-offs like The New Yardbirds (aka Led Zeppelin) had stolen much of his thunder. By 1975, though, Hendrix was dead, the once-brilliant Clapton was lost in a haze

of hard drugs and anti-immigration xenophobia, and Jeff Beck made his first album-length stroll into the realm of

The former Yardbird did this with such genre-stretching panache that he re-established himself as the world's greatest axeman, with an Influential set that encompassed Stevie Wonder and Beatles numbers, as well as four originals (mostly co-written with keyboard wizard Max Middleton). The bright starter, 'You Know What I Mean' kept changing tempos, but that was just a hint of the diversity to come. The reggae shuffle on 'She's A Woman' was innovative, as well as pleasing to the ear, while the talk-box guitar Beck played (with exemplary timing) on the same track was later to be used by Peter Frampton on his zillion-selling 'Show Me The Way'.

That's not to say that squawk-box rock and reggae was all that our Jeff had to offer; there were also swing, funk and full orchestral workouts, the latter arrangements courtesy of Beatles producer George Martin. Egged on by Middleton, Beck carved himself enough room to restate his own rhythmic guitar style, typically playing with stark simplicity before cutting lose into dazzling interwoven spirals.

Despite dazzing reviews, Blow By Blow Hopped in a UK where the rock traternity had split between the pompprog dinosaurs the new pub rockers. Beck's album fitted in neither category, and paid the commercial penalty in his homeland, but it was massive in the US, selling a million and reaching No. 2. Eventually Blow By Blow became a UK collector's item, and today it remains much sought after on vinyl. • Phil Strongman

KIM FOWLEY THE TRIP OF A LIFETIME (RESURGENCE/X-ERT)

Producer: Kim Fowley/Mike Bennett Engineer: Warren Bassett

Studio: Various



his Kim bloke has been around for yonks. He's sung with Frank Zappa and the Plastic Ono Band, worked at Motown, been a '60s dancer on the goggle box, and now, with *The*

Trip Of A Lifetime, he proves that he's also a bit of a manic genius when it comes to dance productions. This album is a bizarre distillation of experimental techno, drum 'n' bass, and generally awe-inspiring eclecticism. And the bugger can sing, too. Even though he apparently hates his performance on 'Here Comes Norman', it's a strikingly emotive ballad that sees his vocals blend wonderfully with those of a mysterious chanteuse named Tacye. Skylab and Roni Size get involved with a remix of the title track, which offers one of the most superb subbass meanderings in history. There's a blissfully stoned ethos to the whole effort: 'Satellite Of Stone' combines dreamy vocals with lush flutes and mellow drums that Tricky would die for; 'Susan Walks (Murder)' has a Doors-y feel to it, replete with scary narrative. All in all, a history lesson, and a perfect listen. • Nick Serre Verdict: It's all in the title, man.....

All the major album releases of the month reviewed and rated, our classic sessions spot Milestones, plus who's in the studio doing what with whom in Recording In Progress...

GENO WASHINGTON CHANGE YOUR THOUGHTS, CHANGE YOUR LIFE (THUNDERBIRD)

Producer: Ray Fenwick Engineer: Benji Lefevere/ Kaplan Kaye Studio: Hoxton and The Premises



t's 55 year old Geno Washington, not 40-something Paul Weller, who should really be called the Modfather, It was Geno and his Ram Jam Band whose uptown airbase R'n'R had mod

crowds standing three high on each other's backs on a thousand different soul nights. They recorded one of the hottest LPs of '67. Hand Clappin', Foot Stompin' Funky Butt Live, but Washington was in semi-retirement when Dexy's Midnight Runners recalled his legend with the Number one single 'Geno' in 1980. Now, after wowing them at successive Edinburgh Festivals with a newsy. bluesy set, Geno has finally cut some of his own songs (he only released one self-composition in the '60s) with his latest backing band, The Purple Aces. And pretty damn good it is too, excellently showcased by Ray Fenwick's tight production and with Washington in gruff tuff mode. 'Change Your Thoughts' proves the man can still do that rockin' soul thang, while the poignant 'Wake Me When The Morning Comes' and the sweetly-sung 'The Blues Walk With Me' are amongst the best '90s blues you'll hear anywhere. . Phil Strongman

Verdict: Ain't over 'til the bald bloke sings..........8/10

VARIOUS ARTISTS THE ACID HOUSE OST (EMI)

Producer: Various **Engineer: Various** Studio: Various



he Acid House is based on the trip of short stories by Irvine 'Trainspotting' Weish, but those expecting three different musical styles to match the three tales will be disappointed. And, despite

that title, those hankering after house (acid or any other kind) will feel similarly excluded, as Bentley Rhythm Ace's electro jungle number 'This Is Carbootechno...' is the closest we get to it. That aside, this is still a wide-ranging widescreen thang that grabs your attention from the off. 'Insect Royalty', Primal Scream's contribution, is a bizarre electronic rip-off of the opening bars of the Dr. Zhivago theme. The Pastels' melodic 'Nothing To be Done' is probably the most fun thing on display, though Nick Cave's crooning of 'Sweetest Embrace' gives it a run for its money. Beth Orton's bittersweet ballad 'Precious Maybe' has its own sombre charm, while you'll recognise The Verve's 'On Your Own', the Chemical Brothers' nine-minute 'Leave Home' and Oasis' 'Going Nowhere'. The 1970s number (now obligatory for all films) is T.Rex's 'Hot Love'. All in all, an intriguing selection which does indeed make you want to go see the movie. . Phil Strongman Verdict: Acieeed. Not. Good though...

VARIOUS ARTISTS DANCE LIKE THE DEVIL (SEQUEL)

Producer: John Schroeder, various **Engineer: Various**

Studio: Pve Studios, various.



ig beat Jocks have been sampling northern soul tunes like there's no tomorrow. Now the same driving beat is conquering the hipper clubs of Scandinavia so what could be

more timely than a compilation like this? Those seeking riddim inspiration will be spoilt for choice, with Jackie Trent's 'You Baby', Kim D's 'Real Thing' and Stella Starr's 'Bring Him Back'. This collection is, in fact, an expanded re-release of material cut in 1965 -69, incorporating semi-psychedelic items like Tami St. John's 'Nobody Knows What's Goin' On (In My Mind But Me)', relentless instrumentals like Sounds Orchestral's 'Black Is Black', and covers by moddy folk like Peter's Faces (an enthusiastic reading of The Reflections' Motown classic 'Just Like Romeo And Juliet'). And speaking of underage romance, Lorralne Silver was just 14 when she cut the poppy blues of 'The Happy Faces' - which is still sought-after on 7". Legendary northern DJs like Keb Darge would have bagged the original 45s many years ago; for the rest of us, it's a great chance to get out the bowling shoes and talc. . Phil Strongman Verdict: Keep the faith.... .8/10

KING SIZE BLUES (CLEAN UP)

Producer: Darren Moss/ Paul Robinson.

Engineer: Various

Studio: Essencore, Ladbroke Grove



ssen's Darren Moss and Paul Robinson were into mainstream dance for over a decade before deciding that "humans don't really know anything about anything". The answer

to this problem was to ask questions - preferably through music, and preferably with their own brand of electro, soul, reggae, ambient and blues. And with added guitar. Right on cue, London's Time Out magazine and the city's Art Board showered them with prizes and grants, and Clean Up records - of One Little Indian fame stepped in to snap them up. And King Size Blues is the result. The set kicks off with the mysterious, shifting title track, and the equally sinister 'God And The Devil', before widening out with numbers like 'Sleep' (which comes on like Bryan Ferry making a fair stab at electronica), before ending with a laid-back declaration of war. Movie samples and dark chords abound. Tricky? Not quite, but King Size Blues is still ideal for all those endless art student dinner parties. Film noir muzak of the highest order. Play on a loop. • Phil Strongman Verdict: Damn near essential...

RECORDING IN PROGRESS

Steve Osborne is producing new album at Master Rock studios

Steve Power is mixing tracks for Pocketsize and at Battery studios

Dave Anderson is producing new album at Windmill Lane in Dublin

holed up with producer Steve Lyon working on an album

Rob Playford's Moving Shadow studio is host where he is pro-

ducing their new album

l is programming tracks for a new LP with a little help from producer Robin Hancock at

are at Wood Lands studio recording tracks with producer Mark Wallis

are holed up their home studio self-producing tracks for their eagerly-awaited second album

is recording tracks at Battery studios with producer Damien Mendis



are at Air studios recording tracks with producer John Leckie

are producing an album for soul diva at their very own The Bunker studio in Wales

are at London's Roll

Over studios working on their self-produced second album

are at Ridge Farm with Steve Cooper recording

at working on a Paul Corkett at St

Katherine's studios

ducing an essential mix album at Wise

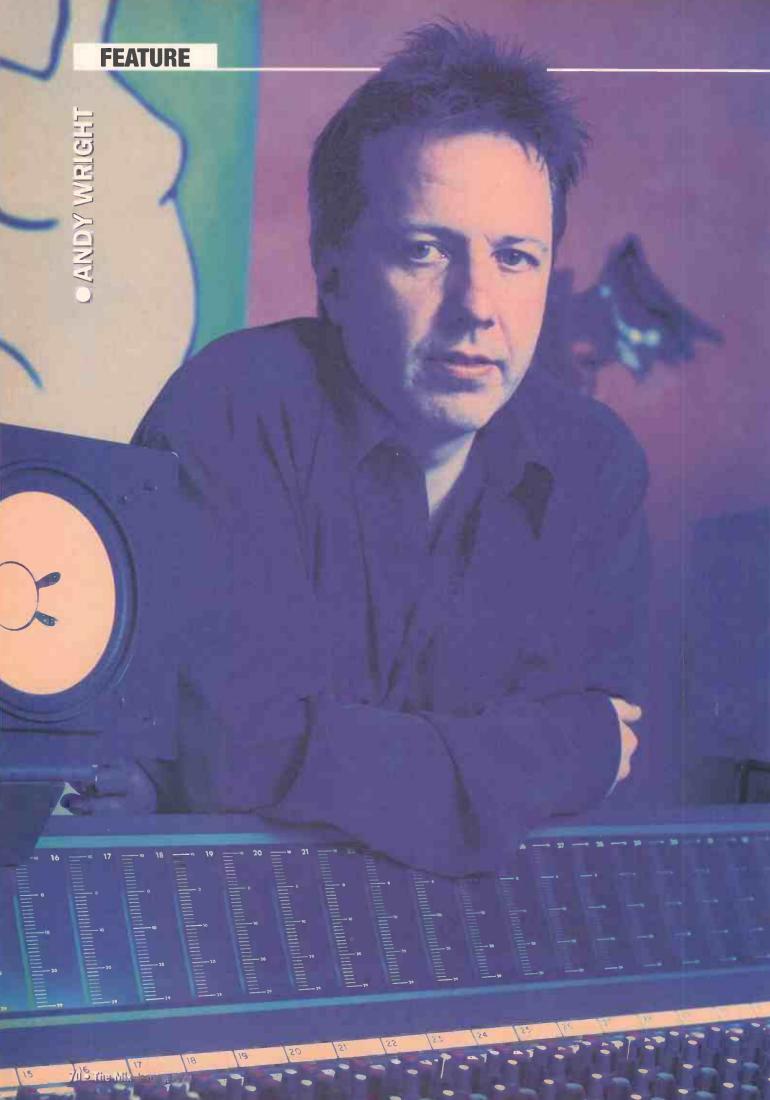
Eden studios is host

who aremixing tracks with Chris Sheldon

Fall are self-producing new tracks at Battery studios

is at Eden Studios working on tracks with producer Garry Hughes

tracks at Whitfield Street



From near-bankruptcy to becoming co-producer of Simply Red's new album Blue, it's been one helluva journey for top-flight producer **Andy Wright. Douglas McPherson** visits his Funny Bunny Studios

here is a point in every career when you may be said to have 'arrived'. You've entered the big league. You've joined the club. You have the key to the directors' loo in your pocket. There may still be mountains to climb, but from this point on it's all going to be on another level. Andy Wright has reached that point. As a programmer, he studied the art of production at the elbow of names like Flood, Alan Moulder, Mark Stent and Nellee Hooper. He laid the foundations for his own career as a producer on projects with Gary Christian, Sarah Cracknell, Alisha's Attic and Natalie Imbruglia. His work caught the ear of Dave Stewart, who invited him to co-write and co-produce Stewart's new album, Piccadilly Picnic.

The event that marks Andy's arrival in the big time is his co-production credit on Simply Red's Blue, which has already yielded major hit singles. Sounding like a musical Del Boy Trotter, Andy claims his rise is based on a case of "Who dares wins. It really works!" Because, barely six years ago, he was skint. "I was working at home," he recalls. "The people downstairs had a baby so the noise had to abate at about 6.30. Which isn't good for making music because most people like to work late, and I certainly like to work with a degree of volume.

'Times were hard and I decided I'd have to do something about the situation. I was fairly well edging on bankruptcy but I had one gold card left in my wallet so I drew out all the credit I had left, set myself up in a studio and joined a health club, leaving a bill of £9,600 to be collected next month.

"I didn't have the money to pay it but I thought, 'Fuck 'em! If I'm going to go

bust I may as well make music for a year and get fit.'

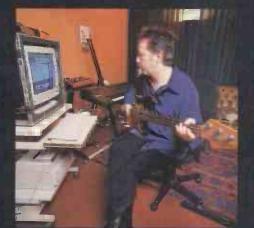
The day I got a phone in the studio and spent the last £500 I got a call from an exgirlfriend of a friend of mine who had joined this Japanese label. She was doing a children's karaoke record and would I be interested? The last quote she'd had was £9,800. I said. 'I'll do it for £9,600'. I did it in about three weeks, got the money, paid off the card and I was rolling!"

Wright's first studio was in London's Primrose Hill. Today, his Funny Bunny Studios are established in a former dairy building a couple of miles

away in Kilburn. It's a funky little place with orange walls, a noticeboard covered with snaps of friends and family and, attesting to the old adage about work, play and dull boys called Jack, a prominent pool table.

"To be honest, a studio is a luxury item for me," says Andy. "I never wanted to be seen as a studio owner. The whole business of running a studio is messy and seldom profitable. Most months I still bail this place out a little bit." What his studio doesn't give Wright in terms of cash, however, it makes up for by offering the time and space to experiment.

"It's brilliant to have a place where I can come in and make music whenever I want to. When a record company approaches me about writing with their artist I can just say, 'Yeah, sure, just turn up next week.' They don't have to bother getting a budget from the label, who may think, 'Is she worth spending this ..?' So there's no excuse not to do something."



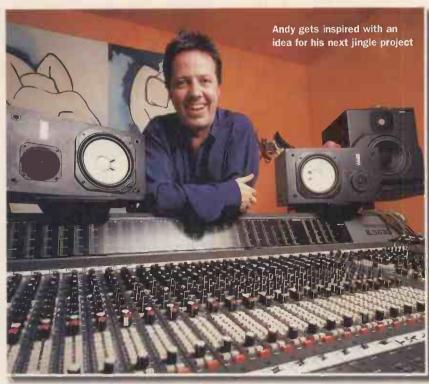


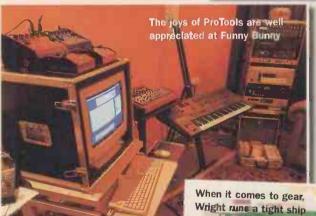
You can hear Andy Wright's latest project, unsigned industrial indie groove band Golden, on the cover CD



SELECTED KIT LIST

Soundtracs IL 3632 mixing desk **Power Macintosh 7300 MOTU MIDI Time Piece AV** ProTools Project/Digidesign 888 Akai S3000XL **Akai S3200 Waldorf Pulse Roland JV1080** E-mu Vintage Keys **Roland JD800 Nord Lead 2 Roland Juno 60** Lovetone pedals 2x 1 GB Jazz drive **Urei 1176 compressor GML** 8200 stereo **EQ GML 8900 stereo compressor GML** dual mic amp **Drawmer dual gate** Joe Meek stereo compressor **Eventide H3500 Alesis Quadraverb**





44 was fairly well edging on bankruptcy, but I had one gold card left in my wallet..."

ProTools Project which is only 8-track, because I thought the technology maybe wasn't good enough to support 16, 24, 32 tracks. Of course, now you can run 64 tracks on ProTools.

"I often work with artists without a band, in which case I become the band. One of the joys of ProTools is if I've got a vocal rolling

across the track I can take everything else out. I can

try new chords, new tempos, which was harder to do before. We had to imagine things more in the past. Now you can do it there and then."

Pointing out his favourite pieces of kit, Wright comes to his Akai \$3200. His current one is on loan while he awaits a new 6000, but he praises the durability of the one he recently sold. "It doesn't sound fantastic but it works. I've used other stuff which does more but breaks down all the time. I don't think I had my \$3200 repaired in eight years."

Next up... "I use the JV1080 for presets. Far as I'm concerned it's the best thing you can buy. You get a good string sound, good piano, good organ.

"The JD800 is one of the first things I got to really understand fully. I've used it less recently, but it is about eight years old. A lot of purists don't like it, but if

> you use it for what it's good at, which is making really nice little sequences, it sounds fantastic,

"The SE1 is sort of a Minimoog in a rack, I don't care that it doesn't sound exactly like a Minimoog because at least it stays in tune. If I'm doing synth-based tunes I use it as my first choice.

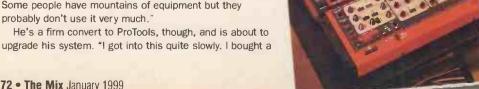
"The Nord, I can't live without. I think it's the best synthesizer made this decade. >

Having his own studio also gives Wright the freedom to pursue his favourite sideline: producing soundtracks for commercials. "They always have a two-day deadline, so at ten or eleven o'clock at night I can have a go at doing a picture for two or three hours." Commercials may not be the glamour end of the music business, but Andy has a hidden agenda for filling his time with them: he wants to be in the movies. "I'm after the Oscar! "That's why I seldom turn down good commercials. They usually commission a couple of people to work on competing ideas.

But even if mine doesn't get used, I want to write the music and see what I can do with the picture."

When it comes to his studio set-up, Wright runs a tight ship. "I don't like to have tons of stuff floating around. Some people have mountains of equipment but they probably don't use it very much."

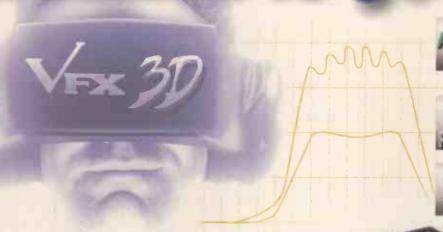
He's a firm convert to ProTools, though, and is about to



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. =		STUDIO		REVERSE REV.		DELAY & REV.		DELAY	REV.	
-10	06	CONCERT		VOCAL DIST.		PITCH & REV	30	PITCH	ECHO	ARREST TARGET
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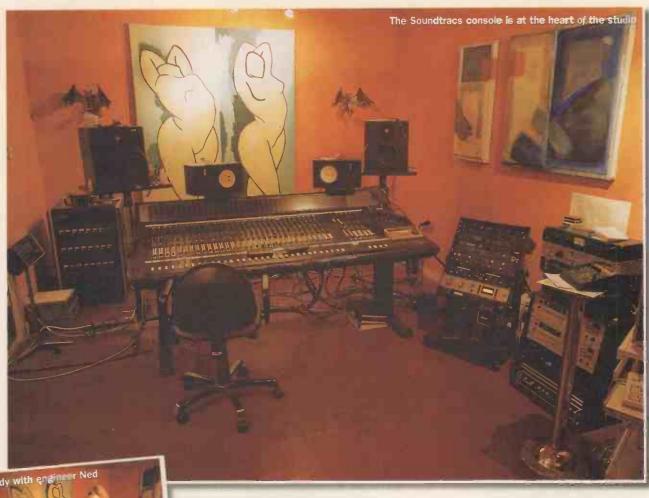
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In fact, I think Nord should give me some kind of sponsorship because I sell this to everybody. I bought it because a friend of mine had one. I walked in. pressed a key and

years and years. I wouldn't consider changing to anything else. I changed once for about two months because a producer wanted me to use Notator on the Atari, but I learned that even if you understand a program it takes a long time to become really quick with it. It's like an instrument in itself. It takes a long while to learn how to play it."

Despite the intrusive noise from a nearby railway line, Wright claims he gets good vocals at Funny Bunny. For projects like

> Simply Red's Blue, however, he tends to create the basic tracks at his place and finish them elsewhere.

'I co-produced Blue with Mick Hucknall and Gota Yashiki. We all had different roles. Mick's was sort of taste-maker, because he's the artist and he does know what he wants. So we would sort of develop an idea and adapt it to what he was hearing.

"Gota has a studio called Westpoint where he's got a G-Series SSL and a 48-track Sony digital. So we tended

Transoftware learning

play an ingrid

ourve: "It's the learning to

to start the tracks here and finish them at Gota's. You don't need a big studio to make that kind of record but you do need the time to experiment and that's what I've got here. It's not costing an arm and a leg and I feel comfortable. I can drift in and breeze out when I like.

"Generally, what I want to leave here with is the plot. All the keyboard sounds, if we're gonna use them. All the ideas for bass and guitar which I'll come up with but not execute very proudly. All the obvious things like tempo and key so that when I go to a bigger studio I

twisted a knob and thought, 'That is fantastic!' I literally used his phone and said, 'Get me one of these straight away!' It sounds great. It's beautiful to program and I absolutely adore it.'

Also on Andy's adored list is his set of Lovetone pedals. "I had the guy that made them put them on a board with switches so I could use them as a sort of studio outboard instead of just a set of guitar pedals that you stamp on. I regularly put stuff through these, either guitars or keyboards. It makes things sound a bit more analogue. You've got a dynamic filter, like an old fuzz box, which is called Big Cheese. Brown Sauce is like a compressed distortion thing.

"The guy who invented it is really wacky. Phoned me up at one in the morning to say it was ready for collection. But I don't mind that. I like to see that kind of enthusiasm.

On his computer, Wright uses Digital Performer. "Before that I used Performer. It's just my program which I've been using for

can fairly well gauge how long it'll take me to walk out with the finished result, which is usually two or three days."

Descended from "generations of piano and organ players," Andy entered the music biz via the tradesman's entrance as a driver for Keyboard Hire. He played with the gear on his days off and when people phoned up needing help with the expensive equipment they'd rented, he started recommending himself.

"That dovetailed into a freelance situation as a programmer. I had a lot of initial success doing that. Then, as the recession kicked in, I started to run out of work. I'd set up a costly lifestyle and couldn't support it. So I regrouped and started doing my own projects. I put out a couple of dance records and had a modicum of success. Basically I decided I wanted to make music because I loved it and didn't care if I made much money. That turned out to be a good decision because it spiralled from there, really."

One of the most important connections Wright has made is with Dave Stewart. He was recommended by Stewart's ex-wife, with whom he worked on a Shakespear's Sister project. Their first collaboration was "these two girls from Dagenham." The result was the launch pad for Alisha's Attic and the beginning of a profitable relationship between Wright and Stewart.

"A lot of the time with the people I work with, it's all down to humour. You get on a wavelength with somebody and you just enjoy each other's company. Dave's always got a billion and one things going on. He's like a whirlwind, and he tries to do most of the stuff that comes his way. Luckily, my brain works quite chaotically, too, and we're both quite decisive.

"Contrary to what people have said, I think Dave's records always sound like he's made a good record for that person rather than them sounding like Dave, and I think that's the same with me. When I get an artist I try to look at who might want to buy their records. If their target audience is all students in their bedrooms about to slash their wrists – obviously we don't want them to slash their wrists! – but let's go down that route. That's one of the things I've learnt in the last few years. In the past I'd just try to make it sound fabulous."

Wright has also developed tactics for handling sensitive artistic temperaments. His favourite is procrastination. Chuckling, he admits, "If I hear something I don't think is a good Idea, I tend to deflect it or postpone it. You know, 'That sounds great, but first let's tie up this one little thing...' And hope they forget about it!"

Wright likes to socialise with his clients, explaining that there are things

you can say in a pub over a few beers that, uttered at the wrong moment in the studio, would destroy the mood of a session. "There are so many different ways to make a record, so many ways to crack it. But generally speaking it's important to make people feel great about what they're doing, and to make them feel like it's their baby."

On a musical level, Wright comes back to the need for experimentation. He points to a story about his partner in Funny Bunny Studios, Dave Allan, who formerly produced The Cure.

From if you understand a program it takes a long time to become really quick with it. It's like an instrument in itself – it takes a long while to learn how to play it..."

"We were working on this track and we needed an idea for the solo. Dave pulled out a tape he'd got on holiday of these two guys who played Chinese flute or something. He just put this flute solo

into the track and it stayed in tune for about 30 bars. Everyone in the room was flabbergasted.

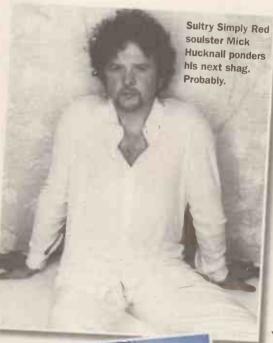
"I've actually tried that technique a few times with absolutely mad ideas. It might be something you'd never clear as a sample but you get a completely new angle. The more you understand that kind of experimenting might work, the more regularly it does."

A final piece of advice Wright offers to anyone in the music business is not to expect to arrive too quickly; it takes a long time to build up contacts and a profile. "You can't expect to like everything you do in the beginning" he adds. And from sore experience he knows the largest problem facing young producers is getting the jobs everybody else has turned down:

"Suddenly it's your chance.
You're confronted with a piece of
material that maybe needs a lot of

work doing to it. And even though you might improve it enormously it may still not be something you'd expect anyone to go and buy. You can't polish a turd, as they say. So you take it back to the record company and they say, 'Well, he hasn't really delivered on that.' It's the raw end of the deal."

Fortunately for Andy, he feels his days of that sort of experience are behind him. The very day after his conversation with *The Mix*, he is due to start work on the next Simply Red album, which he promises will be even better than *Blue*. "Because of the time we spent doing this one," he enthuses, "I think we're really onto something for the next one."

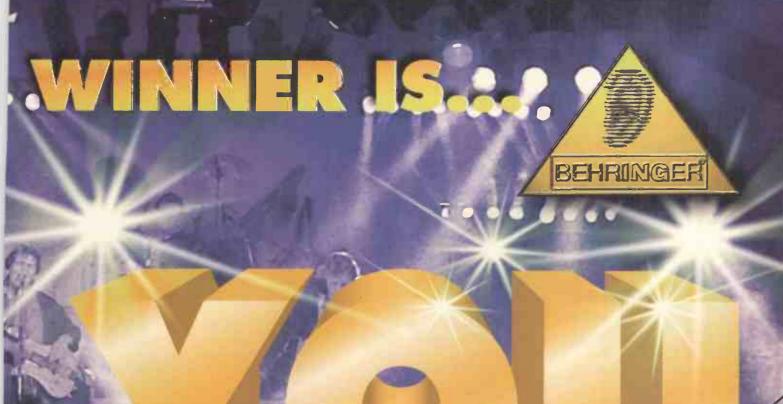


The album that took Andy into the production super in guess

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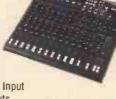
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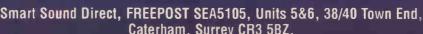
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What lies between new talent and hit records? The production team. that's what! Stu Lambert meets three such teams, all hotly intent on making their mark...

> n the beginning, small, primitive life forms are born in music's primordial soup - new talent. Later in the evolutionary chain they may come to rely on huge reptilian record companies for nourishment. But what lies in between? A twilight world of one-off single deals, remixes, collaborations the production team.

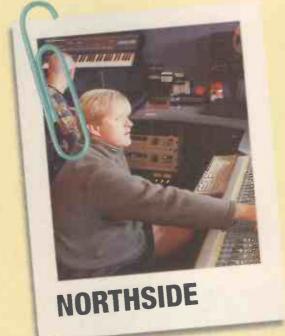
It's a chancy life, often pond-hopping from one opportunity to

another, discussing several different projects which may end up with very disparate sounds. They use a variety of names, often specific to releases, DJ work or remixes. So let me introduce you to: Ben Balafonic and Dom Kai, who range from acid techno to dub under the names Balafon All Stars and Bi Polar; Northside Productions, a house/garage-inclined trio based in Hackney, who are pushing TCB and Baad Company among a galaxy of different monikers; and the Smugg Brothers, a.k.a. Possessor, Koku, Starbus et. al., collaborators in breakbeat, world music and reggae fusion.

Though the three teams walk different paths, they are all technologically adventurous, almost dependent on sampling, but very open to working with traditional musical skills, and all emphasise that the main melody is paramount in a remix. And all these guys share things about the way they work which are becoming the new version of standard practice for music which doesn't follow the multialbum-deal-world-wide tour model. They rely on several different ingredients from the lucky dip of being artists, DJs, remixers, studio owners - and could as well be running clubs, promoting records or doing internet pirate radio shows. They write in diverse styles and re-brand themselves to suit.

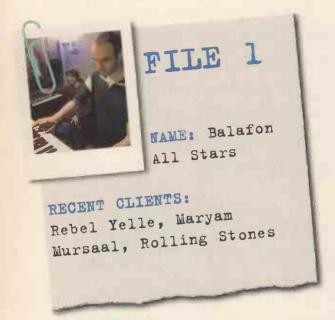
At the end of the day, it's hard to imagine

teams like these ever being content with one career strand, one record company. These guys are all self-starters; multi-disciplinary artists with total confidence in their judgements. Looks like evolution has thrown up a new creature - and it's a chameleon.





SMELLS LII IEAM SPIR



ewest kids on the block are Ben and Dom, who have been working in this country for about 18 months, after a spell of DJ and sound system business in France. They've hung their Mac in the groovy Old Truman's Brewery in Brick Lane, east London. They remix and record as Bi Polar and, as Balafon All Stars, are amassing an impressive body of nouveau dub, breakbeat and acid techno tunes.

Ben DJs too and, when he gave fellow-DJ Chris Liberator a lift to a gig In Liverpool, they got talking about a remix for Chris' label, acid techno stalwarts Stay Up Forever, The result was Kai's Stay Dub Forever mix of Rebel Yelle's 'Purple Heart'. "They were after

> so we used lots of cut-ups and samples to get that vibe," says Ben. "We kept their main vocal and their and evolved it - it was a very

something with a soundsystem twist, 303 parts, but we sampled their 303



different experience from working 'live' with a 303."

Predictably for artists experimenting with acid sounds, Roland gear is revered. "Our TB303 is brilliant, fantastic." They are

equally besotted with their 909, SH101 and Jupiter 6 "for pads, quirky noises." They are long-time Mac users and stayed faithful to the Vision sequencer when they recently upgraded to a PowerMac.

Their manager, who works for Virgin and is a very old friend of

BALAFON KIT LIST

G3 Mac 233 MHz, 6Gb **Opcode Studio Vision Pro 3.5 Cubase VST4.0 Opcode Studio 4 Steinberg Recycle** Peak audio editor Alesis ADAT XT Soundcraft Ghost desk PMC LB1 monitors Akai S2000 **Roland Jupiter 6 Waldorf Pulse** Yamaha CS1x Korg X5D **Roland TB303** Roland SH101 **Roland TR909** E-mu Orbit **Lexicon PCM80 reverb** Korg SDD1000 digital delay SDE 330 3D delay **Boss SX700 multi-effects Eventide Instant Flanger Orban Parasound spring reverb** Dom's, secured them a dance mix of Maryam Mursal's 'Lei Lei' for Real World, which opened doors for them. Bi Polar were put forward to remix The Rolling Stones' single 'Out of Control', released in August. "We did spec mixes and we were chosen for the project along with Fluke," Ben relates. "We were utterly gobsmacked when we heard it was on. I was trembling at the bus stop on the way in to the studio the day we started on it. We did feel reassurance because Mick Jagger and Keith Richards have always been into reggae." In fact, at the time of the remix Keith Richards had been working on his solo album Wingless Angels with the Nyabingi Drummers of Jamaica, a very different sound from the Stones.

"We listened to the original hundreds of times -

it's solid rock, classic Stones really. From a remix angle, you can't ignore the voice - maybe we felt that because we were nervous. For a dub mix, albeit dancey dub, we put a lot of emphasis on the performance of the mix itself. We took two DATs-worth of mixes, a lot of very different ones. We submitted two and the Stones phoned in from tour in Tokyo accepting us."

Effects are vital to dub mixes and Balafonic lay heavy on their Korg SDD1000 delay, because it has a hold button, which is a crucial tool in dub. "We used a Roland SDE2500 for the Stones dub and an SDE330 for special effects - it has some great delays. Then there's our luscious Lexicon PCM80 reverb - very clean and

> powerful," Ben says. They also have some funky old things, like an Eventide Instant Flanger, and they dragged out a venerably dusty Orban Parasound spring reverb unit in need of repair. It seems it's the tone controls and the general sound of the box that is classic, not necessarily the spring. "We're hoping for incredible things from it" savs Ben.

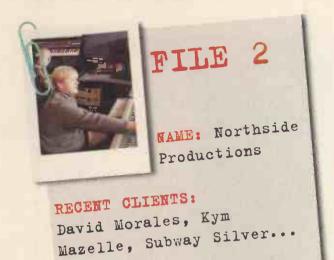
> For their own material, they have been working with Cantankerous (better known as MC Kinky), and MC Rash. Ranging from breakbeat with a very musicianly feel to world dance - it's all those Brick Lane

curries - to dark techno, Balafonic show an impressive command of styles and seamlessly mix 'real instruments' with samples and heavy programming

Despite a grounding in essentially studio-based music like acid techno and dub, Ben says: "We like working with live musicians." The Balafon All Stars have Tello, a French trumpeter, in the ensemble - he contributes a great mute trumpet part to their cool breakbeat track 'The Ghoul and Gus'. But Ben has a personal passion for hard, fast music. "Working with London's top techno producers has been more eye-opening than remixing the Stones."

The classic 909 drum machine





ver feel a tingle when you're doing the weekend shopping? The either you've been fondling that frozen chicken too long, or you're listening to the sound of TCB. 'Tingles' is a garage-style collaboration between singer Valerie M, formerly of the Candy Girls, and Dave Thompson, Shaun

Gavan and Steve Feud of Northside Productions. It reached No.4 in the MRIB dance chart on a pre-release buzz which included airplay on the Asda supermarket chain's in-store radio station, Asda FM. Whatever next - white labels with your washing powder?

Valerie phoned Northside up "out of the blue". They met up and at first planned a house project. But everything changed after Valerie's impromptu vocal over just a kick drum and bass. "No lyrics had been written, she just sang and it was one of those moments when the hairs on the back of your neck rise," Dave recalls proudly. Fittingly, the very first take from that vocal, with no edits, found its way onto some of the

TCB and Northside are production aliases of the team at Roundway Studios, a PowerMac-based suite with plenty of

he Mắc is the nub of the studio

natural light and a nice, relaxed feel. The Mac really is the hub of the studio, boasting a vast range of music programs from Pro Tools 4. Logic Audio and Samplecell (Dave: "like having 10 Akais") to an array of highquality effects like 'virtual' Focusrite Reds, editing and general sound warping programs.

There's new-gen stuff, like IEQ, Vocalign, and Autotune. IEQ analyses the sound of a track from any source and matches your mix sound to it. Vocalign corrects the timing and pitching of vocals, working from a template part, so someone who hasn't a great voice but knows what they want can put a template in and the main vocal will be affected accordingly. Autotune is an 'intelligent' pitch transposer. On the more creative front, Rectify gives an analogue synth-style interface

to treat audio in real time - like feeding to the 'audio in' on an

Timmi Magic of the Dreem Teem knew Dave through a friend; they recently renewed their working relationship with The Dreem Teem's dance mix of 'Tingles', and Northside have worked with the Dreem Teem on tunes including 'Piece By Piece' and a Shola Ama remix. Northside have remixed Gerideau, Kym Mazelle and David Morales, yet the studio also works with both the public sector and charity organisations.

"We are the type of remixers who always try to use the vocal in full if we can" says Shaun. "You can always build any dub mixes from the vocal mix. Then we get a few rhythms going. Steve Feud is a very experienced drummer, he's toured with big bands and everything, and he loves all kinds of music, whether it's jazz, punk or R'n'B." Steve usually programs on a Roland R8 or plays the Simmons pads in the live room. Most of the drum sounds are samples, handled by Samplecell. Outside the Mac, nice keyboard sounds come from a Juno 106, particularly for bass, and nasty

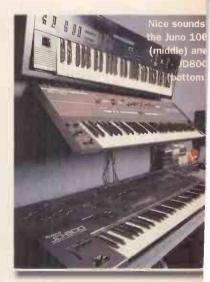
> ones from a rack Nord, used a lot for hard or twisted sounds.

Northside are always circulating tracks to record companies to get feedback at early stages. This is no sweat for them, as Roundway is a full mastering facility and everything is mailed out

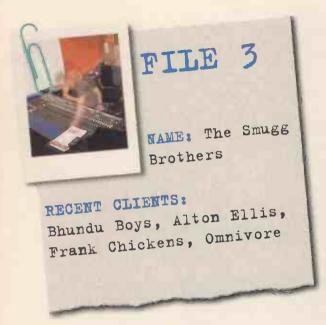
NORTHSIDE KIT LIST

PowerMac 9500 - 200MHz, 208

Mb RAM, 4 Gb Internal/8 Gb **External Hard Drive** Digidesign ProTools 4.0.1 **PCI Realtime Effects Including:** Pro-Crastinator 16 & 24, Dynamics, Compression, Delays, Time Adjust, Various Reverbs & Full Parametric EQ. Logic Audio 3.0.1 with full TDM **Digital Performer 2.4** TC Tools, M5000-M3000 Reverb & Chorus, D-Verb, JVP Multi Effects **Hyperprism** Di-Fi, full retro editing for digital audio **Focusrite D2 EQ Drawmer Gates, Compressors** and Expanders Samplecell II 32meg & Re-Cycle Digidesign DPP1 Pitch Processor 3D spatialising & direct placement **Intelligent Equaliser** Fostex R8 8 Track Recorder Studiomaster P7 32 **Channel Desk** Silver 5L Nearfield Monitors with **BH** Bass Augmenters **Urei 813C (JBL) 1K Monitors** Sample Cell. 32 Meg, On Screen **Editing & Real Time Effects & Ensoniq EPS 16+ Sampler** E-mu Vintage Keys Plus Korq DS 8 **Nord Lead Roland Juno 106** Roland JD 800 Alesis, Digitech, Lexicon, Yamaha, **Drawmer and LA Audio Outboard FX**



on CD-R with colour artwork. At the moment, all the kit is in the main control room, but the guys are planning to build a pre-production and mastering suite in what is now the kitchen. Forthcoming projects include a follow-up to 'Tingles', which will move away from garage to a poppy, funky R'n'B style. And, presumably, they'll be devoting some serious time to thinking up a load of new names for themselves.



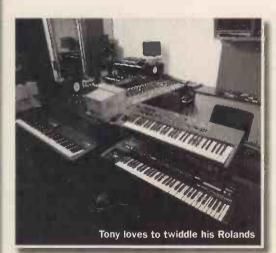
he Smugg Brothers, Simon Wadmore and Tony Chidgey, run Spark Studio in Clapham, southwest London. They record for Dust2Dust as Koku, (getting a 9 out of 10 from Norman Cook for their recent release 'Pumpkin Belly'), and work as Starbus, JK Sufferer, Killer Council (for Recordings of Substance), Twelve From A Dozen (for Delancey Street). They are launching the Smugg label...

"It's about mixing styles, not just doing the obvious," says Simon, a compact, motormouth geezer under a thatch of straw-like hair. "For instance, the track we've just done with Alton Ellis (old-time reggae dude, perhaps best known for 'Can I Change My Mind') isn't a reggae track, it's big-beaty, contemporary dub."

Breakbeat and dub are the consistent ingredients in their

eclectic sound, "Smugg will have elements of reggae in reggae tracks as such," says Simon. The Bhundu Boys

everything, but there won't be



appear on the forthcoming single along with Alton Ellis, and the result is a wicked fusion of moving, melodic vocal

SMUGG KIT LIST

Atari 1040ST/C-Lab Notator (planned upgrade to PC/Logic audio) Fostex E16 16-track analogue Soundtracs MRX 32-8-2 desk Tannoy Little Reds/Yamaha NS10s/Spirit Absolute 2s Akai S3000XL Akai S1000 Akai MPC 3000 Korg 01/w Pro X Yamaha CS1X Roland JD800 Roland Juno 60 Korg M1 Roland SH101 **Nord Lead** Oberheim Matrix 1000 E-mu Proformance E-mu Vintage Keys Roland U-110 **Lexicon LXP-1 Lexicon Alex Behringer Composer** Klark Teknik DN22 graphic **Groove Tubes pre amp** Alesis Quadraverb Plus x 2 Yamaha SPX90 **Drawmer compressors & gates** Aphex C aural exciter

performances from Ellis and the Bhundus with gritty, contemporary productions by the Smuggs. A single with Tippa Irie is coming, and the Smugg Brothers' album Meltdown was released on their own label back in October.

The Smugg Brothers remix of Aretha Franklin's 'Save Me' came from an old friend at Warner Music. Warner re-released this early '60s classic after it featured in a BT ad, "They gave us the original song from the early '60s - obviously, you don't get parts on DAT for that kind of work!" Tony chuckles. "Luckily, the track was stereo and the panning was so total that we got the vocal almost in the clear! Usually it's the vocal that we focus on, or the strongest melody. The beats come next; sometimes that's so important to a remix that there's little else. Then we are likely to set a mood with bits of dialogue or odd one-off sounds. Unfortunately this project is currently stalled somewhere in Warner's transatlantic pipeline; let's hope it sees

the light of day eventually.

Simon comments: "Breaking into remixing is seriously hard unless you know a lot of people already." His advice is: "Take samples from somebody's track, do the deed and send it to them or the record company." He did this after coming by an acappella take of a Hinda Hicks song which The Smuggs remixed and sent to Island, Hinda's label. Darcus Beese, at Island A&R, says he "liked the vibe, though it needed a bit more work," and that mix may still be released eventually.

> Gear-wise, Smugg sounds mostly come from Akai \$3000XL and \$1000 samplers. loaded with strange things. "We trawl charity shops for easy listening albums and strange records," Tony says. "The scary thing is, I actually like some of it!" Tony mentions Herb Alpert And The Tijuana Brass in his defence. "And there's short- wave radio - great stuff from ships at sea, that kind of thing," he grins. Tony likes the Roland JD800: "Because you can twiddle and tweak, and we do use the MIDI send/receive on the faders. We use the Oberheim Matrix 1000 for basses a lot of the time. Sometimes the sounds are so massive they won't sit in the mix, even though they are great". The Smuggs' weighty lo-fi sound is aided by a Groove Tubes valve pre-amp ("Great for fucking up loops or fattening things up") and, like the lads from Northside Productions,

they are big fans of the Alesis Quadraverb.

"We've got a couple of them," Tony enthuses. "They're great, really extreme sometimes. Fun things like the ring mod, which isn't on any of the preset patches, you have to put it in yourself."



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- Graphic Tempo Editor

COMPLETE CUBASE UST SYSTEM WAVES HATTUE POWER PACK



main Features

- Intuitive graphic user interface
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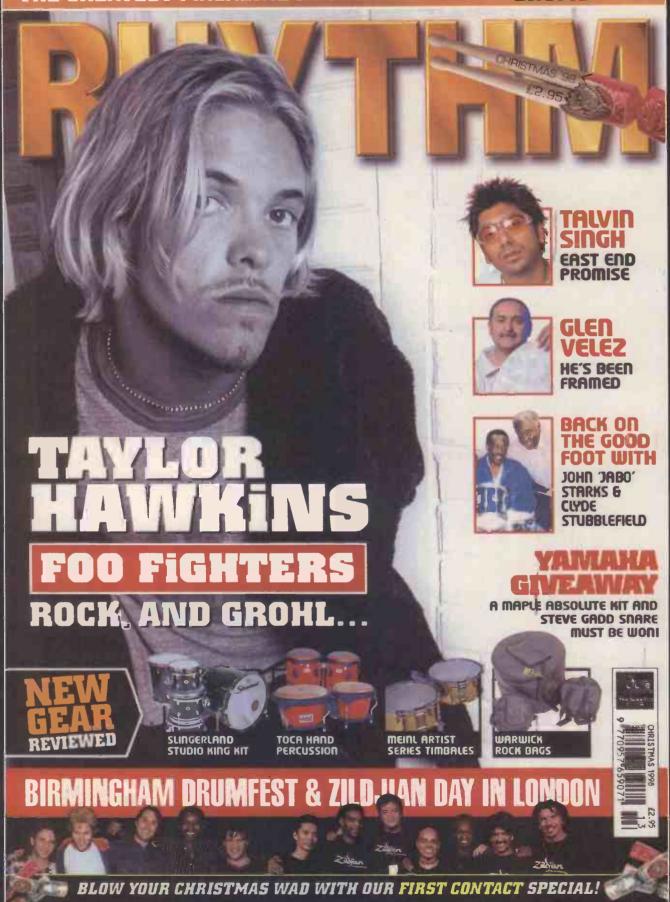




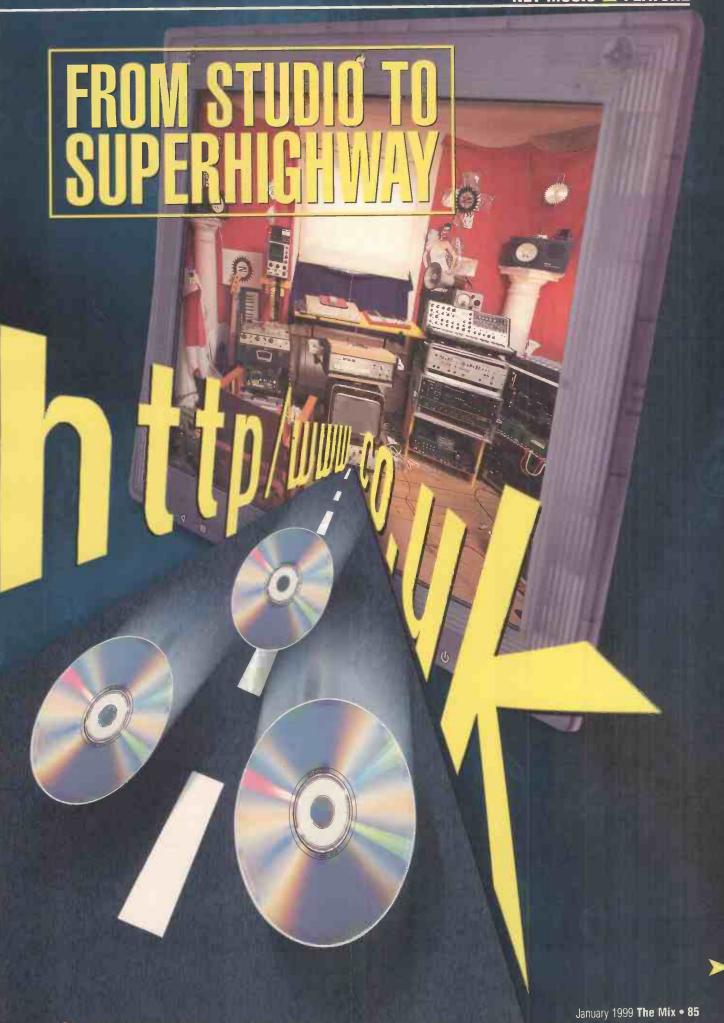
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CHRISTMAS ISSUE ON SALE MONDAY 16th NOVEMBER



JARGON BUSTER

ou've just got to grips with the huge amount of jargon that comes with your PC, hard-disk recorder etc. Now the web adds its own ultra-confusing terms...

CODEC

The name for the various data compression algorithms (such as the MPEG standards) to 'squash' audio and video data into a form that can be streamed over the internet. Hardware CODECS (real time compression) are used in broadcast and remote applications for ISDN and satellite transmission.

MP2/MP3

The file types derived from MPEG layer II and layer III compression methods. It's a bit confusing, but basically the layers correspond to increasing complexity in the encoding/decoding process. MPEG-1 and MPEG-2 refer to development 'phases' of the MPEG standard.

Downloading

If you view a page on the internet your computer copies the file from the website's server to your local hard disk. Your browser can display this page Instantly because it's written in the internet language HTML. If you want to listen to, say, a WAV file, your computer must copy the whole file before playing it. Most browsers then need to launch another program (a plug-in) to play the sound.

Uploading

This is when you copy a file from your Mac/PC to your service provider's server for others to download. It's straightforward for

How can you take your music to the world? Can you ignore all the hassle of a label and distributor and go direct to your audience? *Gavin Starks* finds out if the time is right, in the final installment of our net music special

o what's all this about a digital distribution revolution? For some vears, people have been expounding on how the face of music retailing is radically changing. But the truth behind the hype is that although there are major changes underway, we are still very much in the embryonic stages of this evolution. As we saw last month, retail channels are no longer constrained to your high street store. Everyone from Queen [http://queen-fip.com/] to Bjork [http://www.bjork.com/websense/] has some form of online presence, promoting not only their concepts, image and brand, but increasingly offering music clips, or even full tracks for download and purchase.

audience. If you want to hit the widest possible audience, you should try to encode your sound in all the most popular formats, optimised for different bandwidths. If you want people to download and burn the music directly to CD you need all the infrastructure to do so. This can be very costly.

3. What facilities does your ISP provide? Some providers actually forbid the use of streaming media; others try to limit your usage. Some, however, are emerging specifically to assist the music industry to get online.

4. How much time are you going to devote to running your site? There's nothing worse than finding a site that's out of date and no longer relevant or interesting. So, if you have tour dates and the like on your site, remember to keep

them up to date.

5. How are you going to promote the site? Promotion on the net is hard. You can never assume that just because your site is there and you've made sure it's in all the search engines that people will just visit. The amount of hype surrounding internet audience figures can boggle the mind. Last vear V97

 □ [colin.wav] - RealAudio Encoder
 □ Encode Edir View Options Help 0 . 8 File RealAudio Server File Live Stream File: IK:\v98\colin way File: K:\v98\colin.ra Browse. Format: 44100 Hz / 18-bit / Stereo # · + · + · · · · · · · · · · · -----Dip Length: 00:00:03.3 ncoding Time: '00:00:00 RealAudio 3.0 - 28.8 Stered Gavin Starks Use this option for general stereo conter http://www.V98.com/ Copyright | ency response: 4.0 kHz Bitrate: 20 Kbps Start Encoding Encoding process has fireshed 08:14 PM

Liquidising your toons? It's this simple, pal...

The potential of music distribution on the internet isn't just open to the major players, though – the net can provide independent musicians/producers with a direct line to their audience. So let's have a look at what's involved...

Where to start

If you're hoping to use the internet to make money with your music these are the questions you have to ask yourself:

- 1. Do you really need it? Just because it's the net it shouldn't necessarily consume any more of your time, money and resources than anything else.
- 2. Who are you aiming at? Be sure to set clear expectations of your target

attracted 100,000 visitors to the Virgin Net V97 site over one weekend, and about 30,000 listeners total during the 20 hours of live broadcast. This is still a fairly large number for a live event, and the Prodigy were headlining. The event was also supported and promoted by two of the largest audio webcasters in the USA. Unless you manage to hit a pulse, do not expect even thousands of people to flock to your site over an extended period. Average internet radio stations (even in the USA) still have audience figures in the hundreds at any one time.

That said, online retailers like CDnow and N2K have seen huge amounts of CD sales by offering an easy search facility and back catalogue material, along with reviews and audio clips. It makes sense to use your internet presence to support the marketing of your work. Bolstering your site with 30-second clips is an effective means of self-promotion, and minimises the risk of piracy.

Some artists have effectively used their internet presence to sell CDs direct, bypassing the retailer. If this is your aim, make sure you are able to fulfil orders.

The bad news: piracv

If you upload a music clip to your website anyone, anywhere can access it. If you

SITES OF INTEREST

MusicTrial: www.musictrial.com PRS; www.prs.co.uk MCPS: www.mcps.co.uk MusicBank: www.musicbank.net RealNetworks: www.real.com LiquidAudio: www.liquidaudio.com A2B: www.a2bmusic.com

have not yet secured the rights to your music or signed to a label which is aware of internet issues, you run the risk of someone simply copying your tracks.

At present technology companies and rights organisations are working to find solutions to the growing potential for piracy over the net. Although MP3 has the provision for a 'copyrighted bit' in the header, more complex methods of tracking have been devised [see Jargon Buster. Watermarking] which offer greater protection to the copyright owner. But there is no way to stop someone simply plugging in a recording device to the back of their PC or Mac. More sawy bootleggers will also have the means of stripping out encryption information.

A major problem for rights organisations is locating the source of illegal copies. In the brave new world, music simply assumes the same status as software, and how many of you haven't seen a pirated copy of Cubase? And how do you find these illegal copies? It's all very well setting up a net 'robot' to seek out all the music files all over the world, but then it has to check and validate each and every one of them. All very unpleasant for a rights body.

And what's to stop a major pirate operation setting up in deepest Rapulata where there is no legislation or regard for international law? On the net you can access information from all over the world almost instantly. Pirate software sites will quite often emerge for a few hours every week at different addresses, then disappear without trace.

The good news

MusicTrial (www.MusicTrial.com) is the first real attempt by the Music Industry to work with the internet rather than against

it. Driven by The Music Alliance (MCPS and PRS) in the UK you can download a number of encrypted tracks for free. The results of this trial will help to define the policies and, potentially, the laws surrounding music copyright, so your participation and feedback will be invaluable right now. The trial ends at the end of this year.

In addition, the Performing Rights Society already has a range of trial rates (from £50 to £1,000) for music licensing on the internet, for both commercial and non-commercial usage. Check out [www.prs.co.uk] for details of this, and for other information.

At the other end of the scale, one plucky young start-up is trying to help individuals to get their music out there. At [www.musicbank.net] you can upload your tracks for subsequent free downloading. Its aim is to act as a repository for new artists who don't mind giving away their tracks for exposure, without expectation of payment. If you are stuck with the encoding process, they'll even help you encode the tracks.

Creator of the site, Desiree Miloshevic, suggests that the efforts of Cerberus [UKbased outfit running a secure, pay-per track site for some years] and the like are premature and the current potential for the internet is to expose new music to a wider audience by providing a focal point for listening. This could be achieved by having 'new music' radio stations which play a pseudo-random selection of the submitted tracks, over which the user can have some influence, providing a valuable feedback loop to the artist.

How to?

So, let's get going with actually putting some sound on your website. RealAudio [the dominant method of streamed audio delivery on the net; from RealNetworksl is free, and ideal for preview material. You can download the audio encoder from [http://www.real.com/products/tools/enc oder/] and the player from [http://www.real.com/products/player/].

As with all audio transfer to computer, it is best to use a soundcard with S/PDIF, as bundled soundcards tend to be inadequate. Depending on your target bitrate (the bandwidth your internet audience will have), if you are making preview files experiment with different compression and EQ settings. With low bit-rate encoding in particular, it is a good idea to boost the top end and compress as for radio. Remember, at 28.8Kbs (the most common home modem) your codec's sample rate is typically 4kHz. Also try playing the result through a pair of lowend PC speakers to get an idea of what the user will hear.

It is not essential to have your own server, as some ISPs offer RealAudio streams from a dedicated RealServer as

text and pictures, but links to music files can require a two-stage process: a file which exists on the website server and references (or points), using a 'metafile', at the music distribution server. This is because the mechanisms for delivering music content require a constant, preferably uninterrupted. stream of information.

Streaming

Instead of copying the entire file before playing it, technologies such as RealAudio will start playing the sound as soon as they receive enough information. To produce sound for a website with real-time playback in mind you have to optimise the file to match your target clients' bandwidth. Streaming services such as this are also referred to as Webcasts.

Bandwidth

Considering that CD-quality sound requires 10 Mb a minute, and that most UK home users have a 28.8 kilobit-per-second modem, it can take quite a while to download a full song. In general, internet distribution technologies make use of lossy compression techniques to reduce the file size to make it a realistic proposition for the end listener.

Watermarking

An anti-piracy measure which takes place at the post-production stage. An imperceptible low-level noise is added to the sound in a specific location, containing the copyright data. This signal can, however, be interfered with if there is a lot of noise surrounding the frequency bands that are used. Fingerprinting is the addition of an identification code at the distribution stage using the same technique.

16The demand for people to distribute their music via the net vastly outweighs the number of people actually downloading **17** Ricky Adar, Cerberus

part of their package. However, you don't even need that, since the technology allows you to stream over the standard delivery mechanism of the internet: the HTTP protocol. Just make sure they make a reasonable amount of disk space available on their server. Most ISPs offer at least 10Mb.

Although less reliable than the other protocols supported, HTTP lets you get going, streaming the sound to start playing as soon as it can. If you get a significant audience or want to guarantee delivery, plug yourself into someone else's server – running your own can be costly. Cerbernet [http://www.cerbernet.co.uk/] is a UK ISP offering RealAudio hosting.

RealNetworks' RealAudio Encoder is very simple to use, and works like this:

To encode a WAV file, simply select Open File. You will see the waveform display in the window below it. Fill in the Title, Author and Copyright information, then select the output file you want the RealAudio to encode to. You need to select the compression codec you want to encode to. There's a pull-down list which details the bit rate and gives an approximate guide for usage. For starters, try selecting the 28.8Kb RealAudio 3.0 Stereo codec and hit start encoding.

This will create the RealAudio file. You can play this file now directly in your RealPlayer. It's as easy as that.

Finally, you need to upload this file to your website and link to it. If you are just putting it along with your other HTML files (i.e. for HTTP transmission) then link to your encoded file as

[http://your.web.site/yourFile.ra]. If you have access to a RealAudio server, then your file must be uploaded to that server and a metafile created on the website. The metafile redirects the HTTP request made from a web page to the RealServer.

Create a plain text file called yourMetaFile.ram containing the following: [pnm://your.real.server.address/yourFile.r a] Then, from your web page, link to this metafile as normal:

[http://your.web.site/yourMetaFile.ram] If this bit seems complicated, you can purchase the RealPublisher to create the files for you. You should check that your service provider's web server is set up to recognise the ra and ram extensions to support the appropriate MIME types (special parameters which let the server know how to cope with the file).

The encoding process in LiquidAudio is more advanced than RealAudio's, but it also costs, and you have to run it from a

dedicated Liquid Audio server. As well as encoding multiple bit-rates in a single file, you can add pack shots, promotional information, lyrics and encryption information. You can specify the price, validity period (users can pay to listen to a track for a set time period) and encode the file within the same package. There's even a plug-in for ProTools on the Mac.

Quality

Obviously sound quality is a major concern. Currently, the limiting factor in streaming audio is bandwidth. If you've ever listened to a 28.8Kbs optimised RealAudio stream, you'll have been appalled by the quality (due to the amount of data that has to be trashed to squeeze it down such a small 'pipe'). Things are improving though; the difference between RealAudio version 1.0 and 5.0 is huge. With the release of their G2 system you actually get a reasonable listening experience. Increase the bit-rate to 80Kbs and you approach a CD-like experience.

LlquidAudio, A2B and Cerberus all use higher bit-rates to achieve better quality – typically between 100-130Kbs (remember CD is 1.4 Mbps). These products give good sound quality and many of the new codecs are impressive. Each technology takes the core algorithms and adds data (watermarking etc.) in a proprietary manner. The field looks like this:

- LiquidAudio: Dolby Digital / MPEG-2 AAC (successor to MP3) based codecs
- AT&T A2B: Proprietary codecs based on MPEG-2 AAC.
- Cerberus: Proprietary codecs based on an extended version of MP3.
- AudioSoft: MP3 based codecs.

The future

It's too early to say which technology or retail platform will become the standard. Real Networks are currently leading the pack in the streaming game, with Liquid Audio providing a secure download infrastructure. One significant step which should be in the marketplace by the time you read this is the ability for RealNetworks' new G2 system to embed the LiquidAudio player inside itself. And Netscape now include RealNetworks' software in their browser.

Many thought the war between Microsoft and Real was the one to watch: keep an eye on A2B. As Peggy Miles, consultant to AT&T describes, "A2B is promoting its services to the record industry for major acts. When major acts start using it then the player will be

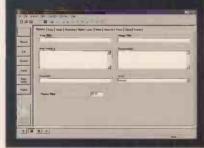
LIQUID AUDIO LIQUIFIER

If you choose Liquid Audio as your Internet audio publishing medium, then you get software support all the way along the line, with special server software (Liquid MusicServer), professional mastering tools (Liquifier Pro), freely available player software (Liquid Music Player), and licensing management (Liquid Center). For now though, it's the mastering and publishing stage we're interested in — all taken care of by Liquifier Pro.

Liquifier Pro is available in three versions (Windows, Mac, and ProTools AudioSuite) and does several important jobs, though actual facilities vary between versions. First, it converts your audio with either the Dolby AC-3, MPEG-2 AAC, or NetShow codecs. A variety of encoding presets, EQ, and dynamics processing optimises the conversion, and you can preview the result before committing to it. For security, Liquifier includes digital watermarking and RSA public key encryption facilities, and for selling your wares, it allows download pricing, CD sales pricing, and secure credit card connection.

Add to this more than 60 preset text fields, promotional graphics, genre and rights menus, and user-defined media fields, and this might just be the most comprehensive system for getting you music on the net.

More from: Liquid Audio (US) Tel: (+1) 888 547 8430 Web: www.liquidaudio.com Digldesign UK Tel: 01753 653322 Web: www.digidesign.com



distributed more places and make it easier for smaller acts to be promoted through A2B, in a jukebox-type setting."

But as Ricky Adar, Managing Director of Cerberus has found, "The demand for people to distribute their music via the net vastly outweighs the number of people actually downloading". For this reason they are changing focus and introducing kiosk-like Virtual Record stores where users can burn CD compilations on the spot.

Home taping did not kill the music industry. In the same way, the net is perfectly poised to help promote new talent and distribute music to a much wider audience than before. These are exciting times, for sure...

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EDEN STUDIOS

Is it the massive kit list, the lush environment, or something more mysterious that has made this London studio a hive of activity for 30 years? *Nick Serre* finds out

et up by three engineer/producers initially wanting to pen chart hits, Eden first opened its doors in 1973. **Director Piers Ford-Crush** gets historical: "Mike Gardner [one of the other two directors] and I worked at the BBC. We were both trainee cameramen and I was interested in pop and writing songs. It started when Mike got a studio at home with a bit of kit in it and a group came along that wanted to record some demos. Philip Love [third and final director] was involved in that, and Mike introduced us... and we started to write some songs."

But obviously the strains of not having a studio of their own caused friction, as Piers recalls. "Mike's parents decided they had had enough of us making a noise in their house, and so we then got some premises in Kingston. It was quite a good place to build a studio because it was a

room within a building, but it was just made of softboard, so the sound went out and annoyed the neighbours. We were there for about six years and we did lots of demo work with quite a lot of people who became successful, like Peter Skellern. We did some work for major companies but most work for our own projects. We never had any big hits but we learned a lot from doing it."

"We moved here at the end of 1973," recalls Piers. "We started with two Revox machines and then ended up with an Ampex half inch which was quite good. We were charging £9 an hour, so we went from that to coming here and buying an Ampex 16 track. I think we opened up charging £16 an hour. We jumped straight into a mastering market, but it was a good time to be doing that because there were very few studios on this side of London, apart from Olympic.

"We hadn't been going more than a few months when we got a gig recording the

Bay City Rollers, which earned us quite a lot of publicity. Around Christmas 1975 we started working on a Graham Parker album and we were very lucky there because it led onto other things. So we did get a bit of a reputation. In 1977 we had about five records in the top 50 in one week. 'Oliver's Army' (Elvis Costello) was one of them, and a record by the Undertones."

The Eden team's firm grounding in studio ownership and production obviously gave the trio the confidence, some 25 years ago, to build Eden as it now exists. That time has seen some of the most illustrious artists and producers frequent the complex. In more recent years, Robbie Williams, Dina Carroll, Stereophonics, and lan Broudie have all found favour at Eden.

Amid the project studio ethos of the last ten or 12 years, Piers believes that quality, purpose-built studios will still have a definite niche in the market. He is wary, however: "With the commercial pressures of being in the industry, it may be that a lot of studio premises will go by the wayside, be closed up and taken away," Piers muses. "It's actually quite worrying where the money will come from to build really nice quality, constructive studios. The pressure will be to do things in an economic way."

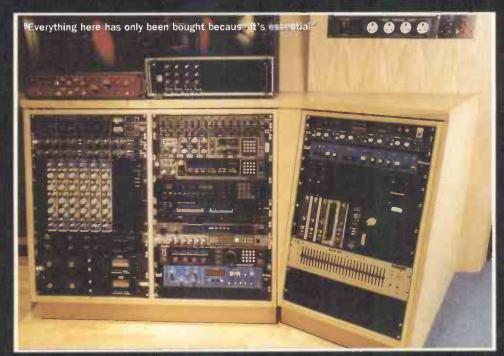
How does Piers see the difference between now and ten or so years ago? "There's been a big change in the last 12 years." he says. "It kind of dates from Live Aid. In the early days here, as well as the work you got from major companies, there were lots of small songwriters developing projects. They were always doing their own thing, they were hiring studios, there were managers of bands getting stuff together, they would go into studios and they didn't really have a lot of options. And if you were

a successful studio, if you had hits, the phones rang from all over the world."

This was certainly the case for Eden, as Piers happily reiterates. "That was the icing on the cake," he remembers. "The work you did with major companies and the records you had in the chart meant you got all that other work. Now there's only the record companies. There is very little other work, and what there is goes into budget studios. But it does offer people a choice."

But surely the cost of upgrading and maintaining such an elaborate studio could put off some potential clients? Piers is open to the suggestion. "When you talk about costs, presumably what goes through the mind of anybody setting up a home or budget studio is, 'I'm getting a really good result here and I haven't paid anything like that sort of money'. In broad terms, to build and equip a decent control room is going to cost you at least three quarters of a million pounds – that's an enormous





RECENT CLIENTS

Dina Carroll
Robbie Williams
Stereophonics
lan Broudie
Dave Bascombe
lan Grimble
Al Clay

amount of money," he sighs. "If you've got premises and you are putting money into it, a couple of million is gone before you know where you are. I think there are one or two projects recently which have easily cost that sort of money. You only have to look at the rates chargeable and sit with a pocket calculator to see that."

But, of course, there is a flip side to

the argument. "The point is that this is where the difference arises. It's not just the equipment – you can get a good result with a lot of economical equipment - but in order to provide a place where people can work in a professional way, you need all of what we have on offer. If we didn't have to buy stuff we wouldn't buy it. Everything here has only been bought because it's essential.

If you took any one thing out somebody would notice. You really need it all, because the kind of producers who work in studios like this know what they want and will ask why we haven't you got such and such. They'll soon say you haven't got enough. So that's where suddenly you go from fifty thousand pounds to two million pounds. There's something that obviously justifies having a much more credible name and higher rates because everything they need, they will have here.

Eden's ultra-professional attitude has seen them constantly reinvesting in new equipment. The two main studios are home to SSL 6000-series consoles and offer 48 tracks of analogue multitrack each, with the option of digital recording.

KIT LIST

STUDIO 1

CONSOLE

SSL 6064G with G-Series computer, total recall with 56 channels
TAPE MACHINES

Studer A800 24 track machine x2

Studer A80 1/2" and A80 1/4"

Tascam DATs

MONITORING

Quested 2x15, AR18, AR18DBX

Yamaha NS10s

Auratones, K-Rok

PROCESSING/ OUTBOARD

Lexicon 480L reverb

AMS RMX 16 digital reverb

EMT 244 digital reverb

Lexicon PCM70

EMT stereo plate

Yamaha REV7 digital reverb

Yamaha: SPX90

AMS 15-80s stereo delay

Eventide Harmoniser H910

Eventide H3000

BEL BD80

BEL BF20 flanger

Urel 1176 limiters

Focusrite mic amps/ EQ (8 ch)

TLA Neve EQ and mic amps (4 ch)

Studio 1 has just undergone another

revamp, and this brings us to another vital aspect of Eden - their recording spaces.

Studio 1 offers a 32' by 24' space, with

three separate recording areas. Wood

block floors and adjustable acoustic

screens give the ultimate in flexibility.

this latest addition, "In the past we've

always had a carpet. But we've come to

realise that it would be better to have a liver floor and get deeper absorption. The

contrast between the live areas and the absorbent areas is much greater now."

A great balance is offered between

Studios 1 and 2. One is a space

"This is the first time we've had a wooden floor," comments Piers on the subject of

Amek PM101 EQ

Klark Teknik graphics

DBX 160X compressors Drawmer dual gates **Drawmer 1960 valve compressor** DBX 902 de-essers

STUDIO 2

CONSOLE

SSL 6060E with G-series computer, total

recall and 60 complete channels

Studer A800 MkIII 24 track machine x 2

Studer A820 1/2" and A820 1/4"

Tascam DAT

MONITORING

Quested 2x15, AR18,

Yamaha NS10s

Auratones, K-Rok

PROCESSING/ OUTBOARD

Lexicon 480 L reverb

Eventide H3000

AMS RMX16 digital reverb

Sony MUR201 reverb

Lexicon PCM70

Yamaha SPX 90 II

EMT stereo plate

EMT 244 digital reverb

Yamaha REV7 digital reverb

Roland SDE3000 DDL

AMS 15-80s stereo delay

BEL BD80s DDL Eventide Harmoniser H910

dedicated to capturing live performances with finesse; the other is a more mixingoriented room with a spacious and



Focusrite mic amps/ EQ (6ch)

TLA Neve EQ/ mic amps (2ch)

Summit TLA100 valve limiters

Tube Tech valve EQ API 550A EQ

Urei 1176 limiters

Klark Teknik graphics

Yamaha NS10s PROCESSING/ OUTBOARD

Focusrite EQ and mic amps

AKAI S1000 sampler

Sony MUR201 digital reverb

DBX 160X compressor

Alesis Midiverb 2

Drawmer DL221 limiters Drawmer DS201 dual gates

Yamaha SPX 90

Tascam DA30 and DA20 DATs

comfortable control room. Studio u dedicated to the IIII vi

> As Piers states, "At the end of the '80s we decided to make some changes, and Studio 2 been enormously successful and has had a history of people just coming here and really loving it. Dave Bascombe works here a lot, and it's just got a track record of very busy producers coming in and absolutely loving it. So we've been very fortunate with that."

to go by, the team are getting it absolutely right, a fact which is further

If Eden's client list is anything

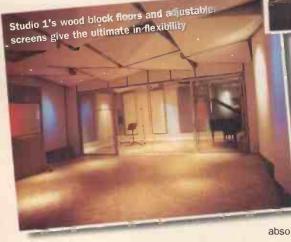
demonstrated by the repeat custom it receives. There's a restaurant and games room at the complex, as well as a

separate lounge area for each studio. In addition, Eden owns a large house opposite the studios for people to rent. Piers observes "About half of everything we do has accommodation with it. It's much cheaper than being in a hotel. Clients can come over easily, but at the same time they are far enough away to be isolated."

The emphasis is most certainly on professionalism and experience at Eden, as is clear from Piers' closing comment on the overhauls Eden has seen over the

years. "Not many people have had as much experience as us; it must be difficult for people to go to consultants and take advice. We have pretty much started from scratch. There is nothing in the studio which is original apart from the concrete. It's been changed totally. It's been a wonderful chance to incorporate everything we've learned and pass that experience onto our clients."

More from: Beth Shuttleworth, Studio Manager, Eden Studios, 20-24 Beaumont Road, London W4 5AP. Tel: 0181 995 5432. Fax: 0181 747 1931





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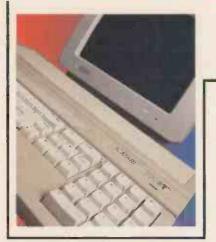


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ATARI TOOLBOX



NEWS

Home-baking

A couple of months ago we mentioned Soundpool's CD recording software, and updates of the program are now appearing with extraordinary regularity, adding things like support for new CD-R devices. The suite is essentially divided into two discrete programs: one for audio CD creation (ISO red book standard), and one for data CD-ROMs (yellow book) and mixed-mode CDs.

Unlike Anodyne's CD Writer (reviewed in *Toolbox*, issue 54), CD Recorder Pro doesn't actually need a CD-ROM driver to enable it to work. Nevertheless, the software is supplied with a customised (and much improved) version of Atari's freeware CD-ROM driver, MetaDOS. If you already have ExtenDOS Gold, you won't need to install MetaDOS, since CD Recorder Pro happily exists with this too. All that's required is the obligatory chasmic-sized hard drive, a CD-R(W) device, an Atari, and the master disk in the floppy drive to act as a software key.

The audio CD program shares many similarities with CD Writer; you may load in any AVR, AIFF or WAV file to use as an audio track, so long as it's 16-bit, 44.1KHz, stereo, and more than five seconds in length. In theory, at least. In practice, CD Recorder Audio frustratingly picked holes in many-a-file, particularly with AIFF and WAV files (that were otherwise quite valid), unless they were created by another Soundpool product. Even the AVR files generated by Clarity 16 (whose

Atari software is on the cover CD: check pages 8 and 9 for full details



Advice and software for Atari users, compiled by *Danny McAleer*

authors invented the damned format) were partially scorned, loading in only half the sample. Fortunately, the latter was remedied by the shareware sample converter 525, but it isn't unreasonable to expect a little tolerance from such a professionally-priced program. Of course, music recorded in Audiotracker loaded straight in. Typical.

This initial blip aside, the actual program itself is fairly straightforward, and is made more so by the help boxes that appear over buttons to inform you of their function. New songs can be added to the playlist by simply selecting New Track from the file menu, up to a maximum of 99 tracks. For each of these, there are a set of properties that can either be applied globally to the entire CD list, or tailored to each track individually. These include pause length and offset, as well as copy enable, serial numbering, and preemphasis. As you might expect, tracks may be given long titles, and these lists can be printed or saved in ASCII text format (with or without the additional pause and index times) too.

One of the more surprising omissions in CD Recorder Audio is the ability to be able to move tracks up or down the playlist. It isn't even possible to change the source sample once a track has been added

(unless of course you sneakily delete it from the hard drive, or rename it, in which case CD Recorder prompts you to look for a replacement). Fortunately, there is a delete function in the program itself, and additional tracks may be inserted at any point selected by the user (if no track is highlighted then it is automatically tagged on the end).

Two functions in CD Recorder Audio are particularly noteworthy: firstly, 'CDs' may be played back from the hard drive (when a 44.1KHz external clock is connected and active), so it's a great deal easier to ascertain whether juxtaposed tracks work well together. Secondly, pauses between tracks can be zero seconds long, so it's feasible to effectively merge one track into

The second program in the suite is designed to create data CDs, and works much like the Atari's own desktop. Files may be copied from a destination disk onto the CD-ROM list window by simply dragging the icons across. New folders may also be created in the CD-ROM list, although the program does not permit data already in the list to be moved. Directories may also be browsed in both source and destination windows, with provisions for sorting by name, date, size, and type.

Data files can be from multiple

Fi		ool CDRecor	der Audio Pro	o - "M:\SIABCOU\SIABCOU.CDA"	Ø ₽		
-	OS 150 COTOR IN SEC						
Mas	CD Name: A Bug on a Blobby Oily Spillage Mastered by: Danny McAleer Date: 18.10.1998 MCN:						
TRK	NAME/CD-TIME		TRACK-TIME	ISRC/SOURCE			
81		f Sensibili	ty				
80	80:00:00	00:02:00	-00:02:00	Pause			
01	88:02:00	02:29:61	00:00:00	SENSIBLE.AVR			
			82:29:61				
82	The Modi						
00	02:31:61	00:02:00	-00:02:80	Pause			
01	02:33:61	02:37:02	00:00:00	NODI.AVR			
-			02:37:02				
83			mensionalism				
00	05:10:63			Pause			
01	05:12:63	02:26:65	00:00:00	2DIMEN.AVR	-		
0.4	100		02:26:65				
84		had had 'ha		2			
88	07:39:53			Pause			
01	07:41:53	02:41:61	80:00:00	HADHAD.AVR			
85	Verbatin		82:41:61		-		
99	10:23:39	00:02:00	-00:02:00	Dance	200		
81	18:25:39	82:84:68	08:00:00	Pause VERBATIM.AVR	1		
01	10:53:33	02:04:00	00:00:00	AFKDM I TIL I MAK			

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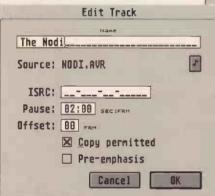
ATARI TOOLBOX

destinations, and as long as the drives are well-optimised, fast, and defragmented, no errors should occur during the recording. A safer option is to use a 'CD image' - a huge single file that contains all of the data you wish to copy, stored in one location. Of course in order to do this, you'll need a monster-sized (and in all likelihood, empty) partition to copy the image onto first

Since this program is concerned with writing data CDs, it must adhere to set ISO standards, or else no-one will be able to read them. Options here include level 1, DOS, Atari, or 'don't care' (which sounds a bit flippant) where the first two will not permit certain ASCII characters in file names that are perfectly viable with GEMDOS (the program will ask you to rename the file). And so, unless you're creating the disc for a PC, either the Atari or 'don't care' selection seems to be the best setting here.

When CD Recorder Pro finds a valid CD audio track file (a sample that is

Individial track parameters may be set



44.1KHz, 16-bits, and so on), a musical note graphic is displayed next to it. You then have the option to add this to the data part as a sample, or to add it onto the remainder of the CD-ROM, and create a mixed-mode CD playable in a standard CD player. It really is that simple! As with the dedicated audio program, no provisions are made for re-ordering tracks, although they can still be deleted or replaced.

multiple files, CD Recorder Pro has a function whereby entire SCSI devices (including other non-standard Atari CDs) may be copied. There's even a separate CD copy utility bundled with the suite. making multiple copying of a disc a far less laborious process.

In addition to creating CD-ROMs from

Recorder ID DEVICE 9: QUANTUM LIGHTHING 738S 2: SAMSUNG WN32162U ALAA YAMANA CDR182 1.01 ATARI Falcon838 Cancel Scan OK

CD Recorder Audio

The time taken to record a CD or CD-ROM is very much dependent on the drive itself, and the computer, but in both programs a progress bar is displayed to keep you informed of the work completed. Both programs will allow you to perform a 'test write' too. where the process of writing to the CD is carried out without actually physically affecting the the CD-R (which can be useful for auditioning faster write speeds without rubbishing a perfectly good CD-R).

There are a number of substantial differences between CD Recorder Pro and CD Writer, not least of which is the marked difference in price. However, unlike premium beers (which seem to taste the same however more expensive they are), you do get a lot more flavour for your money: auditioning of CDs before writing them; variable length pauses and index points; and the most prominent advantage: being able to create CD-ROMs and mixedmode CDs. Since CD-ROMs are such an inexpensive and reliable form of hard drive back-up, it's not inconceivable to think one might consider the software just for that purpose (it'd be a shame though, since there is so much more to tinker with).

Naturally, all these extra functions equate to a slightly longer time fiddling with parameters (often without just cause, but merely because they're there), and so if the only reason someone had for investing in the software would be to make audio CDs, then CD Writer should certainly be plumped for. However, in terms of flexibility, CD Recorder Pro leaves a lot of software rooted to the starting block, wondering whether the pistol has sounded. It may not be cheap, but the rewards are equal, if not more, than its asking price. CD Recorder Pro is available for £199 from Titan Designs (who can also supply a suitable CD-R(W) device, cables, and a SCSI link adaptor if needed): 6 Witherford Way, Selly Oak, Birmingham, B29 6AX. Tel: 0121 693 6669, Fax: 0121 414 1630. Email: info@titan-bss.co.uk

NOW SHOWING

VDI version five has been available to its natives in Germany for some time now, but it's only just ben released here, after what seems an eternity since the last upgrade. This latest version now actually works on a number of systems (TOS, MagiC, MagiC PC and MagiC Mac), and even has support for a number of Atari graphics cards (such as the Nova and ET4000).

Other improvements include a wealth of new drivers for various programs and printers (including a lot of new models, both colour and mono; the list is enormous), background printing when run under MagiC v5, support for True Type, Postscript, and Speedo GDOS fonts, and it is now even bundled with the CPX server CoPs, online HTML documentation, and programming guides. Of course, you still get the same speedy screen acceleration that NVDI is noted for, so there's really no excuse for not having at least one version of it!

NVDI v5.0 costs £59.95 (plus £3.95 postage and packing), but existing version 3 or 4 owners can upgrade for £29.95

when the original disk and manual are London, SE22 8SD, Tel: 0181 693 3355. Fax: returned. More from: System Solutions, 17-0181 693 6936. Email: info@ 19 Blackwater Street, East Dulwich, system-solutions.co.uk.





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usion Vocode Mac/PC	£125.00	Vocode TDM	£239.00	Fusion Filter Mac/PC	£125.00
usion Vinyl	€ 79.00	CFX 1	£129.00	Q Tools AX	£179.00
Valdorf D Pole	£149.00	Wavelab Plug ins	£289.00	Cubase Plug ins	from £119.00
asy Waves	£125.00	Native Power pk	£379.00	Sound Forge XFX 1-3	£ 99.00
coustics Modeller	£199.00	DSP Bundle PC	£739.00	DART	€ 49.00

Cooledit Pro is fast becoming one of the most respected audio editing packages for the PC, with superb noise reduction and fantastic real time preview of most effects it is truly stunning. It even has a 30 band graphic eq with real time preview! A truly powerful package. Sound Forge too Is here along with Wavelab and XG Edit, Gary Gregson's superb XG Editor.

Cooledit Pro	£279.00	Sound Forge 4.5	\$279.00	Wavelab	£279.00
(G Edit Registration	€ 25.00	ACID	€249.00	Recycle PC/Mac	£179.00

A new breed of software has arrived offering powerful synthesis and sampling, the first was ReBirth now In V2 form, one of the latest is Reality a super power synth coping with everything from FM to physical modelling, on top of this it is a mega powerful sampler and offers modulation of somples. VAS (Virtual Analogue Synthesiser) offers some pawerful software synthesis at an entry level price.

	Free XQ edit		C Console only £99	
VAS Modular	£149.00	XPOSE	£349.00	
Rebirth PC/Mac	£139.00	Reality	£299.00 VAS	\$ 29.95

Yamaha SW1000, DS2416, VL and DX daughter boards in stock. You want 8 in 8 out on a 24 bit PCI card with external rack unit featuring full size jack and XLR ins and outs together with MIDL for less than £500? Well we've got it. Gadget Labs Wave8/24 and it's only £495III

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Digital Audio Labs	Sphone	SEKD	£phone	Wavecentre	\$429.00
Tango	£phone	Sonorus STUDI/C	£579.00	Yamaha XG	from £ 69.00
Montego	£109.00	Malibu	€ 99.00	Daytona	€ 89.00
Yamaha Sw1000	\$449.00	DSP Factory 241	6 £599.00	Ax44 Expansion Unit	£199.00

2 midiman

Superb 20 bit PCI hard disk recording outs via break out cable or external recording with a signal to noise ratio cards to work side by side. NT and Exceptional value for money, Sound excellent and compares well with



card offering 4 independent Ins and break out box. Super clear hard disk of 94db. Multi card driver allows two Mac drivers also available. On Sound said "it's specification is cards at a £500 price point.....

Dual mic preamp and DI box, great microphones, guitars or any other quarter inch jack and XLR, up to 60db 5 Hz to 50 kHz. Independent outs and with a solid construction



for boosting low level signals from source. Two independent Inputs, both gain with a frequency response of gain controls. An extremely useful unit

Just what we needed, on ADAT to SPDIF converter with built in Digital Mixer! 24 bit data transfer and 56 bit internal processing make this a powerful piece of kit. Sample rates from 39 kHz to 51 kHz supported, pan and gain controls with 128 step resolution. Also converts SPDIF to ADAT.



We all know it's Carbon Dioxide but this SPDIF coaxial to optical and vice versa. it to be used as a booster for long



little baby ain't gas it's solid. Converts also has a pass through mode allowing lenaths of cable



You don't often see these in the fields and they don't produce any milk. External 24 bit A/D converter and 20 bit D/A converter. If you've got an SPDIF digital i/o on your soundcard these are for you. The A/D unit will let you plug in your analogue source and give digital out for connection to the digital in on your sound card giving super quiet transfer to your PC. The D/A unit offers superb conversion of analogue to digital, useful for Dat, DCC or any other digital source, Dynamic range ground 100db. The Flying Cow does it all with AES/EBU, SPDIF, XLR and quarter inch jack connectors.

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PC TOOLBOX

News, advice, and software for PC users, compiled by *lan Waugh*



NEWS

Rue the day

As if simply being Microsoft wasn't license enough to print money, the company is now rumoured to be interested in buying De La Rue, the British company which prints banknotes. De La Rue produces security packaging for Microsoft which has helped reduce counterfeit sales and boosted Microsoft sales by over 10%. De La Rue's shares have fallen drastically since its heyday in the early '90s. From a high of £10 they are now languishing at under 150p, making the company rife for a takeover bld. The company has a 26% holding in Camelot, the company which runs the National Lottery. If Microsoft does take it over, it will be interesting to see what Bill does with his share of the Lottery! Pundits would expect him to

Hey, stoopid

Have you bought a computer from PC World? Then you're probably an ignoramus! A recent survey of PC World managers revealed that the most common reason for returned equipment was lack of customer knowledge. It also revealed that PC World does not have the resources to test returned products for faults.

The rise in popularity of the PC as a consumer item inevitably means mass confusion about computers and IT and, as one of the UK's major PC retailers, PC World is obvlously picking up lots of first-time buyers who don't know their serial ports from Southampton.

Software and samples for PC are on the cover CD - check pages 8 & 9 for details



Cheaper webs

Intel have joined the growing number of companies and individuals calling for cheaper web access. Craig Barrett, the company's CEO, has lambasted the high cost of telephone calls in the UK, claiming that the prohibitive cost is preventing businesses developing e-commerce and preventing individuals signing up for web access. Accessing the net is two-and-a-half times more expensive in the UK than it is in the US. He also criticised both the UK and US government encryption laws for preventing further development of online business.

Acorn drops off

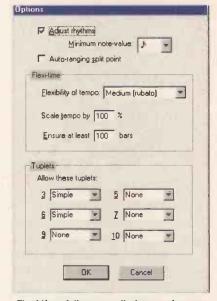
Acorn, one of the founding fathers of personal computers, developer of the BBC Micro and later the Acorn Archimedes, has thrown in the towel and decided to stop manufacturing its RiscPC. The company shot to prominence in the 1980s when its BBC Micro computer was chosen for use in schools. It even managed to retain its hold on the education market with the Archimedes in spite of competition from low-cost PCs. The decision by education to continue with the Arc was heavily criticised, particularly by industry - training pupils to use a machine which was unknown in the outside world simply didn't make sense. The company has made 60 staff redundant and is now concentrating on the manufacture of digital TV components. The end of an era...

Finns scale heights

It is somewhat fitting that the news of the demise of Acorn's computers, if not Acorn itself, should be accompanied by news that the Archimedes' most famous music program has finally been ported to the PC. We're talking about Sibelius, the eponymous software developed by the Brother Finn and which prompted many composers and musicians to rush out and by an Archimedes simply in order to run it.

Now, however, that is no longer necessary. On the Archimedes, the program impressed because it was blisteringly fast. And no wonder – it was written in machine code! The PC version is written in C++ and it's no slouch either. It can reformat an entire score in 1/10th of a second.

Copy-protection is by way of a



Flexi-time follows small changes in your timing when recording music in real time

registration number. A "Code to quote" pops up when you run the program. You have to phone Sibelius, quote the code, and then you get a marathon-long number which you have to enter into the program. This enables saving and printing.

The program has a slightly different modus operandl to other score writers. Instead of organising the score into windows which you scroll thorough with a scroll bar, Sibelius has one virtual window which contains the entire score. The background – virtual manuscript paper – is grained so it looks like the real thing, and you can mess with the texture and colours if you want.

But the neat thing is, you can click and drag on the paper and this moves the score around underneath the mouse. There's a Navigator window which shows a miniature version of the pages in the score and you can move to any page by clicking on it in the Navigator and by dragging the miniature pages around inside it.

You can enter a score by clicking notes and symbols onto the stave, you can use the PC's keyboard, play a score in via a MIDI keyboard and you can import MIDI files. You can click and drag notes and symbols around the score, insert bars, and the program reformats the score almost instantly. One nice touch is that the program knows the range of the



Check your modem's performance at the Modem Speed-Test Page

instruments and warns you if you try to add or move a note outside the range. The program uses music intelligence, a myriad of typesetting rules to ensure that the score looks good.

It can play back the score via MIDI and it not only takes note (ha!) of performance instructions such as hairpins, articulations and dynamic markings, it also has a feature called Expressivo which uses artificial intelligence to create a human-like performance. It does this by 'intelligently' making small changes to the timing and volume of the notes.

A first, quick look at the program was impressive and it's easy to see why the Archimedes version was so well-regarded. Individual musicians' requirements vary so it's good to know that you can get a demo to try before you buy. Call Sibelius free on 0800 458 31111. The program costs £695, although there are discounts available if you're in education, and these prices start from £399.

Modem mania

With the world currently settled on the 56K modem as the fastest way of transferring data over telephone lines – ISDN and cable notwithstanding – you may be wondering where or not it's worth upgrading your 22.8K jobbie.

The short answer is that if you surf the net and download lots of software, it probably is. If you only use it for email it probably isn't. However, don't think that just because you have a 56K modem, you'll be surfing along at 56K. You won't! If you manage to download at 48K you'll be doing very well – but that's still a darn sight faster than 28K.

However, expect these speeds only from your own ISP. As soon as you leap out to other sites you'll be restrained by the routing and the amount of traffic on the

site, and if you achieve 33K transfers you'll be doing very well.

Having installed a faster modem, it's

important that you set it up correctly. The setup section of the software will likely have a section which enables you to set the connection speed. It will have settings such as 4800, 9600, 19200, 38400, 57600 and 115200. Set it to 115200. This is not the speed at which the modem runs, but the speed at which it communicates with the host computer. Some comms software pops this figure up onto the screen during log-on, which can be misleading.

If you want to test your modem to see what data transfer speeds you are actually achieving, check out the Modem Speed-Test Page: http://hometown.aol.com/inventorr/modem/modem.html.

Born again... and again

If you're a ReBirth fan, check out the *Mac Toolbox* pages for details of the latest release. After you've read that, the following will make sense: Rebirth v2.0 for the PC does not include ReWire, although it will be included in v2.0.1. You will need Cubase VST 3.6 to use ReWire. Both are due any day now.

BUG OFF

ith a year to go to the Millennium (although we all know the Millennium doesn't really start until 2001), it's not too soon to start talking about The Bug. You will have heard about how airlines are not scheduling any flights over the period, hospitals won't be performing any operations over that time and how the world is basically going to come to an end one minute after midnight on the 1st January 2000.

on the 1st January 2000.

The problem is to do with the way computers store the date. Some computers, particularly older ones, store the date as two digits which are the last two digits of the year. It 'knows' we are in the 1900s so all it needs is the last two digits to give it the year. 98 means 1998, 99 means 1999 and 00 means 1900. Uh!

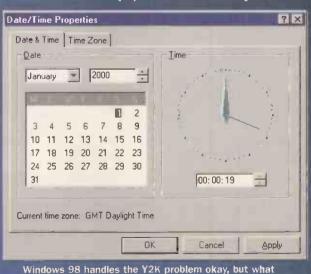
Oh! The problem is referred to as the Year 2000 problem or Y2K for short.

There are actually three areas of concern regarding Y2K – applications, operating systems and hardware. If an application only uses two digits to store the year, any value less than 99 is going to be assumed to be in the 1900s and not the 2000s. There's not much you can do about this, other than get an update from the supplier, but most users won't

come across this problem – it usually surfaces on custom software such as payrolls and stock control systems.

Operating systems such as MS DOS and Windows have the potential to handle the changeover incorrectly, but MS DOS 5.0 and later and Windows 3.1 and later work okay.

The hardware is the third potential problem area and the older the PC, the more likely it is to have a Y2K problem. It's all to do with the BIOS which reads the date from the internal clock during boot-up. If it only reads two digits instead of four there could be a problem. y2kfix is on the CD. If you want more information about Y2K issues check out the following sites: [http://www.year2000.com] [http://www.cinderella.co.za].



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Stand No. 204

Nov. 27,28 & 2

MIGA TOOLBO

News, advice, and software for Amiga users, compiled by John Kennedy

NEWS

The Amiga is getting a long- overdue update to its operating system. Release

Amiga OS upgrade

3.5 will be the final OS for the current range of Amiga computers. After that will come the next generation of Amiga hardware, based on an entirely new processor, graphics and sound hardware. The Release 3.5 features list doesn't make breathtaking reading; instead, it's a consolidation of what already exists in one form or another, usually thanks to thirdparty patches and applications. The key enhancements include:

- · support for Retargetable Graphics, through a central system requestor. This includes support for the latest A1200compatible graphics hardware.
- · support for Retargetable Audio. System support for sound means third-party hardware will be more useful and better supported. The new system promises not to break current AHI technology.
- · out of the box, the new OS will allow Amigas to connect to the internet.
- · enhanced printer support. New drivers will mean better support for today's lowcost high-quality colour printers.
- · enhanced file system and CD-ROM support. The Amiga will be able to access hard drives beyond the 4Gb limit currently Imposed. Of course, being considerably more effecient means that most Amiga users won't need the space, but if you plan on capturing audio direct-to-disk, this is a vital fix.
- · support for PowerPC-based coprocessors. Amiga owners wanting more speed will already have left the 68060

Software for your Amiga is on the CD-ROM cover disc - see pages 8 and 9 for details







Announcing REBOL~ - The Language of the Free-

Version 1.0.1 Now Ready for Download

A new type of computer language, and the Amiga is there right at the start

behind and moved to PowerPCs. The new OS will integrate support more tightly, ensuring the Amiga will never be faster. · user interface improvements, with new icons and on-line help in HTML format.

To make the most of the new OS release, you'll need an Amiga with a CD-ROM drive, hard drive, 68020, 3.1 ROMs and 4Mb of expansion memory. For better performance, a 68030 with 8Mb of memory and a graphics card is recommended. And to squeeze the very best from the new software, you'll need a PowerPC expansion, 16-bit soundcard, 32Mb of memory and an I/O accelerator. At the time of writing, the project is 9% complete, so there is plenty of time to save up for all that lovely new hardware.

Does the name Carl Sassenrath mean anything to you? It should, for he was one of the key software designers responsible for the Amiga's operating system. While the Amiga has been in limbo, Carl has been busy on a new project with the modest aim of redefining the nature of computer programming. This month saw the first public release of Rebol, an entirely new programming language.

Rebol programs are surprisingly easy to create and understand, and yet powerful enough to control everything from internet sites to file-level scripting languages. They look a little like a cross between Perl and Basic, with some ARexx thrown in for good

What makes Rebol special though, is the degree of control it provides over messaging and networking, making it potentially one of the most useful

languages currently available. Rebol is a cross- platform language, and so not only is it available for the Amiga, but for Windows, UNIX and almost every other computer and operating system too. If your Amiga is currently gathering dust, download the Rebol system and convert it back to a cutting-edge development machine. More from: www.rebol.com

New music software

Yes, there is still plenty of new and 'currently in development' software to watch out for, especially in the field of virtual instruments. One of the most impressive programs to date is GMPlay, a program which allows the Amiga to play standard MIDI files. How, you might ask, can the Amiga play standard MIDI files when it has no built-in MIDI hardware? The answer is, in common with programs such as Roland's Virtual Sound Canvas, the sounds are generated and mixed on the fly. GMPlay is basically a software wavetable synth for the Amiga, which decodes the MIDI files and triggers and mixes the necessary notes in real time. It's currently at version 1.3, and author Christian Buchner has plenty of plans for improvements.

Work is still progressing on the 303 Tracker program we mentioned a few issues ago. Jeroen Schellekens, the expert coder responsible for the project, has a new website which provides information and great example sounds to download.

If electronic percussion is your thing, check out Soft Drum. My grasp of the German language is limited to asking for beer, I'm afraid, but it's pretty clearly a drum synthesizer with support for MIDI files and effects. Information and downloads, from the website:

www.amigaworld.com/support/softdrum/



The Amiga has a growing number of virtual instrument programs

ONE LISTEN... You'll GET

the DRAWMER MX50

THE MIX Alan Branch:

"Comping some backing vocals in the computer and printing them on to multi-track, they were a little bit sibilant, so were processed with the MX50. With a few seconds fiddling they sounded much more natural. It's an excellent tool for recording or mixing. This box can reduce anything that is up in the sibilant range, from the fret string noise or twang of an acoustic guitar to a hi-hat within a loop. When looking for the final polish to problem vocals this should be in your rack.

SOUND ON SOUND Paul White:

"Not only is the MX50 a very good dedicated de-esser, it is also affordable when you look at what other manufacturers are charging for a comparable product...there can be few de-essers that work as smoothly and unobtrusively as the MX50, and which are so straightforward to operate. The floating threshold system is also extremely clever, as the input signal can vary over a wide range and still be treated effectively. If you suffer from sibilance problems, this is probably the best budget solution around."

AUDIO MEDIA David Mellor:

"The MX50 is very simple and to the point. All you have to do is find the frequency at which the offending ess sounds are at their worst, and dial in the amount of reduction you require. There is a definite need for a standalone de-esser, and the MX50 fulfils that need admirably, and it has two channels for when you are really having a bad ess day."

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Reduces only the level of frequencies above the value set by the FREQUENCY the rest of the frequency range control. This eliminates the ESSEs and leaves the rest of the frequency ranger. With AIR activated this offers the most transparent mode of operation.

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mode this determines the frequency split-point

Sets an average left/right signal level which is used as the FLOATING INK FOR STEREO OPERATION level which is used

to the output with no for before and after useful Routes input signal processing, comparisons. BYPASS



DRAWMEI

the whole signal, value set on the Shows how much gain reduction is being applied up to a maximum of 20dB. In FULL BAND mode gain reduction is applied to the whole signal, whilst in SPLIT BAND mode only frequencies above the value set

harmonics and increases transparency of the de-essing process.

AIR Adds back high frequency gloss in excess

signals in the selected frequency band as set on the FREQUENCY control. Reduces total signal level in response to FULL BAND DE-ESS

gain reduction that occurs when an ESS is detected. This Drawmer's Intelligent FLOATING THRESHOLD system that adapts to the dynamics and level of the incoming signal so there's no need Sets the amount of gain reduction that occurs when an ESS is detected.

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MAC TOOLBOX



NEWS

Mega iMac

The iMac Is still top of Apple's promotional activities and the company has reported that 278,000 iMacs were sold in its first six weeks on sale. That makes it the fastest-selling Mac ever. A survey of 2,000 iMac buyers indicated that around 40% were new Apple customers, 29.4% were first-time computer buyers and 12.5% are 'converts' who own PCs. The remainder already have a Mac. See last month's *Mac Toolbox* for more information about iMac.

Following hot on last month's news that Tesco are to stock the iMac, the Dixons Group are also to give it some shelf space in 58 of their PC World stores and flagship branches of Dixons and Currys. Apple will support the training of Dixons staff on the benefits of the iMac and the Macintosh platform. Apple also have a national retail presence through the John Lewis Partnership group of stores.

Apple up

Apple have reported a fourth quarter profit of \$106 million compared to a loss of \$161 million in the same quarter last year. Gross margins were 27%, which is fairly healthy. For the year, the company generated revenues of \$5.9 billion and net earnings of \$309 billion. It is the first time in five years that the company has grown faster than the computing industry.

OS 8.5 out

The latest system software for the Mac, OS 8.5, has just been released. It boasts over 70 new features, including Sherlock

Check out page 8 & 9 for details of the Mac software and samples on the cover CD



News, advice, and software for Mac users, compiled by *lan Waugh*

which lets you use multiple search engines on the net, improved network copy performance and PowerPCnative **AppleScript** which runs five times faster than before It also has a simplified installation



You can modify basic waveforms by drawing, and mathematically

process, incorporates QuickTime 3, and the feature you've all been waiting for – support for the new Euro currency symbol.

For the musician, there have been several problems reported in earlier versions of OS 8 with certain music apps which will reportedly be fixed in 8.5. OS 8.5 will retail for around £70. If you bought your Mac on or after 17th September you can upgrade for £14. The good news for iMac owners is that they can upgrade for £14 regardless of when they bought their computer. In the following weeks, all new Macs will ship with OS 8.5. We hope to bring you more detailed, information about OS 8.5 next month — watch this space.

Making waves

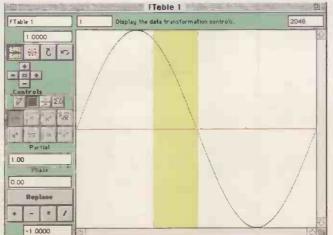
Here's one for all the synthesists out there. Grainwave is a software synth for the PowerMac. It uses an open architecture system which has three levels: patches, regions and operators. A patch is the highest level and is, as you would expect, a 'sound'. Only one patch can be open at a time. It can be played with the mouse, the keyboard, or via MIDI, and you can save patches to disk.

A patch contains one or more regions which contain sound-generating algorithms. It's roughly the equivalent of a voice on a synthesizer. Each region appears as a box in the patch window which can be opened to reveal a host of parameters. These are arranged into tabbed windows which include signals, controls, mixers, effects and structures.

An operator is a self-contained processor which performs a certain type of calculation and outputs a sample. Other operators can access the sample, process it and so on, allowing you to build fantastically complex sounds.

Here's a quick whiz around the sound-creation process. The main window is the patch window which is where regions appear. Opening a region allows you to edit it using the tabbed windows. For example, you might go to the Signals panel and add a waveform. This will be a sine wave by default, but you can edit it in all

The Structure panel shows how the modules fit together



manner of ways, either by drawing onto the waveform or with mathematical functions.

So you mess with this for a while. Next you go to the mixers panel and add a stereo output which sends the audio to the Mac's output. Then you choose Play from the file menu and play the sound. That's about as simple as it gets.

Grainwave has a mine of powerful processing functions. For example, in the signals panel, other operators include feedback FM, pulse, sample and random. There's also a grain operator which effectively gives the program granular synthesis capabilities - as you might expect from its name. Granular synthesis

generates a rapid series of short sounds, typically a few milliseconds long, that combine to form a longer sound. It can produce interesting sounds which change and evolve over time.

The Effects section includes filters, parametric EQ, delay, a waveshaper, a compressor, distortion and a pitch shifter. The program also supports a plug-in architecture which enables developers to add their own operators. You need a knowledge of C programming to use it, but at least it allows expansion through thirdparty developers.

Grainwave is a fascinating, if somewhat academic, program but it proved somewhat fragile on the review machine - a 210MHz PowerMac clone - and tended to create system errors of the sort which require a complete restart. Also, if it can't find an audio file it needs for a patch it won't let you cancel the Alert box. Bit of a nuisance. But if you like messing with synthesis, you'll find it a powerful program and well worth a play.

Grainwave is shareware and registration costs \$40. The program is on this month's CD along with the Reference manual, a Tutorial, the Plug-in Kit and loads of patches. You can also download them from:

ftp://www.mills.edu/ccm/grainwave/

BORN AGAIN, AGAIN...

teinberg have released ReBirth 2. Briefly (in case you've been holidaying in Angola for the past two years) ReBirth is a software emulation of two Roland 303 bass lines and a Roland 808 drum machine. It generates digital audio sounds at 16-bit 44.1kHz quality, and has a graphic front end which emulates the programming of these classic analogue

ReBirth produces is debatable. Overdriving it can produce a pumping effect which is arguably more useful, if a little limited in its practical application.

The PCF (Pattern Control Filter) has been

given extra patterns. The PCF is essentially a low pass filter with 54 preset patterns providing a range of filter envelopes which produce a range of rhythmic phasing and sweeps. There is only one PCF so it can only be applied to one

section at a time.

There are several new programming features, too. Along with the 909 comes a Shuffle feature and the Song Sequencer has been redesigned to allow you to adjust the knobs in Song mode whereas previously you could only do this in Pattern mode. However, this has led to a few changes in the general way Song mode functions so even seasoned users are recommended to read the Song chapter to assimilate the changes.

One of the major new biggies, however, is ReWire, which enables integration and synchronisation of ReBirth with Cubase VST v4.0. It enables up to 18 ReBirth channels to be routed to VST's mixer allowing you to apply VST effects to ReBirth output. It provides sample-accurate synchronisation between the two programs, allows them to share one soundcard and take advantage of multiple outs. Linked transport controls allow one program to control the other's playback and rewind functions. As a sort of side-effect, running the two programs in this way uses less system resources than running them together conventionally.

ReBirth, as users will know, is essentially a monophonic device. As a sort of byproduct of the integration with VST, by routing ReBirth sounds to different VST channels they can be panned in the mixer allowing you to create a stereo mix. The major downside is that you cannot use

ReWire and OMS simultaneously, so you can't use MIDI Remote Control of ReBirth while using ReWire.

If you're a bit of a hacker you'll also enjoy customising the ReBirth layout using Mods. You can change the appearance of the program and substitute your own sound samples. You could do this in earlier versions, but it is now considerably easier. However, customisation is not for the fainthearted (as the manual says) although the instructions do explain how to do it. (There are items on the customisation of ReBirth in issue 45 and 50 Toolboxes.) Four Mods are included with the program, and you can download others from the web.

The manual includes installation instructions and a brief tutorial, but the bulk of the instructions, alas, are on-line in Adobe Acrobat format. And you will have to read them to get the most out of the program.

For ReBirth Mac users running VST 4.0, this is an essential upgrade, without a doubt. If you don't have VST, the extra features such as the 909 section and the effects ought to be tempting. And if you don't have a copy of ReBirth yet, you may well be wondering why ever not?
ReBirth 2 costs £149. The upgrade is £39. More from Arbiter Pro Audio on 0181 207

On next month's CD, we'll bring you a taste of what Rebirth can do with a bunch of beats cooked up by Rhythm magazine editor Ronan MacDonald.



Routing Rebirth sections to VST's mixer



ReBirth 2 adds the classic TR-909 to its arsenal

Version 2 has several new features which will excite and titillate. One of the most interesting – and, apparently, most oft-requested – is the inclusion of a new requested – is the inclusion of a new TR-909 section. Seems some users weren't happy with just the 808 and wanted more. Now they've got it. The new 909 section looks like a 909 (of course!) and offers two Accent levels plus flams.

There are now four distortion units

enabling you to apply distortion individually to all four sections, although they all share the same front panel. There is also a Distortion Shape control which changes the character of the distortion. Low settings are similar to the distortion level in

rlier versions. There's a new compressor effect which can be applied to any of the four sections or to the master output. It evens out the volume level, as compressors do, although how useful this is with the sort of music

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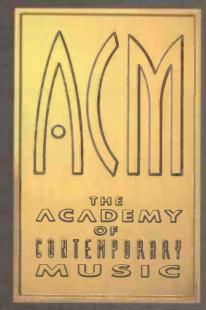
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HELP FILE

THE MASTERMINDS THIS MONTH'S HELP FILE TEAM



NAME: Ian Waugh OCCUPATION: computer journo CHOSEN SUBJECTS: computers, software, bungee-jumping



NAME: Paul Mac
OCCUPATION:
technical editor, *The Mix*CHOSEN SUBJECTS:
Apple Mac, hardware,
flat-planning programmes



NAME: Trevor Curwen OCCUPATION: producer/engineer CHOSEN SUBJECTS: processors, vintage sounds, vintage mags

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Minimum muddle

I want to buy Cubase but have a couple of questions before I spend my money. I have access to a Macintosh 8100/80 (96Mb RAM) and 7500/100 (50Mb RAM). Is Cubase 4 going to run okay on either of

Cubase 4 going to run okay on either of these Macs (I have heard that Cubase 4 requires a minimum of 120MHz), or is it a better idea to buy an older version of Cubase?

Sabrina, email supplied

The 7500/100 was launched in 1995. It has no built-in 2nd-level cache although this can be added, but again, it's well under par. These machines used the 601 PowerPC chlp too, which is not as powerful as the later 604 or even the 603 chips.

A lot of the processing power is required for VST's audio facilities so you may be able to run Cubase as a MIDI sequencer, and VST 4 has a facility to disable the audio to conserve CPU power.

Although you don't say so, we assume you want to use VST's audio facilities, in which case this is of little use. In any event, even if the program does run, the audio facilities will be so cramped and limited that you're likely to find it frustrating in the extreme.

Steinberg generally don't keep much of a stock of older software (upward and onward and all that), but you may be able to pick up an

older version second-hand. Again, if you want to use the audio facilities, early versions of VST still require a nippy machine. You have to go back to version 3 to find a recommendation for a 90MHz PowerMac. The more power you have, the more audio tracks you'll be able to play and the more effects you'll be able to apply.

If you don't want audio facilities then seek out a pre-VST version of Cubase. Otherwise I'd suggest you invest in a faster Mac before VST 4. lan Waugh



If you want Cubase VST, you got to have the power



The minimum recommended spec for Steinberg's Cubase VST 4 is a 120MHz PowerMac with 256K 2nd level cache.

However, even with this you are urged to use a faster machine, and Steinberg's recommendations are not to be taken lightly, that's for sure!

A search through Apple's archives didn't unearth a 8100/80, although there were 8100/100, 8100/110, and 8100/100AV Macs. These have 256K 2nd level cache but even so, they are a little under spec.

The Help File, The Mix,

Future Publishing, 30 Monmouth St, Bath BA1 2BW email: themix@futurenet.co.uk

Past masters



I have bought one or two copies of *The Mix* lately and I particularly enjoy the sample CDs on the cover. However, I

have unfortunately missed out on most of the past CDs so far and would like to know if there is any possible way of getting hold of these.

Matt Becker, Oxford



Since the Pro Sample CD series began last January, back issues have been very much in demand. As a result, we've only got the

following back issues left: January '98 (Vocals), June '98 (Drum Loops), Summer '98 (Drum Machines), September '98 (Drum Loops), and October '98 (Male Vocals). This list was correct at the time of going to press, but there's no guarantee that it'll stay that way for very

long, so you'll have to get in there fast. Of course, if you want to avoid future disappointment, get a



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Paul Mac

Mastering medium



I have now reached the stage where I want to put my music onto a 2-track master. At the moment I am just putting it onto

tape with a hi-fi tape deck. It's crude, but I am still learning. But I want more! Should I buy a professional mastering deck like the Tascam 102 MkII, opt for CD, or even another format? I am only using keyboards and sound modules.

Trevor Senn, email supplied



While the Tascam 122 MkII is a fine machine and should give better results than a hi-fi cassette deck, the proportional

increase in quality probably does not justify the outlay. The limiting factor here is the medium of the compact cassette itself, rather than the machine itself.

Cassettes are a great way to get your music out and about. The problem arises when your master is a cassette and you are then making duplicates from that cassette onto other cassettes, with the inevitable degradation in quality. If you feel you need to change your mastering machine, try a format other than cassette and relegate your cassette deck to running off copies for others to listen to.

The higher-quality mastering options open to you are DAT, CD-R, and MiniDisc;

all of these are digital formats and each has its own set of pros and cons.

DAT machines are found in most professional studios, are easy to use, and the tapes are reasonably priced. MiniDisc is not generally used for mastering in professional studios, but may offer you practical advantages over tape; notably random access. CD-R is getting more affordable and it's always nice to have a CD of your music, but bear in mind that you cannot erase what you have recorded if you make a mistake when mastering.

Having said that, the cost of Pro CD-R discs is very low, lower than 'high quality' cassettes, in fact. The more expensive CD-RW discs can be erased and used again, but these will not play on most of the current generation of CD Players, though that shouldn't be a problem if you're making CDs to play back on your machine for your own benefit and for copying to cassette for others. Have a look at the CD-R round up in last month's issue of *The Mix*. That should give you a good idea of what's available.

Trevor Curwen

Going loopy



I am a profoundly keen to begin creating house and garage tracks. I have messed around with a wave studio on my

computer, but it doesn't really take me as far as I would like. Basically what I require from a program is: automatic calculation of BPMs; a friendly and easy-to-use interface; easy-to-follow manual; the ability to paste together various loops which the program will then automatically put in time; and the ability to sample and EQ a recording. If there is a man's voice in a mix can I sample just that voice without sampling the backing track?

Paul Taylor, email supplied



What you want is Sonic Foundry's Acid, which we looked at in *PC Toolbox* in issue 53. It's basically a sequencer for

samples and sample loops. Each track holds a different sample and you can have as many copies of it, or sections of it, on a track as you wish. You can use samples recorded at different tempos and the program will play them all at the same tempo by adjusting their timing. It can make some pretty heavy tempo changes without affecting the quality too much. In other words, you can mix just about any sample with any other.



CD-R keeps getting more and more affordable. This is the Marantz CDR630 (£749)



Your guide to the technical jargon contained within the Help File

AIFF

Audio Interchange File Format. A standard file format for digital audio, originating from Apple, and therefore popular on Macintosh-based systems. Does, however get used for other platforms, especially the Atari

Cardioid

A particular microphone polar pattern (area 'listened to'). Describes a heart shape pointing away from the capsule

CD-R

Recordable CD. Achieved by 'burning' data into a special coating on the CD. The newest incarnation is CDR/W (Read/Write), which can be erased, as well as written

DAT

Digital Audio Tape. A stereo, digital tape format, originally developed as a consumer format, but taken up as a mastering format by the audio industry. Uses a special rotating head assembly

EQ

Equalisation. Frequency (pitch) selective filtering of audio in order to boost or cut levels inside the specified frequency range (bandwidth)

Loops

Convienient audio segments that when played over and over are rhythmically coherent. A single loop might be a one-bar drum pattern, for example

MPEG

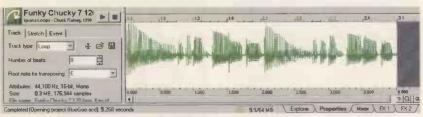
Moving Picture ExpertsGroup. This working group, part of the International Standards Organisation, have put their name to several types (layers) of video and audio data compression

Parametric

Type of equalisation where gain, centre frequency, and bandwidth are all adjustable

WAV

A digital audio sound file standard



Itching to get into house and garage? Try Sonic Foundry's Acid

There are a few criteria it doesn't meet. It can't record and it can't manipulate samples by chopping out the background and leaving a vocal. This is actually a rather specialised process requiring specialised gear, which you probably won't find outside a studio. We do have news of a sonicWORX plug-in from Prosoniq called Pandora that will do this sort of thing. Otherwise, with a good parametric EQ you can cut out the bass and the bits above the vocal to reduce the background material, but it won't eliminate it entirely. It's actually easier to get rid of the vocal and leave the background, but that doesn't help much, does it?

The manual for Acid is fine, although it's online – the program is easy enough to use and you won't have to refer to it much. Something else you may consider a disadvantage is the price. It costs £249 from SCV London (0171 923 1892). But if you're into loops, you'll love it.

A cheaper alternative is a program like MixMan Studio, featured in *PC Toblbox* in issue 51. It's not half as 'pro' but it's still good fun and it's only £39.95 from Time+Space (01837 841100).

Ian Waugh

DIY mic masking

I use an AT4033a to record vocals and acoustic instruments, but being so gorgeous and sensitive, it tends to pick up my

MDMX-4's fan rather well, even from the other side of the room. Is there any way of counteracting this, other than sound-proofing? I guess it wouldn't be safe to disconnect or modify the fan, but it's a bit of a problem, and I can't record vocals in other rooms. Bit of a long shot, really.

R. Burridge, London

Without actually hearing it, I can't be too specific; but yes, it would be unwise to disconnect the fan. You've probably already tried the

obvious things, but they are worth mentioning anyway. First, check that the fan is working normally as the manufacturers intended. If something is broken, misaligned, or dusty, you could be getting more noise than is necessary. Next check that the fan isn't setting off any sympathetic resonances in adjoining furniture and so on. Try sitting the MDMX4 on a rubber mat and see if it helps.

If a proportion of the fan sound is low frequency, your 4033's high-pass filter,

which operates at 80Hz, should get rid of some of that, and as the 4033a has a cardioid response, make sure that the capsule is pointing in the opposite direction to the MDMX4.

If none of these things alleviates the problem, soundproofing is the next step, and as permanent soundproofing is not practical, try using movable acoustic screens to isolate either the microphone, the recorder, or both. Rig up some sort of framework and hang heavy curtains, blankets, duvets, or sleeping bags on it. This should provide a degree of isolation between the microphone and recorder. The Argos catalogue provides a low-cost frame



It's the sensitive sort, the AT4033 mic

in the form of a bedroom tidy rail (page 171) and these can be easily dismantled and stored when not in use. Don't laugh, I've been using the two vertical sections of the Argos double tidy rail, hung with velvet curtains in a V shape behind the mic, and it does help.

On the other side of the room, you could just stick a cardboard box lined with foam rubber over your recorder for short periods while recording sensitive parts.

The other things to look at are the amount of pre-amp gain you are using, and the amount of compression, Try a little less, and see if that helps, and try closer miking. Lastly, although I would not advocate the use of a gate when recording, a single-ended noise filter, like the Drawmer DF320 can be used to filter out high frequency noise.

Trevor Curwen

Atari users unite!



Do you have a listing of Atari user clubs in the UK? I would be very intersted in joining one. Cam, email supplied

There are lots of Atari user groups in the UK, but to find out if there is one in your area, contact The UK Association of

Atari User Groups (UAAUG), 37 Garwood Road, Yardley, Brimingham, B26 2AN. Tel: 0121 786 2991. Email: sidcelery@cix.compulink.co.uk. If they

sidcelery@cix.compulink.co.uk. If they cannot help you out, try your local library. Or you might like to consider starting up a user group yourself. Once again, the UAAUG will be able to help you out here with support, contacts, and advice.

Danny McAleer

FAQ: MPEG CONVERSION

'm in the habit of dundering ting net for dram loop, samples and long use to downloading AIFE and WAVs while the boss isn't looking (or listening as a blook trip hop bursts from my PowerMac). I have recently discovered a great site which has MP3 loops that download in a trice but then play via Real Audio Good of RA has no Save facility and I'm unable to get them into my sampler as RAs. Do you know of a bit of shareware that we not convert RA to WAV or AIFF (and don't say SoundApp because it doesn't). Steve, email supplied

e shall refrain from commenting on your work habits and only hope your boss doesn't read The Mix, on it's likely you'll no onegate spending all your time listening to loops.

Noticep: the disciplination of the content of the conten

SoundApp should convert some MPEG files, although it has been reported to have problems with certain files, specifically Shockwave Layer 3 files, But according to our research MPecker Drop Decoder ought to do the job, it converts MPEG or MPEG Layers 1, 2 or 3 files to AFF format You can find a copy on the cover CD of our Bumper Software issue 48. You can also find the latest version at: https://www.anime.net/~now/mpeckers.html.

find a copy on the cover CD of our Bumper Software issu 48. You can also find the latest version at http://www.anime.net/~go//mpeckers.html.

There are a couple of other MPEG utilities on the aforementioned CD. There aren't many free/shareware MPEG encoder/decoders for the Mach although I think I spotted another one before my browner went pear shaped. C'est la surfing vie, eh? Happy looping.



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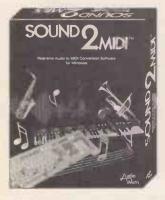
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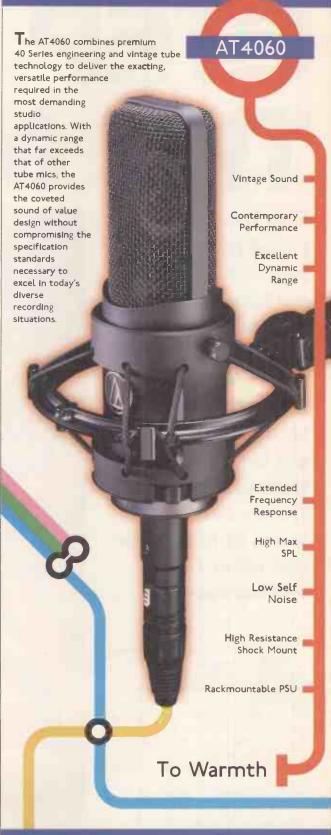
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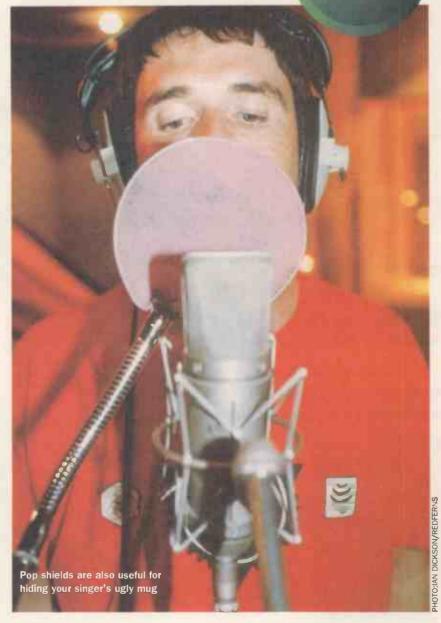
STEP UP TO THE MIC PARTS

Like it or not, it's usually the vocal performance that decides whether your tune will be a hit or a miss. So we're kicking off a new series that'll show you how to get the best vocal tracks. This month, Trevor Curwen looks at mic types and other frontend hardware

sk people what the most important element in a recording is, and most will agree that it's the vocals. And no matter how good your music is, a sub-standard vocal can kill it quicker than Prince Naseem can duck n' dive.

Whilst they certainly help, top-quality microphones and state-of-the-art recording equipment are not a prerequisite for a great vocal recording. Excellent results can be obtained using more modest equipment. Nor do you need the voice and talent of Frank Sinatra or Aretha Franklin – with a little patience and the use of a few simple techniques, any singer can end up with their best possible recorded vocal.

Over the next few issues of *The Mix* this series will cover the basics of recording vocals, with techniques, hints and tips to help get the best possible performance



recorded with the best possible sound. So let's start from the beginning — what equipment to use, and how to set it up.

Microphones

Both condenser and dynamic microphones can be used to record vocals. Generally in professional studios,

large-diaphragm condensers are used, as they have a refined sound with a wide dynamic range and extended frequency response. Many excellent vocals, however, have been recorded on commonly available dynamics like the Shure SM58.

Choice of mic is down to what you have

available, but in a situation where you have several different models, make your choice based on which mic suits the singer's voice for a particular song. Many engineers and producers will put up several mics initially to check which one sounds best.

Having chosen a microphone, it's preferable to mount it on a stand. Most mics come supplied with a mount, and the more expensive ones will have a suspended cradle mounting to Isolate the microphone from shock and vibration. It is possible to record vocals using a hand-held mic like an SM58 but, in terms of the sound being recorded, there are several reasons why this is not ideal.

Firstly, there is handling noise to consider – the sound of the singer moving their grip on the microphone and moving it around will be picked up. Secondly, unless the singer is very experienced with mic technique, the mic will be held at different distances from the mouth at various times, resulting in small changes in timbre and level. And, thirdly a hand-held mic rules out the possibility of using a pop shield.

Now, having pointed out the drawbacks, it must be said that there will always be some singers who feel most comfortable using a hand-held mic. In this case, recording with a hand-held is the way to go, because a relaxed and confident singer is going to turn in a better performance than one who is uptight about having to stand still and sing into a standmounted mic. A slightly less-thanperfect sound is a small price to pay for a great vocal performance.

Arctic rolls

The next thing to consider about a microphone is its polar pattern (see diagrams on p. 112). Many mics, especially less expensive ones, have a fixed polar pattern, usually cardioid. Others have a switchable polar pattern, but unless you are after a certain effect, switching it to cardioid is preferable. Cardioid mics are the norm for recording vocals as they accept sound from directly in front and reject much of what comes from the back and sides. This is important in the context of the room where the vocal recording is to take place, as reflections from the walls may be picked up by the microphone, adding some of the ambient sound of that room to the vocal sound. This would obviously be more pronounced if an omni pattern was selected on the mic.

Now, there may be occasions where you will want to record in a particular room to pick up the sound of the room or the reflections from, say, a window or wall in

the room, if that will suit the track you are working on. But in most cases it is probably best to record a vocal in a dead-sounding area and add any ambience at the mixing stage using a reverb unit, because once ambience is recorded with a vocal, you are stuck with it

Some studios have acoustically-treated vocal booths, but if you have to record your vocals in a normal-sized room, a dead area can be created by siting acoustic screens around the microphone. The DIY approach to this for home recording is to hang

Kurt Cobain: his sound may not have been perfect, but his performances were supreme

curtains, duvets, blankets or something similar around the singing area. A couple of self-assembly bedroom tidy rails from the Argos catalogue (page 171) make an inexpensive and practical framework to hang material on and construct a functional vocal booth. These can be disassembled and stored away when they're not needed.

6" is ideal

A singer's distance from the mic can make a lot of difference to the sound recorded. A distance of 6" or so is perhaps a good starting point, although experienced singers will work the mic by leaning into it for some passages and moving back for louder sections. Sing too far away from the mic and more of the room ambience will

be picked up; sing closer to the mic and more of the proximity effect comes into play. Proximity effect is a pronounced boost in low frequencies which results in the voice sounding bassier when singing very close to the mic, and it can be successfully exploited by an experienced vocalist.

It is best to try to keep a vocalist at a consistent distance from the mic, particularly when doing multiple takes and where he/she has to leave the booth to listen to playbacks and then go back and

sing the odd line. If the same distance from the mic Is maintained, variations in volume and timbre between takes is minimised, and dropped-in lines will sound more natural. Once a singer is at the optimum distance from the microphone, mark the position of their feet on the floor with gaffa tape so that they can go back to the same position each time, and don't forget to mark the position of the mic stand at the same time in case it is accidently moved.

The height of the microphone on its stand in relation to the singer is also a factor to take into consideration. Some like to sing up to a mic suspended a little higher than them, but this can strain the voice if the head, neck and shoulders are stretched up. A mic that is suspended too low is also not ideal If it causes the singer to hunch over, although this at least puts less strain on the neck and shoulders. An advisable starting position is to have the capsule level with the singer's mouth and then move it if necessary to suit the singer's most

comfortable stance. Having the capsule level with the singer's mouth creates its own problems, as it is more susceptible to blasts of air, but there are methods to counter this, the most Important of which is the use of a pop shield.

A pop shield is generally put up a couple of inches in front of the mic and its basic function is to stop plosives, which are the popping sounds from blasts of air usually produced by singing the vowels 'B' and 'P'. The pop shield also serves to protect microphones from spit and moisture produced by the singer.

Commercially available pop shields, which usually have a gooseneck and a clamp allowing direct fixing to the mic stand, are fairly expensive. However a home-made substitute can easily be

constructed from a pair of tights stretched over a bent wire coathanger - just remember to wash them first if they've been previously worn!

If you cannot attach the pop shield directly to the mic stand, try using a second mic stand purely as support for the pop shield. One useful trick is to fix a pencil vertically down the centre of the pop shield, as this tends to dissipate the energy of blasts of air before they reach the mic. If popping problems still persist, try getting the singer to sing slightly to the side, above or below the mic. If a singer has difficulty doing this and needs to focus directly on the mic, put up another mic that is not plugged in and site it right next to the real vocal mic. Then let the singer sing into this dummy mic.

Whisper to a scream

Microphones have to be connected to a pre-amplifier, and there are two options available. Connection can either be into the mic amp in a mixing desk's input channel, or into a standalone mic pre-amp. These provide a higher quality signal path to the recording medium than that provided by the average mixing desk. A budget mixing desk will have identical mic amps on all of its input channels and these are built to a price, so a standalone pre-amp, relatively more expensive than one desk input channel, ought to have better quality components and a cleaner signal path. Also, a shorter signal path to the recorder is usually provided by a standalone preamp which can connect directly to it, whereas the signal through a mixing desk may have to pass through input channel, group busses and patchbay.

Compression is near-essential to even out the performance when recording vocals. The human voice has a huge dynamic range (from a whisper to a scream, to use the old cliché), and a compressor will 'squash' that range a little. Don't go over the top, though; reducing the peaks by a few dB ought to be sufficient. Once compression is recorded you can't take it off, so it's best to err on the side of caution. More compression can, of course, be added as needed at the mixing stage.

Several of the standalone pre-amps on the market have their own compressor built in. When recording through a desk's input channel, a compressor should be connected via the channel's insert points.

EQ can also be applied when recording vocals, perhaps to remove a bit of nasal honk from a voice, to brighten up the sound a little, or, most usefully, to filter out some of the bottom end of the spectrum. Real low frequency sounds, such as outside traffic rumble or the sound of the singer's feet moving on the floor can be transmitted up the stand to the microphone, and an increase in bass due to the previously mentioned proximity effect can also be a problem. To get

MICROPHONE POLAR PATTERNS A *cardioid* (or unidirectional) mic is so named because of its heart-shaped response. It will pick up sound mostly from the front. Dynamic cardioid microphones are popular for vocals because of their off-axis exclusion, and robustness but condenser cardioids are much better for the studio vocalist. A figure-of-eight microphone picks up sound from both front and rear of the diaphragm, but because the opposite sides are out of phase, side-on sources get cancelled out. Figure-of-eight microphones have the potential for very accurate recordings. This is the polar response of an 'ideal' omni-directional microphone. In practice, the response favours the 'open' side of the capsule at higher frequencies, so off-axis sources can be dull. Omni mics are particularly resistant to wind and handling noise. A hypercardioid microphone mixes the cardioid and figure-of-eight patterns to produce a 'thin' cardioid with an out-of-phase area at the rear. Because of this, the hypercardioid is good for reducing the effect of reflected or off-axis sounds, such as room reflections.

around this, switch in a high-pass or bass roll-off filter. Most mic pre-amps and desk channels, and some mics, will have a switchable filter operating at somewhere between 75Hz and 100Hz, cutting out most of the low end below that figure.

EQ should, however be applied with caution. Adding too much top-end boost, for example, can often exaggerate the sibilance of the voice. It's best to record a vocal flat, but if you feel the need for EQ, use it sparingly. And while you may be tempted to use a noise gate or downward expander to cut out noise between phrases, our advice is not to. It's too easy to chop the end off notes and make the vocal sound unnatural. Processing of this sort should be left to the mix stage, when time can be taken to set it up accurately.



THE

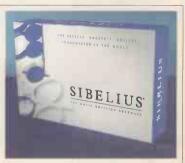
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Condenser or dynamic?

Although there are other designs, the microphones most commonly used in studios today fall into one of two categories - condenser or dynamic. A microphone is simply a device which converts acoustic energy (sound waves) into electrical energy, and the dynamic and the condenser each do that in their own way. This has consequences for the sound produced, and hence the use to which each is put.

A condenser mic, also known as a capacitor mic. has a thin diaphragm that is supported around its rim at a small distance from a thicker backplate. The theory is that the two form the two electrodes of a simple capacitor, and are oppositely charged by the application of a polarising voltage. When the diaphragm moves in response to sound waves, the spacing of the diaphragm and backplate (and hence the capacitance) will vary, and this is used to generate the output voltage.

Because a voltage has to be supplied to the backplate and diaphragm, a mic of this nature needs a power supply. This usually comes in the form of 48V phantom power supplied from the mixing desk or mic preamp. Condenser mics are more difficult to manufacture than dynamics and are therefore more expensive; they are also not as rugged and are more susceptible to changes in atmospheric conditions, so should be stored, and handled, with care.

In use, a condenser is generally more sensitive than a dynamic and has a better transient response. It also has a wider frequency response, so can pick up more top end than a dynamic, making it very useful for instruments like cymbals. acoustic guitars, and vocals.

Condensers can be built with two diaphragms, and by changing the voltage of the second diaphragm in relation to the





first, the mic is capable of several different polar patterns - from omni-directional through cardioid to figure-of-eight. Some condensers are designed with a valve in the circuitry; these do not need phantom power as they usually come with their own power supply. Valve mics provide a different tonality than the standard condenser, with an added warmth in the sound.

Another variation from the standard condenser design is the electret mic, which uses a permanently charged electret material to charge the capsule. These mics are usually cheaper than condensers and can often be run from a battery if you do not have a phantom power source.

Dynamic mics work because of the electromagnetic interaction between the field of a magnet and a moving coil conductor. A coil of wire, surrounded by magnets, is fixed to the back of the diaphragm, the motion of which results in the coil cutting through the magnetic field, inducing an electric current in the coil.

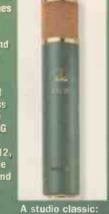
Unlike condensers, dynamic mics do not require any power supply. They are more robust, and can cope with high sound pressure levels. Because dynamics are pressure-operated, their polar response can only be either omnidirectional or cardioid, and most handheld dynamic vocal mics are cardioids. Dynamics are also limited in their high frequency response, some having an upper limit of 16k (a good capacitor will go up to 20k).

Mics designed for stage use will often have a bass end roll-off built in to counteract the proximity effect, and many have a presence peak built into their frequency response somewhere up around 5k. This is designed to help vocals cut through a mix. Some very well-known rock singers record their vocals with dynamic mics for that particular punchy sound. M

Next month we'll look at setting up a headphone mix, and getting the best out of a singer.

VOCAL MICS

£2,000 + Some 1950's valve vocal microphones are still in use today, The Neumann U47 and the AKG C12 are cla<mark>ssi</mark>cs and sell for well <mark>in exces</mark>s of £3,000 on the reissue of the C12, in the form of the C12 VR, M149, and the soon-to-be-released M147



the AKG C12

Below £2,000 The Neumann U87 and AKG C414 are the two most common vocal condensers used in studios today.

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Neumann U87...



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Welcome to the hallowed depths of the A&R Dept, where Nick Serre and his record industry pals scrutinise your demos for signs of musical and production talent

KERSLAND SOUND SYSTEM THE MANY SPLENDID THING



ell, I've never had a pair of underpants land on my desk before. Comical Underwear Records is home to Kersland Sound System, and their self-produced

12-track demo has had them hailed as 'Glasgow's answer to the Chemical Brothers' by the Glasgow Evening Times. Quite an accolade, and one that is not a million miles from accuracy. Lo-fi is the order of the day, and with funky, squelchy ramblings, it's an uplifting, if slightly esoteric offering. There's a big '80s influence at work here, which is wise, given the current musical climate. That said, a few bits are perhaps a little too dated; there are some synth sounds that are in danger of being in the kingdom of cheese. This may be deliberate and some add a reminiscent vibe to the proceedings, but they're too damn high in the mix, and detract from what is, essentially, some great songwriting and production talent. Over the 12 tracks, the mood swings from upbeat house to dark drum 'n' bass, but never loses the distinctive Kersland Sound System ethos. Quite an achievement, and one that someone big, somewhere big, ought to pick up on.

Verdict: Glasgow's finest......7/10

More from: Jonathan Smallwood Tel: 0141 337 1993

SLICK WICKED NATION NO REST FOR THE WICKED



rban
Dance
Squad
and FFF spring to
mind here. Hellfor-leather guitars
and funky breaks
collide on this 64minute opus with
serious attitude.

Precious little information is provided on Silck Wicked Nation, so it's difficult to ascertain how this was recorded. I'd hazard a guess, though, that some live work has enabled the posse to hone their style and translate it into a studio environment with apparent ease. Versatility is also high on the agenda: 'Victim Of Love' and 'Stupid' are tear-jerking ballads, the latter with the most gorgeous acoustic geetar, whereas 'Mama' is a jazzy workout, replete with lush walking bass and swelling wah guitars before overdriven axes enter the fray along with a pumping Hammond. Beautiful, 'Opportunity' is perhaps a little close to the Guns'N Roses camp, with predictable chord choices and orchestral elements, but then the vocoded vocal and funk bass make up for that times seven. This is a professional package and one hell of a calling card to boot. Get in touch chaps, 'cos there are several people I'd like to put in touch with you..

Verdict: Slick and wicked, obviously......8/10
No contact details supplied

A&R CHECKLIST

We receive a mountain of tapes every month, so to maximise your chances of having your demo reviewed (and if you're really good, getting on *The Mix* CD) you need to provide the following:

- Decent quality cassettes, preferably chrome (type II), CD or DAT
- A kit list of the gear used to produce the demo
- A biography of the act. We want to know all about you
- Artwork. This can be a picture of the act, or a groovy graphic
- Lastly, send us cool music that deserves to be going places...

Unsolicited packages might be accepted at the following address:

A&R Dept, The Mix, Future Publishing, 30 Monmouth St, Bath BA1 2BW

CARGO FUNK DEMO



s part of an evergrowing trend, Matt Booker, a.k.a. Cargo Funk, has been DJing the circuit for eight years, and it's only the last two that have seen him take the sometimes dangerous plunge into production. The glory is (in Matt's case) that he has the

ability and the influences to pull it off with authority. The tracks here may be a little too disparate for a four-track sampler - record companies are not gonna be given a strong enough idea of the thinking behind Cargo Funk. That said, however, there's a definite identity going on. It just needs to be honed for A&R guys and girls. It's very difficult to cite the influences that have gone into this production, which earns it extra brownie points. As do the sometimes quirky arrangements and orchestrations; vocoded voices meld with manic industrial clanking, and poppy ditties dive headstrong into funk arrangements. Matt has the live arena in mind too, and is adamant that the material can be reproduced live, which I, for one, can't wait to see. This may well also be where A&R attraction could come from, as well as the three compilation albums that 'Indica' has been selected for, and the fact that a previous incarnation attracted positive comments from the likes of Sasha. Digweed and Oakenfold. Not a bad start by anyone's criteria. Get on that road, matey.

THE MUSE THE BEST OF POSSIBLE WORLDS



t is the philosophy, rather than the sounds of bands that we try to live up to." So sayeth The Muse. Their particular muse, by their own admission, is as

diverse as Lenny Kravitz, U2, Massive Attack, Deep Forest, and Depeche Mode. Certainly on opener 'Insane', there's a distinct DM vibe. Laid-back, with moody voices and timbres, it's hauntingly evocative, but peters out a bit too quickly. Shame. 'A Reason To Walk Out' is where the aforementioned Kravitz-isms come out, with lush guitars and more searing voices making for an uplifting anthem. Richard's voice (assuming it is his dulcet tones gracing the demo) are wonderfully distinctive, and could be the clincher in getting label interest. To that end, The Muse should try to make more of the vocals, to really stand out. Try some subtle delays for a start, and do some experimenting to see what you come up with. Other than that, the arrangements are spot-on for the pop style the guys seem to be aiming for. The Muses' previous guise, Avadorme, even atrracted some positive comments from Sony S2 and The Mix columnist Sam Winwood. My advice? Keep writing and strengthening your style, and maybe get out live. It can really help to hone strong tracks even further.

Verdict: Best of all worlds......8/10
More from: Richard Levy Tel: 01926 435163

THE BORIS YELTSIN LOVE XI THE DRIVEN EP



've got to give these guys a mention on the strength of their name alone. Fortunately the tracks supplled are on a par. With a minimal set-up and a stint in a

studio. The Boris' have managed to carve an identity encompassing industrial, rock and dance influences that is completely endearing. 'Under Your Skin' hints at TackHead nuances; a kind of Seattle-meets-UK hardness that so many fail to capture properly. The guitar antics at work can be likened to Prodigy forays, and demonstrate the abilities of Gash Anderson, who has obviously absorbed an abundance of influences, and makes no bones about ft. Inventive effects and bizarre playing antics (a must live, I'm sure) set the mad tone. 'It Gets Better' combines reverse effects and scratching with a catchy chorus, but, sadly, it's nowhere as strong as its precursor. Which is a pity, because the Lovers' identity is all over it. Back to the drawing board for that one, chaps! Samples abound on The Driven EP, and although they fit the remit well, I can't help thinking that the lads could come up with original ideas of their own. Influences are well and good, but don't go over the top. That's something they really need to concentrate on if they are to win favour with the geezers with the wonga.

DEMO OF THE MONTH



HEADBOUND DEMO

ive shows, DJing, and studio antics are common exploits for Bath-based trio Headbound. Imagine Beck in his mellower moments, combined with smatterings of acid jazz, esoteric sampling, and an absorption of the best of British cool, like Brand New Heavies and Stereo MCs, and you're somewhere close to

defining Headbound. However, categorisation is something that should really be avoided with these guys. Plagiarism is a word I suspect they're not too familiar with, as demonstrated by the six disparate tracks offered here, 'Rude Awakening' and 'Sour Grapes' are masterpieces of originality, with catchy-as-hell vocal hooks, and orchestrations of the highest calibre, 'Recluse' (check it out on the CD), is a bit more of a departure: eerie and evocative, the swirling textures, ambient drums, and poetic vocals, allied with strange samples and generally fucked-about-with harmonies, are awe-inspiring.

The multiple vocals going on are finely orchestrated, and epitomise Headbound's attitude of suitable simplicity. Mainstream? Perhaps not, but it's certainly the kind of stuff to set festivals and live gigs on fire.

In the hands of the right producer, Headbound deserve major success. Let's see if the industry agrees... More from: Sil Willcox Tel: 01225 336653 email: headbound@aol.com

INDUSTRY VERDICTS

wouldn't go as far as to call this an acid jazz outfit, but Headbound certainly pick up from where the likes of The Young Disciples, Urban Species and Galliano left off. To some people, even being mentioned in the same breath as acid jazz would be a good enough reason to seriously consider taking up a career in accountancy, but you cannot deny that Headbound do have a collection of very well-crafted and flawlessly performed tunes. Refreshing, if not neccesarily groundbreaking.

• Sam Winwood, A&R, Sony S2

reat production, smooth and funky with lots of interest. There are some strong songs, but this needs a dash of something special to push it through – I wouldn't expect to recognise a new Headbound track immediately, like Jamiroquai or Finley Quaye. Building a fanbase by playing places like the Jazz Café and low-key festivals, and promoting directly to regional specialist radio with CD-R, and so on, would be my strategy – and I'd change the name.

• Stu Lambert, Partner, Zip Dog Records



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Soundtracks Project 8 mixing desk 24:8:2 with meter bridge, as new £1,195. Tel Richard on 01323 736017 (East Sussex) or 07771 628473

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Spirit By Soundcraft Delta 24-channel frame, four groups, six auxes, stereo master, loaded with 18 deluxe I/Ps and one stereo line I/P. A top class superbly built classic, lightly used on film and classical work, and well cared for, over 23K new, now £1,500 ono. Tel 0171 209 0209 days or 0181 771 8718 evenings or e-mail: 16-35@msn.com

Spirit By Soundcraft Studio 16, ten months old, mint condition, unused for five months £700 or exchange for Mackie 1604VLZ (PS: the Spirit's too heavy for my studio). Tel John on 0181 546 2907

Spirit By Soundcraft Studio LC 24:8:2, eight-buss, eight aux sends, seven stereo effects returns, unrealised project, never used, still wrapped and boxed £1,100. Tel Dannie on 01902 838543

Studer A80 eight-track tape machine and BEL noise reduction unit plus tapes £1,000 ono. Tel Robin on 0181 671 7573

Studiomaster Proline Gold 24:8:16:2, 40 inputs on mixdown with full mIDI mutes customised with leather armrest along front, plus Atari 1040 with Cubase £650. Tel Shaun on 01782 563149 or e-mail: shaunlowe@hotmail.com

Tascam 38 eight-track tape m/c (half-inch tape), also one reel tape, Bel NR unit, connecting leads and remote control £450. Tel Paul on 01462 436804. (Hitchin, Herts)

Tascam DA20 MkII DAT recorder, absolutely brand spanking new, never used, with full guarantee intact, full packaging £625. Tel 01543 467239 (Midlands)

Tascam DA20 DAT machine, immaculate condition, SPDIF connections £350. Tel 01248 670490 (North Wales)

Yamaha 01V new digital mixing desk, built-in effects, dynamics processors on every channel, motorised faders and MIDI automation, brand new, boxed, unwanted gift £1,230 ono. Tel 0181 969 6982

Yamaha 02R analogue expansion card, eight balanced in/out, allows connection of analogue multitracker or other equipment, never used, surplus to requirements £400 ono. Tel Fraser on 0973 295039

Yamaha MT50 four-track, four-channel simultaneous record, DBX noise reduction, sync out, limited use, good condition, includes manual, PSU and p+p, only £160. Tel Jules on 0131 225 4609 (Edinburgh) days or 0131 667 5318 evenings or e-mail jules@outdoortrading.com

Yamaha ProMix01 and XLR to jack eight cable loom, immaculate condition £850 ono. Tel Andy on 0161 773 5642 after 5pm

Yamaha Promix01 programmable mixer, only six months old, mInt condition, cost £1399 offers around £800. Tel Paul on 01332 737850 (Derby)

Yamaha RM800 recording mixing console 16:8:2, three aux sends, three-band EQ with swept mids, home studio use only £425. Tel 01647 231305

AMPS/PA

Linear Phase 8810 monitors, two, 12-inch woofer, five-inch mid-range, three-inch tweeter, two frequency controls, 125W minimum power handling, 5W, new, boxed, guarantee £1,200 ond. Tel Tony on 0171 241 6560

Trucker bass head (doubles as a PA amp). £80. Tel Paul on 01462 436804 (Hitchin, Herts)

Yamaha P1500 power Amp, new, boxed and unused £300. Tel Paul on 01332 737850

EFFECTS

Alesis MEQ230 sterep 30-band graphic EQ, very accurate tool, mint condition, boxed with manual £95. Tel Jon on 0121 249 0598

Alesis QuadraVerb Plus multi effects unit, excellent condition, true stereo ins and outs, MIDI controle, user patches, ring mod and resonator £145 ono. Tel

Steve on 0374 240225

ART Alpha 2 effects unit, immaculate, supber 24-blt DSP unit, 200 programs, memories, full MIDI control, manuals, boxed £240. Tel 01992 501469 (Herts) or e-mail: ram@ramorley.demo.co.uk

Behringer Ultrafex powerful stereo exciter with surround processor, mint condition, boxed with manuals £95. Tel Jon on 0121 249 0598

LA Audio GCX2 compressor, totally unused, mint condition, boxed £175. Tel 01543 467239 (Midlands)

Lexicon LXP1 Reverb and effects, superb sounding, mint condition, boxed with manuals £235. Tel Jon on 0121 249 0598

Roland DEP3 multi effects unit, very good-condition £199 ono. Tel 07801 677130

Yamaha EMP700 effects £165. Tel Andrew on 0171 478 4401 (London)

Zoom Studio 1204 with manual, as new £100 ono. Tel Sean on 0115 958 9558 (Nottingham)

SOUND MODULES

E-mu Morpheus sound module, two years old, 150 extra presets, 303-a-like, sweeps, thick pads, mint, boxed, manuals £500 ono. Tel Leighton on 01793 876259 (Swindon) after 5pm

Korg X5DR module, 64-voice polyphony, lush sounds, only £190. Tel Kez on 0128 873649

Marshall 5002 time modulator 'A' system, original with power supply, recently serviced, good working order £650 or will swap for a 90- or 21-inch PC monitor with a Pentium 2 333 or 400 with 100MHz motherboard, you know the score. Tel Criss on 01992 850315 (Enfield)

Novation BassStation keyboard, manual £250 ono (swaps considered). Tel 01604 472040

Novation BassStation keyboard module, with instructions, mint condition £170. Tel Willis on 0171 485 0762

Roland MC-303 Groovebox, as new with manual £300 Tel Leo on 0116 270 1085 (Leicester)

Roland MC-303 Groovebox, six months old, boxed with manuals, mint condition £350 ono. Tel 0181 555 3182

Roland MC-303 mint condition, as new and boxed with manuals £300. Tel

Roland MKS-50 synth module, Juno 2 in a rack, superb sounds, new original manual, excellent condition £300 ono. Tel 01582 699674 or 614016

Roland TB-303 complete with carrycase, manual and power supply unit, good original condition £570. Tel 01582 699674 or 614016

Roland U-220 sound module, excellent sounds for dance music, especially the pianos and strings, very good condition, home use only, manual included £220 ono. Tel Paul on 0113 283 3431 days on 0113 266 5568 evenings or e-mail: p.cooper@lmu.ac.uk

Yamaha EX5R rack synth, sampler, sequencer, effects, a programmer's dream, six months old, minimal home use only £1,350. Tel Andrew on 0171 478 4401 (London)

Yamaha MU100R sound module, 1,500 voices, 46 drumkits, 64-voice polyphony, virtual acoustic modelling, two A/D inputs, 70 effects, elght months old, boxed, manuals, *FM* 90% £450. Tel 0113 269 6386

Yamaha TG100 sound module, 200 quality sounds, ten drumkits, effects, manuals, ideal for MIDI files or composition, can be heard $\mathfrak{L}140$. Tel 01244 546393 (Chester area)

Yamaha TG500 sound module, superb sounds, six outputs and elght-voice multitimbral, bargain at £400. Tel 0141 581 7089

MISCELLANEOUS

Friendchip TCR1 timecode refresher, 1U, 19-inch, rackmounting box, corrects old or distorted timecode, in real time and puts out new pristine code, ideal for working with old multitrack tapes £75. Tel Jon on 0121 249 0598

Future Music issues 1-60, no covermounts, swap for something Interesting, eg, old effects pedal, Stylophone, whatever. Tel 01625 619684 (Macclesfield)

J L Cooper PPS100 SMPTE/MTC synchroniser/translator, for slaving sequencers to tape using MIDI Clock or MTC, mint condition, boxed with manuals, hardly used, hence sale £95. Tel Jon on 0121 249 0598

Keyfax Phat.Boy MIDI performance controller, boxed as new, one month old, unwanted glft £100 no offers. Tel 0181 555 3182

Korg M1 sounds, 200 dance techno sounds on Atari and PC format, analogue synths, sweeps, basses, kits £35. Tel 0121 443 2743

Multicore cables 20-way stage box, one 10-foot, one 25-foot, ten XLRs and ten jacks £60 and £95 respectively. Tel 01993 775677

Rack trolleys two available, Denard 12U, trolleys with castors, both in mint condition, the Industry standard rack, normal version £80. Super-strength version with adjustable height £95. Tel Jon on 0121 249 0598

Roland JV-1080, 2080, XP sounds, 128 vintage dance techno patches, two kits, all on disk, as good as the expansion boards, amazing sounds and a real bargain, don't miss out, only £15. Tel 01208 873649

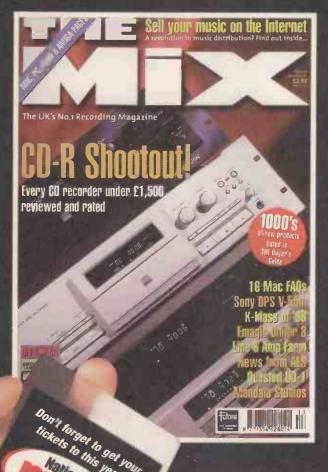
Sample CDs Synthasia £, Loopland £25. House and Garage construction £10. Dance Vocals £10. Synth Bass loops £10 and Cubasis Audio £20, Tek 01992 715285. Can post if required

Sampler: 50 drum and bass beats on five S1000 format floppy disks, all



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Various: Akai S20, boxed with manual £400 ono. Roland MC-303 boxed with manual £400 ono. Samsun Mixpad boxed with manual £50. Tel 01827 289263 days or 01827 289274 evenings

Various: Akai S1000 £500. Roland JV-180 with techno board £690. Studio Quad £225, FM mags and CDs 12 and 19-75 with ten issues missing, sensible offers. Tel Rik on 01457 872301

Various: Akal S2800 with library, mint, boxed £600. Roland Juno 106, mint except Chorus broke £400. Kurzweil K2000 with 8Mb sample library £1,000 Mackie SR24 VLZ desk, four-buss, mint, boxed £900. Yamaha EMP100 £90. Tel 0117 944 2761 (Bristol)

Various: Akai SG01V sound module, boxed with instructions, A1 condition £175. Boss mono delay £40. Dr Synth DS330 GM sound module, clean sounds, cut down Sound Canvas £110. Atari 16-bit sampling card, new, boxed, with editing software and sequencer £45.00. Tel Scott on 01474-353190 or e-mail: scwalker@freemail.org.mk

Various: Amiga 1200 with Atari colour stereo monitor £75. Techno Toolbox sample CD £20. 12U equipment rack in black vinvl £20, no offers on any of the above, everything mint. Tel Andy on 01253 890048 (Blackpool)

Various: ARP Solina String Ensemble, old classic £350 ono. Also Roland MC-202 plus power adaptor £250. Tel Nev on 01926 833203 (Learnington Spa)

Various: Atari 1040 with Creator £200 ono. Roland W-30 £630 ono. Studiomaster Club 2000, 14:2 mixer £260 ono. Korg Poly 61, not MIDI £100 ono. All in excellent condition with manuals. Tel Simon on 01703 694894

Various: Atari 1040 STE with SM124 monitor and Cubase V3.0 £250. Akai S950 sampler, fully expanded, huge library £500. Roland Juno 106 £650. Kawai K4r £250 Fostex X-28 portastudio with eight-channel mixer £250. Sansui MDR7 FSK tape sync unit £40. All boxed and in immaculate condition. Tel 01423 536597

Various: Atari STE, 4Mb £65. Falcon, 16Mbv, MusicStation, enquiries welcome. Amiga Sequencer Plus One software £15. Yamaha VSS30 sampler keyboard with onboard editor £40. Tel Gary on 01293 534415 evenings

Various: E-mu ESI32 8Mb, SCSI connection, V2.1 software, manual, boxed. Evolution MIDI controller keyboard. Atari 1040 STE, hi-res monitor, Cubase V2, disks and leads £950 ono, Tel Nathan on 01473 286618

Various: E-mu Orbit V2 as new £485

no offers. Roland W-30 sampling workstation with stand £555. Yamaha B200 keyboard, eight-track sequencer, beginner synth, editable sounds £185. Tel Nick on 01949 860274

Various: Fatar Studio SL880 sevenoctave piano, weighted keyboard £350. AlesIs NanoPiano, 64-voice piano module £175 Both mint and three months old. No offers please. Tel 01536 410690 (Northants area)

Various: Fostex D160 hard-disk recorder with 3.6Gb hard drive £1.650 ono. Korg 168RC digital mixer £525. ADAT XT £1,200. Emax II sampling keyboard £450. Korg X5D synthesizer £350. Roland SRV-330 space reverb £400 ono. Tel Alan on 01274 817317

Various: Fostex E16 with looms, very good condition £1,275. Behringer MX8000 desk with stand, excellent condition £750, DA20 DAT, hardly used £350. Studio Quad £200. BBE362 £120. XRI300 sync £100. Tel 01278

Various: Fostex R8, Studiomaster ProLine Gold, 16:8:16:2, QuadraVerb, all for £1,050, Roland S-760, 18Mb RAM, CD-ROM player, external 340Mb hard drive £900. Roland D-70 £495. All in excellent condition. Will split. Tel Pete on 01503 220240

Various: Friendchip TCR-1 time-code refresher, ideal for working with old multitrack tapes £80. LA Audio MIDI mute £240. JL Cooper PPS-100 SMPTE/MTC synchroniser/translator £100, Lexicon LXP1 high-quality reverb unit (also chorus/delay) £240. 1U 19inch rackmount tray for half-rack units £20 or with LXP1 for £250. Behringer Ultrafex, powerful stereo exciter with surround-processor £100. Alesis MEQ230 graphic EQ, two 12U Denard 19-inch tlltlng trolley racks with castors £80, super-strength version £95. [let us know your number and we'll run your ad again next month]

Various: Hammond XB-2 keyboard with case, mint £500, Yamaha DX7 £200, REV7 effects £225, E-mu Morpheus £450. Fostex 280 four-track £225. Roland SH-09 £225. Tel Steve on 0181 905 5917

Various: Korg i5M module, boxed as new, six months old £325. Korg 01/W Pro, 76-note version, comes with flightcase, all XPC sound cards and damner pedal £825. Tel Simon on 01227 456990 or 07771 540296

Various: Koro M1 music workstation £380. Tascam 488 eight-track recorder £390. Yamaha QY10 video cassette sized eight-track MIDI sequencer, composer, sound module £85. Tel John on 0191 266 6251

Various: Korg M1 Ex £450. Akai S01 sampler, fully expanded £250. DR-660 drum machine £180. Tascam 424 portastudio £250. All in good condition. Tel 01904 631570 (York)

Various: Korg Z1 £1,200. MC-303 £350. Even Gina audio card £350. Cubase VST £250. All three months old £2,000 the lot. Tel Simon on 01323 505828 (Eastbourne)

Various: Kurzweil K2000 the don (!),

8Mb and library £1,200. Roland Juno 106, chorus broke, otherwise mint £400, Yamaha EMP100, MIDI effects £90. Alesis Monitor 1 £199. Tascam 16:4:2, swept mid £250, Mackie 24:4:2, mint £900. Tel 0117 944 2761 (Bristol)

Various: Moog MiniMoog £650. Roland Juno 06 £90. Korg Poly 800 MkII £90. Yamaha QX21 sequencer £25. Boss DR-550 drum machine £45. All excellent condition. Tel Marvin Wilson on 0113 286 4129 (Leeds)

Various: Moog Rogue £200. Roland D-70 £400. Roland MC-50 £200. Yamaha SY35 £200. Baby stops play! Tel James on 01483 420105 (Guildford) evenings

Various: Moog three-band parametric EQ with overdrive, very rare £450. Fostex D80 with expanded drive £700 Mackie 1604VLZ £595. Roland R-8 £240. Tel 0141 334 4452 (Glasgow)

Various: Odyssey Mk I £499. SH-101 £265. Korg 700S £265. SCI Drumtraks £199. System 100 Model 101 synth £265, TR-707 £155, DX £159, SH-09 £250. Tel Tom on 01384 353694

Various: OSCar synth, M2 MIDI, very good condition £800. EDP Wasp Special (wooden case), good condition £450. Yamaha DX7 Mkl case + ROMS vgc £195. Roland TR606 drums £125. Tel 0410 199500 days

Various: OSCar synth with manual £800. Roland TR-909 boxed with manual £800 or swap either for something decent like Nord or JP-8000. Tel Sam on 01384 231176 or 07666 804067

Various: Pentium PC 686/200MMX, full multimedia system, 32Mb, 512K cache, five months guarantee £500. Cubase VST £150. ReBirth £50. Kenton Pro 200 £100. Roland PC-160 MIDI controller £50. Everything mint with manuals and boxes. Tel Nick on 01273 603067 (Brighton)

Various: Roland A-50, immaculate £399. Korg X3, immaculate £599. Alesis MidiVerb 4, immaculate £149. Snirit By Soundcraft Folio 12:2 £175 Akai S1000PB £299. Akai EXM008 £149. Akai IB103 £49. Shure SM58 £69. Smoke machine £79. Tel Ross on 01482 494261

Various: Roland Juno 6, perfect condition £200 ono. Atari 520 STE. 4Mb RAM, lots of software including eight-bit sampler cartridge £100 ono. Tel Steve or Lyn on 01248 670616

Various: Roland Juno 106 £380, JX10 module £450. Marantz CD63, special edition £130. Juno 1 £220. All boxed, manuals and in great order. Roland XP-80 £820. E-mu Proteus 1 £180. Jupiter 8 rack £680. Alesis QSR £385. PG800 £170. Sony HRMP5 Pro, effects £260. All immaculate, boxed like new. Tel 0151 283 2811 evenings or weekends

Various: Roland Jupiter 6, near perfect condition, recent service £700. Roland JD-800 £900. OSC OSCar latest MIDI £750. Novation BassStation rack £200. Boss DR-660 £200. Akai S2800 £650. Tel Martyn on 0161 904 9027 any time

Various: Roland JV-1080 £700. Atari STE, 2Mb, boxed, SM144 monitor,

Cubase V2 £200. Spirit By Soundcraft Folio F1 16:2 mixer, boxed, mint £250. Roland PC-200 controller keyboard £65. Tel 01865 727621 (Oxford) or 01523 446974 (pager)

Various: Roland R-8 MkII drum machine, mint, 808, 909 sounds, manual, boxed £499. Yamaha RY30 drum machine with dance card £299. TR-727 £99. DR-660 £159. Korg DDD1 £79. Cards available. Tel 01708 250846

Various: Roland S-50 sampling keyboard with monitor £285, Matrix 1000 analogue sound module £210 Seck 12:8:2 mixing desk £210. Lexicon LXP5 multi effects £145. Tel Mel on 0114 258 6328 (Sheffield)

Various: Roland SH-2000 mono synth, big sound £100. Boss digital reverb £40. Atari 520 STFM £55. Casio digital piano module £35. SVGA monitor £85. Yamaha FG411S acoustic guitar £140. Tel 0802 896315 (Oxford)

Various: Roland TR-909 £850. Roland MC-202 £250. Alesis QuadraVerb £200 Korg MonoPoly with gate-to-clinch lead £400. Behringer Multicom £200. Roland CSQ-100 £20. ARTFX £100. Korg Wavestation SR £500. All mint with original manuals. Tel Mike on 0171 385 9573 or e-mail: mnewman@tyga.net

Various: Roland XP-60, boxed, new with warranty £800. Expansion cards: dance, world, orchestral, vintage £100 each. Quadra Verb GT £200. Alesis 1622 mixer £150. AKG C1000S mic. Tel 0121 449 8024

Various: Seck 18 8 2 mixing desk £300. Alesis D4 drum module £250. Alesis Quadra Verb GT £250. Akai S950 £300. Atari STE 1Mb, plus monitor Cubase £80. All home use and in excellent condition. Tel Andy on 01535 630496 or 0370 864638 or e-mail: andy.lumsden@easynet.co.uk

Various: Studio car boot sale -Digitech MT44 quadgate, Roland C-464 module, tape sync, MIDI Merge unit, AWE64 Gold soundcard, unused, still in box with Cubasis Audio, two reels, 14inch tape, one reel half-inch tape used once, offers. Tel 01909 487750 (Notts)

Various: Studio clearout - Yamaha PSR-SQ16 workstation, 16-track sequencer, fully MIDI compatible. Yamaha MDF2 MIDI file player. Yamaha ME50 electronic organ, two keyboards and bass pedals, MIDI compatible. Yamaha SW60XG PC synth card. Stereo delay unit for a microphone. Need to quickly clear space. Call me and make me an offer on one or all of them. Tel Eddle on 01203 680764 evenings or e-mail: emcgarry@ldv.co.uk

Various: Turtle Beach Tropez+ soundcard, 32-voice, 12Mb sampling RAM upgrade, full duplex, software, manuals £140. Mackie CR1604 mixer. stx auxs, three EQ, mint £495. Fatman analogue rack module kit, two VCOs, MIDI £150. Tel 01202 462837

Various: Yamaha CS1x abd SU10, both very good condition £570 one, will split. Boss DS-330 GM sound module, boxed as new £180. Tel Mike on 01926



Various: Yamaha MDF2 MIDI file, player, great condition, useful piece of kit £95 ono. Professional radio mix, boxed as new, only £110. Tel Eddie on 01203 680 764 evenings or e-mail: emcgarry@ldv.co.uk

Various: Yamaha PSRSQ16
workstation, 16-track sequencer, fully
MIDI compatible. Yamaha MDF2 MIDI
file player. Yamaha ME50 electronic
organ, two keyboards and bass pedals,
MIDI compatible. Yamaha SW60XG PC
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01203 722 014 evenings or e-mail:
emcgarry@ldv.co.uk

Various: Yamaha RY30 rhythm programmer £200 (no offers). Yamaha YS200 digital synthesizer, 61-key, touch-sensitive, aftertouch keyboard, FM, four operator, eight algorithm, simultaneous eight notes output £110. Tel Chrls on 01325 312932

Yamaha sounds on disk for SY85, thousands of sounds and loads of drumkits on ten disks £35. Tel 01628 531477

WANTED

Akai \$2000 or \$2800, must have SCSI board and extra output board, willing to pay £650. Tel Phil on 0181 640 5285 after 5.30pm

Akai \$3000XL wanted, must have 32Mb Zip drive, big effects, in exchange for Roland MC-505, brand new, one month, three-year warranty, six outs, three effects, D-Beam controller. Tel Rob on 0191 421 5388 (Newcastle)

Atari STE with monitor and sequencing software and possibly sampling, give me your sales pitch on 01294 602206 from Wednesday evenings till Sunday evening or, alternatively, leave message for Graham after the tone

Doncamatic Stageman or Korg SM20 or Korg Mini Pops 7. Tel Chris on

01232 236093 after 6pm

E-mu ESI32 sampler, must have at least 8Mb or higher, cash waiting. Tel Phil on 0181 640 5285 after 5.30pm

JV expansion boards and data cards. Tel Alan on 01942 749868 evenings

Kraftwerk, Numan, OMD, Human League MIDI files wanted, call me and tell me what you've got. Tel Steve on 01834 813306. Anyone swap my Speak N' Spell for a good PC MIDI interface?! Please help!

Roland D-5, D-10 or W-30 with manuals, Akai S2800 plus SIMMS memory, will pay good money if in good nick! E-mail: danfindlay@hotmail.com or tel 07970 754 051

Roland MC-303 Groovebox, must be in excellent condition with manuals, etc, will pay £230. Also wanted:
Doncamatic Stageman drum machine, in excellent condition, will pay £50. Tel Dave on 01333 428648

PERSONNEL

17-year-old male seeking part-time, full-time job or training in music studio or anything else such as music festivals, etc (info welcomed). Tel Steven on 01685 843442 (South Wales)

Anyone interested in assisting a major music project for the disabled should visit

http://www.innotts.co.uk/~rur/music.ht ml or send A4 SAE to Paul Simpson, 231 Caxton Street, Sunnyhill, Derby DE23 7RB

Cubase VST tuition available, experienced programmer running V3.5 to V4.0 on G3 Mac available tuition. Tel Ben on 0973 4948862 or e-mail: ben_marx33@hotmail.com

Digitopia, sample CD of synth sounds only £15. Tel Jason on 01440 707246 (Cambs) evenings only

DJ Talldred looking to play out In London area (recently moved down), full-on hardstep drum n' bass, willing to make people dance for expenses. For booking tel 0973 687774 or e-mail: talled@hotmail.com. All enquiries will be sent demo

DJ wanted to add breakbeats and DJ Shadow type ambient to superb live

dance band, based in the South, influences include anything except Oasis, commitment, enthusiasm, equipment and transport a must. Tel Dave on 01722 325499 (Salisbury)

Drum n' bass musicians wanted (experienced), sophisticated, groove programmer, keyboarder (own gear would be nice), experienced drummer, programmer, singer, lyricist, all for high-quality drum n' bass progressive electronic project (Goldie, Roni Size, Tricky). Tel Alois on 0181 671 4398

Garage/house female singer, song writer, all songs have melodies, 20+ in all, seeks garage/house producers to work with. Tel Carolanne on 0131 556 9733

Guitarist seeks drum n' bass, acid funk, hip hop, house bands with samples: Garbage, Bowie. Pro gear, sounds, attitude, flexible, 100% dedicated, check me out. PS: no kids, no dreamers, serious callers only please. Tel 0956 496902 (London NW8)

Hip hop producer seeks rapper/ragga or soul/reggae artist for conscious hip hop. My musical influences range from U-Roy to Curtis Mayfield to Blak Twang. No wannabe gangstas or Puff Daddies please. Tel Andrew on 01223 774315 (Cambridge) or e-mail: acas13@hotmail.com

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Second acoustic, electronic drummer, percussionist wanted, for long-term, part-time varied musical project, occasional rehearsals, gigs, Midlands/London. Tel Bob on 0116 270 2134 for more details

Songwriters, musicians, collaborators

wanted for seriously good music. My influences: hard house, techno, Numan, Depeche Mode, Bowie, Placebo, Beatles, etc. Tel Richard on 01727 863512 (St Albans)

Vocalist/guitarist wanted for newlyformed Ultravox/New Order covers band. Ongoing rehearsal at present but live work planned for future. You should have your own gear, transport, ability and some commitment but Captain Kirk-style sideburns are not essential! Call Al on 0181 942 3063 (email: sonik@zetnet.co.uk) or Chris on 01372 373386

SOUNDS

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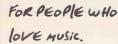
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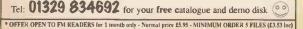


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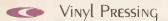
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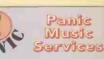
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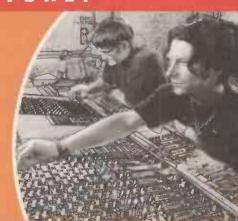
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NEIL LANDSTRUMM

Nick Serre catches up with all-round techno guru Neil Landstrumm in his newly adopted Brooklyn abode, and finds a headphone jack, 12-bit kinda guy...



aving produced the finest techno for some of the most renowned labels in the biz. **including Tresor and** Peacefrog, Neil Landstrumm has recently released Pro Audio, a melting pot of dark techno grooves inspired by his recent relocation to Brooklyn, New York. Simultaneously launching his own label, Scandinavia, to promote quality dance to the masses, and dismissing the stagnant UK techno scene, his move to the Big Apple enabled him to absorb the Stateside vibe and prompted an album that sees him pushing the boundaries of techno, with an unusual slant on technology. Recorded purely on an Apple Powerbook with Bias' Peak software, Nell produced a unique, dark, masterpiece that made everyone sit up and take notice...

How did you approach making Pro Audio?

It's a completely new style of production, really. The whole idea was to do it all on Apple Mac and related software, and really try to break away from the 808 and 909 thing that so dominates dance music, and to concentrate on making new innovative sounds. That's really what dance music needs at the moment, because it's become so stale and stagnant. There are very few people who are willing to push the boat out. When

this sort of music first started, a lot of people were rewarded for their experimentation, and that's why a lot of foreign labels were so good, because it was like 'Wow, I've never heard anything like this before', and gradually, over the years, it just became dominated by one or two sounds, which got cloned and cloned to the extent that it became diluted and boring. The original experimentation wasn't repeated. That's what I'm trying to bring back with *Pro Audio*.

Is that why you made the move to NYC?

That was part of the reason. To take new influences on board, and treat it as an experiment to see how it affected my music. I've been to New York a few times over the years for gigs, and I love the amount of music coming out here that is New York-specific. Like a lot of the early electro, and hip hop, it's all so New York, and when you Ilve here, it ends up coming out. I live on a main street in Brooklyn, and it's amazing; you get these 4x4s coming down the street with the bass booming, setting off car alarms, and I love that rolling structure, and It's something I've tried to emulate.

What's the advantage of having your own

I guess I've always wanted to do my own thing. I wanted to have a label which would put out quality stuff. Not to sell loads of copies, because I know it's not going to. I just want to be in the situation where I can put things out that will, over time, create some interesting momentum. Plus, I really wanted to push the whole bass, techno thing, which is what I've been working on, and it gives me an interesting platform to work on the design aspect too. I'm not actively seeking artists, but I just tend to bump into people, like Bill Youngman, who's combining electro with drum'n'bass. He calls it 'electrostep', and it's something absolutely unique. So the label is also an opportunity to develop people like that and bring it to a wider platform.

What sort of gear are you using?

I've completely fallen in love with the Apple Mac. The potential for both audio and visual stuff is awesome. Sometimes

I'll spend a whole week building a whole bank of sounds that I'll use in a video production, or for the web, or for tracks. I'm using Bias Peak, which is amazing. It's the Photoshop for sound, I think. ProTools is a bit too high-end for me. I'm more of a headphone Jack, 12-bit guy. I did everything out of a Powerbook for Pro Audio, and it's great to have that flexibility. People were saying that I couldn't do it on a Powerbook, but 1 thought 'fuck that, I'm doing it anyway', and embraced the new technology. There's only so much you can do with the old gear, but once you get into the digital domain it blows the cap off all of that. The possibilities are endless. That was actually a bit of a problem when I started working on the Pro Audio stuff, cos I was thinking 'God, there's so much I can do, where do I focus?', it really took a while to nail down what I wanted to do.

Do you have a set way of working?

Recently I've been using a more cut-andpaste style, whereas before it was more of a live style. I'd get all the stuff up on the machines and jam it live, pick a few mixes, and eventually get the one I wanted. Now, it's more a case of getting lots of bits together, sticking it all in Peak, twisting it around a bit, bringing it into Deck 2, stretching it all out and laying it, in a way that I used to use Cubase, but doing it with pure boxes of audio. What I'm really into at the moment is things going out of time. I got really annoyed by the rigidity of techno, and I really like the way things can gradually slide out of time. It's a case of trying to humanise things while doing it all within the computer.

What's next for you?

I'm at a point now where I've spewed out all the techno I want to, and I'm really open to working with other people. I'm very keen to get my teeth into something unusual, just to see what I could come up with. I'm working on this hip hop beat thing, and working more on the label. I'd love to work with a band or something that has different elements, and see how it can be twisted. That's the glory of technology, that you can be anywhere doing anything, and it all comes together.

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