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Welcome to the first issue of Sound International incorporating Beat Instrumental. In this issue you'll find plenty to tell you what's happening, and what's going to be happening, now that we've combined forces to bring you what we believe is the best British musicians' monthly, so I won't dwell on it here. Suffice to say: We all hope you enjoy the new look, and will give us your comments on ways we can improve.

Consider instead, for a moment, the state of the music industry today. On the instrument side, it seems that perhaps things are on the upturn a little; unfortunately this upturn won't be quick enough to save the fortunes of some companies, and I expect we'll see a number of names disappearing over the next few months. On the record side, several companies are laying off staff wholesale – it'll certainly be up to the smaller indies to do the A&R and find new acts. Studios are being hit, too: the average £20,000 album budget of a few years ago hasn't shifted much despite rising studio prices and overheads, and these days there are seldom album contracts available for new bands: it's 'Do a string of singles first'. As a result too, many freelance engineers and session-men are feeling the pinch. We can only hope it gets better.

Certainly such factors as 15% VAT have pushed the majority of quality gear out of everyone's reach, and this added to already absurd album prices has done its bit to reduce record sales. I simply don't know what we can do about it. Do you? Let's have your ideas.

Cover illustration by Barbara Fry; photo this page, top right, Norman Hodson.

Richard Elen





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SOUND INTERNATIONAL

incorporating BEAT INSTRUMENTAL is the monthly magazine written for musicians, by musicians. We aim to provide an open forum for the exchange of ideas, techniques, artistry and experience between musicians in all fields of music, and welcome your comments, opinions and contributions. It's our policy to damage your opinions as little as possible. Of course we are human, and do make mistakes, but we'll always offer space for replies and corrections, although we can't be held responsible for such errors, or loss of damage to contributions or other items. The contents of this magazine are copyright, but we'll generally give permission to reprint if you ask us first in writing.

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NEWS•

New Readers Start Here ... H opefully, many of you will be reading this magazine for the first time. If so welcome to the new-look Sound International incorporating Beat Instrumental. If you've been a regular Beat reader in the past, you'll find plenty to interest you here, in what we strongly believe is the best musicians' monthly in the country. Obviously there are big problems associated with a merger of two important magazines: the mere preparation for this issue has been a major event, and it'll take a little time for things to settle down. As a result we have been unable to include in this issue some of the regular items from Beat which we will be continuing in the future -simply because we either couldn't get hold of copy in time, or just because we ran out of room. This issue contains more editorial space than at any time in the past, and the magazine will be getting bigger from now on, but we

still have a large number of items we would like to have included, but simply couldn't, for the reasons above.

From next month, however, we hope to bring you a number of extra regular items, including Chris Gibbons' Guitar Bar and a special new section for queries (in addition to our Letters pages) under the heading Sound Advice. edited, as in Beat by Gary Cooper. We will also be continuing the regular Studio Profile feature under the title Studiofile, kicking off with an article on the Nomis rehearsal/recording complex. Beat's Tipped For The Top series will be continued under the title Road Works - see this issue for the first article from Adam Sweeting on new bands on the road. We are also considering continuing the Shop Profile and Price Guide pages, and would be interested in your comments on their value.

Also in this issue, you'll find an

expanded reviews section, covering everything from instruments to budget recording gear for the musician - subject to review items and reviewers being available (could you be one?) we'll be adding further review sections to cover other instruments in the

We hope you like the new format for Sound International incorporating Beat Instrumental we're doing our best to give both Beat and SI readers everything you need and want from a musicians' monthly, and we'd like to hear from you on how you think we've succeeded - or not. Write to us with your views, and if you can get to Ólympia, talk to us at the British Music Fair this month. SI/BI is your magazine - we're a bunch of musicians (and the odd studio engineer) so we understand your requirements—help us to make sure you get the information you want.

NAMM Bam Have A Nice Day, Sir...

NAMM Music and Sound Expo Chicago, June 28-July 1, 1980

here were Lions in our hotel in Chicago. Hundreds of them. I should explain that Lions are some bizarre order of ex-service people (they have Lionesses too) who seem a bit like the Round Table in Britain - ie they get together to do Good Deeds for the Needy. Only thing is when they gather for a convention, as they did in Chicago (a mere 35,000 of them). they dress up in yellow and mauve waistcoats with PITTSBURGH PA and CLEVELAND OH in 4in letters on the back and as many badges and pins on the front as the garment will hold without tipping the unfortunate bearer forward with the weight of all this excess metal. They even manage to make a fully rigged-out Rick Nielsen (who, in case you hadn't guessed by the Cheap Trick jumper, scarf, badges, tie-pin, socks, plectra, hat, belt and anylthing else wearable that can possibly have Cheap Trick inscribed on it, is lead guitarist with a popular outfit called Cheap Trick) look pretty laid-back and insignificant. The SI investigation team eventually tracked down Rick on the Hamer stand at the NAMM show, and he promised faithfully to write some words down on Cheap Trick notepaper with his Cheap Trick pen about just how he gets that fantastic sound, just for SI readers' enjoyment. Innee nice?

NAMM is the National Association of Music Merchants, an American association of instrument dealers and retailers, and their shows (two held every year, one in an eastern state, one in the west) are a musical instrument buff's paradise. This year's show in Chicago's McCormick Place, a huge exhibition complex built some ten years ago to the south of Chicago's

downtown conglomeration of some of the most handsome buildings I've ever seen, is no exception. So read on, and I'll tell you about some of the new instruments and equipment I saw there. Some of these you'll be able to see on show in Britain for the first time at this month's London Olympia British Music Show, others won't be available for some time vet, still others don't even have UK distribution arranged, so they may remain unavailable.

Guitars proved to be a focal point of the show - and this year the big two, Fender and Gibson, both had plenty to shout about. Fender, of course, have been keeping pretty quiet of late: their new Lead I and Lead II guitars issued last year (see SI Sept '79, and Lead II review SI Dec '79) have been minimally promoted and therefore haven't taken off at all, while the previous 'original design', the appalling Starcaster (reviewed SI July '78) is best forgotten. So it's not surprising that Fender have turned to what must be their two most popular designs, the Stratocaster and the Precision, for their 'new' efforts.

The new six-string is the Fender Strat, which on first sighting looks like a Stratocaster decked out with brass hardware (actually components from the new-ish Fender Brassmaster range). The Strat comes in two rather attractive stock colours, amusingly titled 'Lake Placid Blue' and 'Candy Apple Red'. These are, after all, American guitars. What Fender have added in musical versatility are further pickup configurations via two-mode switching on the bottom rotary control, adding four more sounds to those previously available from the five-way selector, coupled with the brighter sounds to be got from the 'hot' Fender X-1 pickup in the lead position. There's a six-piece bridge, Schaller

machines, tremolo arm as standard, 4bolt neck joint, and the guitar does look rather good, with a slightly smaller headstock than on the standard Stratocaster, and a US price for maple or rosewood fingerboard versions at \$995.

Really interesting, though, is Fender's first venture into the world of active electronics. The Fender Precision Special bass is, essentially, an active-powered Precision with brass hardware. Active controls allow you to add or subtract up to 15dB to or from treble and bass via the separate tone controls - with normal passive controls, of course, you can only cut the tone you already have. Thus we have here three rotaries on a Precision: volume, active treble and active bass. There's also a little flickswitch near the jack socket which they call 'circuit defeat' - this lets you send the controls back to a normal passive Precision should you so desire, or should your 9v battery go dead after the estimated 1,200 hours' life. The demo I heard in the Fender booth at the Chicago show sounded very good indeed, and when I picked up the bass it felt easy to playaided by the slightly faster neck which is 1/16in narrower in cross-section that that of a regular Precision. Of course, the problem with some active guitars and basses is background noise - it didn't seem bad on the sample I tried briefly, but we'll have to wait and see what it's like in real conditions. I hope we get one to review soon - the colours available are the same as those for the Strat mentioned above, and the brass hardware once again comes from the Fender Brassmaster range, along with a 4-piece brass bridge. The US price for maple or rosewood fingerboard versions is \$995.

Fender also announced another

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NEWS









new bass at the show, but they didn't have a sample ready in time to exhibit. This is the Fender Lead Bass – odd name, huh? Anyway, it seems as though it will be aimed at the sort of area their Mustang bass used to fill. It'll have two eight-pole pickups, with phase control and pickup selection, and the body will be of solid ash. That's about all of substance that Fender were telling, and a price wasn't even given. We'll give more details when we know.

Gibson seemed decidely less than keen to let us see their new Sonex-180 guitars, so we had to break into McCormick Place one night and pinch the one sample available to get a look. This is a particularly dangerous occupation in Chicago as the usual police procedure is mandatory machine-gunning for even the smallest crimes (stealing a loaf of bread, heroin dealing, etc). So we blacked up carefully and stole quiety Into the now-deserted building. Eventually we found our prize, a Gibson Sonex-180 Custom. Deftly sawing the guitar in half, we couldn't help but

notice that this was not a conventionally constructed guitar. Indeed the sample was composed of a three-laver laminate: a maple centre piece, with outer layers of wood resin - a sort of fibreglass-like material to look at and feel. But that particular mixture may well change with production models we'll keep you posted as to what's going on in the innards of the Sonex guitars. We can be more positive about the models in the Sonex range, and the cash required to own one of these beasts. There are three basic models: Sonex 180 Custom (£295 inc VAT and case); Sonex 180 Standard (£256 inc VAT and case); and Sonex 180 Deluxe (£215 inc VAT and case). The Custom comes in ebony or white finish, has a maple neck, ebony fingerboard, two humbucking pickups, coil tap switch, tune-o-matic bridge, chrome-plated hardware and a scalelength of 241in, while the Standard comes only in ebony finish with a 'selected hardwood' neck and rosewood fingerboard, but is otherwise similar to the Custom, and the Deluxe is similar to the Standard but is without coil tap switch.

Gibson showed three other new ranges of interest: the Les Paul Standard-80s, the Howard Roberts Fusion and the 335-Ss. Standard-80s are an attempt to provide a 'vintage-style' Les Paul as a new instrument, and in this they succeed in being accurate and attractive. The Howard Roberts Fusion is a guitar which may well be useful in a variety of musical styles - hence the solid maple centre-block running the length of the otherwise semi-acoustic body, and the shape vaguely reminiscent of a sort of 'less sharp' 175. Front pickup is humbucking, with the addition of a punchier Super Humbucking type in the bridge position. At £663 inc VAT the Fusion could well have an effect on many players' styles and techniques, so watch out. The 335-S series are solid, slightly smaller versions of the ES335-shape guitars, and they come in three styles: the Standard is allmaple with two new Gibson humbucking pickups with cream and black coils, rosewood fingerboard and chromeplated hardware, at a cost of £352 with

VAT and case: the Custom, at £405, is all-mahogany and has an exposed-coil front pickup and the new pickup of the Standard in the bridge position, ebony fingerboard and chrome hardware. These two are in the Firebrand range. with sort of 'scorched-out' logos (ouch!). The 335-S Deluxe is the nicest of the new 335 range, though unfortunately it's the dearest at £459. It includes the rather good Gibson TP6 fine-tuning tailpiece and two Dirty Fingers humbuckers, plus a Posi-Lok strap button, and comes in tobacco sunburst, 'silverburst' or cherry finishes. With luck you'll be seeing a good few of these new Gibsons reviewed in upcoming issues of SI.

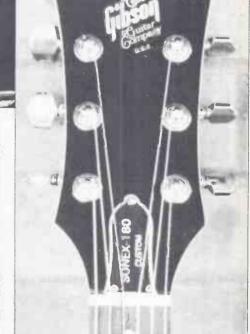
What else was happening in guitarland, you ask? Well, regular readers of SI may remember my reporting the existence of the Peavey T25 prototype guitar, shown at last year's NAMM show in Atlanta, and using a new material for construction (Gibson's 'Multi-Phonic' proposals are hardly revolutionary merely in using new materials for guitar manufacture) called Sustanite. I mentioned then that

NEWS

Manuallaninin







Top row left to right: Ibanez AS50, Peavey T25, Aria Elekord AE90. Washburn Festival series, Fender Precision Special, Fender Strat. my kinda town Bottom row left to right: Fender 300 bass amp between cab and SRA400 power Veillette-Citron Classic range, Gibson Sonex-180 Custom in case new Gibson headstock logo.

the T25 was 'a way off from being in production', and sadly that's still true now, though Peavey's Rick Grigsby assured me that shipping of the T25 was expected to start some time around the early part of 1981. Joining the T25 at the Chicago show was a simpler model, the T15, with very basic volume, tone, split/humbucking controls ('a student's model'); UK price'll be ±£135! The Sustanite is only used for the body now, which has a wooden core, and the neck is wood too, despite Peavey's experiments with synthetics in this area as well. The T15 too comes into the long-way-off category, with Mr Grigsby estimating 'sometime in 1981' as a likely appearance date, but comforting news is that the T25's projected price is £170.50 with case!

From synthetics to synthesis – Roland, as ever, had a standfull of new objects, not least of which was the very new *GR33B* bass synth. So new was the instrument that even one of the demonstrators seemed to be having an ongoing familiarity problem. Still, the bass synth is essentially similar to the 303 guitar synth unveiled at

January's Anaheim NAMM show (see report SI March '80), with a bass controller (ie bass guitar) made by Ibanez, and a floor-resting control module. The module has controls for string-selection with LED status indicators, an overall Master Tuning control, an LFO section with rotaries for Rate and Delay, two programmable pitch settings which can be brought in latched or unlatched by footswitches Pitch A and Pitch B, a VCF section with 12dB and 24dB filters, Envelope modulation, Envelope attack and decay (A and B) and associated footswitches, plus VCF Mod and VCA Mod footswitches, The bass controller has similar onboard controls to those of the guitar synth controller, together with active electronics, and includes the interesting LFO control either side of the synth pickup. We could only get pretty basic info at Chicago on the GR33B, so try to get to see it during the London show this month - also, we hope to be reviewing both the Roland guitar and bass synths later in the year. US prices for the bass synth complete are between \$1,795 and \$2,050.

Aria and Washburn both launched new lines of electric/acoustic guitars at the show - ie acoustic guitars with transducers for amplification and associated onboard volume and tone controls, à la Ovation though obviously without the Lyrachord back. Aria's were called the Elekords, two with a subtle single cutaway, the AE100 (gold-plated hardware, spruce top, sucamore sides and back, 'violin' finish) and the AE90 (chrome-plated hardware, spruce top, rosewood back and sides, natural finish); the other two with conventional small-waisted shape: the FE70 (materials as AE100) and the FE60 (materials as AE90). The Washburns are called the Festival Series, all named after big outdoor festivals (remember?) such as the Woodstock models, which are mahogany-bodied. These too have single cutaways, a little 'sharper' than those of the Arias, but Washburn do have the slight advantage of three 12strings in their range.

Ibanez had some interesting new instruments worth noting, the least

subtle being the Destroyer II (or DT500CA if you prefer less romantic titles) at \$459 in the States. It's much less of an out-and-out Explorer copy than the previous Destroyer, from which the II draws its inspiration along with the Ibanez Iceman, Referring back to the Gibson Howard Roberts Fusion and now coming across the Ibanez AS-50, you might think that some of the major guitar manufacturers are taking more interest in the jazz-rock (for want of better terminology) player. The AS-50 is a semi, but with a smaller body size than Ibanez semis have sported previously. Jeff Hasselberger of Ibanez, himself a solid-bodied electric player, explained to me that he really liked the sound of semis and reckoned that solid players would go for the AS-50. 'The AS-50 is basically not only for solid-bodied players, but it will attract them,' he enthused. 'Sounds great, and it's really inexpensive,' \$590 to be exact, in the US of A. The new acoustic that caught

All photos Tony Bacon

Why there isn't a Westbury in Peter Haycock's r collection.

To the rock world, Peter Haycock, guitarist with the Climax Blues Band, is a skilful and imaginative player of

international status.

So you can imagine our enthusiasm when we discovered that the guitar Peter uses for both studio and live work, was a Westbury, (a Custom II, gloss black actually), quite a modest guitar pricewise, for a musician of his standing. So with almost indecent haste, we tracked him down and asked him over the phone if he'd tell us why he chose and

used a Westbury.

And could we put it in an ad?

'Sure' he replied, 'as long as you mention the Climax Blues Band's new album coming out shortly on the Warner Brothers label'.

It was a deal, and the conversation went like this:

Peter, why Westbury?

I think because it's such a versatile guitar, yet so easy to use ... I can still get a lot of widely differing sounds quickly.

You're obviously happy with the sound. Yeah, it's great, as I said, it's very versatile . . . used with a variety of amps you can get anything from a screaming humbucker sound to a really slicing single coil sound.

I understand you collect guitars.

Yeah, right, I've got sixteen so far ... including an ES355a gift from the Marshall Tucker Band, a black Les Paul Custom and a Veleno which has a weird aluminium neck.

And yet you use the Westbury to the exclusion of the others?

Right, I've now got a room full of guitars, just collecting dust.

What about the old adage—you're not a guitarist till you've owned a Gibson?

It's nice to own one . . . I would say try a Westbury first . . . you'll be pleasantly surprised . . . you can, over the years, spend a lot of money trying to find the right guitar. starting with perhaps a second hand Fender . . . through the Les Pauls, 355's etc. You'd be far better off buying a versatile one like this, as they certainly aren't a lot of money. In fact I'd say that a Westbury is a short cut to finding the ideal guitar for stage and studio work.

Did you know the Westbury range starts at £135.00

including VAT?

Really? That's amazing, they look and perform more like £400 guitars.

Dear Rose-Morris, If what Peter says is anything to go by, Westbury seem to have a great range of guitars. Please send me the full story.

Rose-Morris & Co. Ltd., 32-34, Gordon House Road, London NW5 1NE Tel: 01-267 5151





my eye on the Ibanez stand was the Macaferri-like *R400*, mainly because of its attractive price-tag of \$295.

Veillette-Citron are a New York state based guitar maker who have recently relaunched themselves more positively into the guitar market - they do make very good guitars (Bill Nelson has one, and I think I heard someone mention that Peter Green has one, too) and now offer their handiwork in three distinct ranges: Standard (own twin-coil hum-cancelling pickups, chrome hardware, rosewood fingerboard, black or sunburst finish, guitar \$970, basses \$860 to \$1,251); Classic (two-stage twin-coil hum-cancelling pickups with phase reversal push/pull pots, gold Schaller machines, V-C brass hardware, select flame maple in clear, black or sunburst finish, guitar \$1,270, basses \$1,140 to \$1,616); and Limited Edition (faced with contrasting exotic woods as available, including ebony, koa etc, electronics as Classics, guitar \$1,500, basses \$1,370 to \$1,846). They all offer superb craftsmanship and if you're in this sort of league, they're well worth checking out.

A stand full of replacement pickups at a trade show is enough to make my eyes go blurry and my brain think that they all look the same (though that could well be due to one too many plum wines at Ron Of Japan the previous night). But Seymour Duncan showed some good pickups, and Geoff Richardson told me about their quality Jazzmaster and Jaguar replacements, and of their renowned Gibson/Guild P90 replacements. Dave Gilmour and Jeff Beck are among the players who have sampled and enjoyed SD pickups, and we are warned of an upcoming Invader pickup which Geoff described as a



'super punkout' unit. Hmmm.

One of the few brand new companies that really caught my eye at Chicago NAMM was Legend Amplification. They have a range of two combos, an amp and four cabs, plus a teak-finished combo, which are hand-built to exacting standards and look particularly good. The woodworking of the solid oak casing is beautifully done, utilising a joint called the 'fingered box-joint' which looks just like overlapping fingers and is claimed to be 'the strongest type construction possible'. The combos are the G1250SC, a 50 watt valve preamped, 4-band eq amp with a single Celestion 12 (\$750) and the G21250SC, a 2×12 version at \$875. The amp is the GH50, the same as the amp in the combos, at \$650, and the cabs come in 1×12 , 2×12 , 4×12 and 4×12 slant-fronted models, from \$350 to \$900. The teak-constructed version of the combo, the G1250SCT, costs \$875. Not cheap amps, but quality stuff.

Acoustic have a new bass amp (with accompanying combo version), the 120. It's rated at 125 watts RMS and has high and low input jacks, bright switch, treble, midrange and bass tone controls, power boost, 5band eq, pre-amp out/power amp in jacks, LED power indicator, weighs 25lbs, and costs \$489 in the States. The combo version features a 15in driver in tuned reflex cab, weighs 60lbs and costs \$679 over the water. Fender, too, had a new 300 watt bass amp, the B300. It's a transistor amp with the accent on eq facilities: there are four regular tone controls for Bass, Low Mid, Mid and Treble, plus a 'parametric' eq section rated at Low (40 to 100Hz), Mid (120 to 315Hz) and High (400Hz to 1kHz). Also included is an internal complimiter to ensure clean, smooth output (assuming that's what you want), a bi-amping facility and rack-mounting. US price is \$995 (a popular price-tag for Fender these days, it seems).

Ibanez stole the fx show with their UE400 four-into-one rack unit, which features compressor, phaser, distortion and chorus/flanger units in one instrument. FET switching onboard or from a footpedal ensures silent operation, status LEDs let you know where you are, and a very simple but effective switching system allows you to arrange the effects in any order you require. It's mains-powered, and should seduce many a musician away from separate units cluttering up the stage. For those who stay cluttered, Ibanez added the

CP-835 Compressor and the PT-909 Phase Tone to its redesigned line of FET-switched, LED-status lighted stage effects (the rest were outlined in News in SI June '80). Boss had four useful additions to its already swollen range of effects: the DM-100 Analogue Delay, a two-channel echo unit at \$395; the RX-100 Reverb Box, also with two channels, at \$260; the PV-1 Rocker Distortion pedals, at \$145; and the BF-2 Flanger, a compact version of the successful BF-1, at \$125

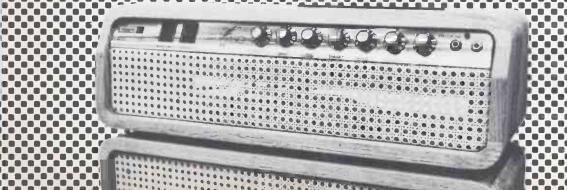
There were some attractive things

to hit at the show, and Harvey Mason

could be seen showing visible evidence of his new endorsement arrangement with Premier (yes, there were a few British companies at NAMM too). Meanwhile, at either end of the electronic drum market. Sunare and Electro-Harmonix had interesting new products to show. Synare had their electronic Bass Drum, capable of producing short, medium and long bass drum sounds, all tunable with a single control, and with an added triple or repeat-beat facility, all at a US price of \$299. They also had a new electronic Tympani unit which can be tuned via either a front-panel control or the optional footpedal. You can also achieve 'bending' of the sound while it's sweeping up or down, and the unit sells in the US for \$325. Lastly, Synare were showing two new electronic Toms, the Hi-Tom and the Lo-Tom. These are not methods of greeting your friend Tom, but are fully controllable electronic drums with tom tom sounds. Front panel controls are for Tune, Run Range, Speed and Direction, Output Decay, Sensitivity and Volume. Either tom sells in the US for \$299. Electro-Harmonix, however, were showing off a multiplicity of their value-for-money Space Drums, which now include the basic Space Drum giving the you've-heard-it-everywheredone-to-death disco-drum synth sounds; the Super Space Drum with added modulation, generating sequence and ring mod effects; the Crashpad which gives snare, cymbal, surf etc, but nowhere to sleep; the Clap Track giving varied 'hand clap' sounds; the Sonic Boomer which allows drummer's plain ole acoustic drums to be electronicised (is that the right word?): and Rolling Thunder, which has nothing to do with Bob Dylan and everything to do with low frequency drum synth sounds.

And that's about it. Back to London. Coming back through customs, shattered from a five-hour

Left: the beater poised to obtain bonks and thuds from Synare's new electronic Bassdrum. Below, Legend's attractive GH50 amp top made from oak (and the odd bit of metal and glass).



VEWS

stopover at New York's Kennedy airport, I got thoroughly searched by an annoyingly pleasant officer. Not that I was worried - I always get stopped, so I make a habit of swallowing any excess liquid or substance on the plane: makes for odd flights. Anyway it's worth pointing out that the only reason the previous text contains so many American prices is that they're the only ones available at the moment - but just in case you get tempted to shoot across the pond, our friend at HM Customs with the shining wit and perceptive questions decided to make a public statement to SI readers. 'Tell them to come up with something better than the "They-were-sellingthem-off-in-a-job-lot-at-\$50-a-piece story when they bring back a mintcondition late 50s Gibson. You should see our stock-room - we've got our own trade show going on in there, you know.' I grinned and picked up me duty frees.

Next month old Crombie will be covering the new keyboards shown at NAMM – and there were plenty there. I noticed a new Moog (the Opus 3, a combination strings/organ/brass keyboard), a 'preset' version of Oberheim's OB-X called the OB-SX and a good deal of new ARPs, including a' two-VCO Solus and a big new digital poly called the Chroma, All these and more next time. Bye.

Further info on the above products is

Tony Bacon

available from the following addresses. Acoustic amps: US - 7949 Woodley Ave, Van Nuys, Ca 91406, Tel: (213) 997-6631; UK Kitchens of Leeds, 26 Victoria Street, Leeds, Tel: 0532 446431. Aria guitars: UK - Gigsville, South Drive, Phoenix Way, Heston, Middx TW5 9ND, Tel: (01) 897 1225. Electro-Harmonix effects: US - 27 West 23rd Street, New York, NY 10010. Tel: (212) 741-1770; UK – Unit F24, Park Hall Trading Estate. Martell Road, London SE21 8EN, Tel: (01) 761 3739. Fender guitars and amps: US – CBS Musical Instruments, 1300 East Valencia, Fullerton. Ca 92634, Tel: (714) 879-8080; UK -Fender House, Centenary Estate. Jeffreys Road, Brimsdown, Enfield. Middx, Tel: (01) 805 8555. Gibson guitars: US - Norlin Music Inc. 7373 North Cicero Avenue, Lincolnwood, III 60646, Tel<mark>: (312)</mark> 675-2000; UK - 114 Charing Cross Road, London, WC2, Tel: (01) 379 6400. Ibanez guitars and effects: US - Elger Co. PO Box 469. Cornwell Heights, Pa 19020, Tel: (215) 638 8670; UK – Guitars: Summerfield Bros. Salmeadows Gateshead, Tyne and Wear NE8 3AJ, Tel: 0632 770431; Effects: J T Coppock, Highfield House, Royds Lane, Leeds LS12 6LJ. Tel: 0532 634652. Legend amps: US-6399 East Molloy Road, East Syracuse, NY 13057, Tel: 8315) 437-3413. Peavey guitars: US - 711 A Street, Meridian, Mississippi 39301, Tel: (601) 483-5365; UK Unit 8. New Road, Ridgewood, Uckfield, Sussex TN22 5SX, Tel: 0825 5566. Roland/Washburn/Boss: UK - Brødr Jørgensen, Unit 6, Great West Trading Estate, 983 Great West Road, Brentford, Middx TW8 9DN, Tel: (01) 568 4578. Seymour Duncan pickups: US - Box 4746, Santa Barbara, Ca 93103, Tel: (805) 962-6294 or 966-1286. Synare drum synths: Star Instruments Inc., PO Box 71,

Stafford Springs, Conn 06076, Tel: (203)

Gordon House Road, London NW5 1NE, Tel: (01) 267 5151. Veillette-Citron guitars: US – 11 Field Court, Kingston, NY 12401, Tel: (914) 331-7965.

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GARY COOPER ON ... INSTRUMENTS AND EQUIPMENT



The Beat Goes On!

o equipment this month, no facetious comments on the instrument manufacturers and wholesalers, just a little bit of background to the merger of the dear old warhorse Beat Instrumental and our own favourite for the 1980s, Sound International.

Anyone who regularly reads both magazines will know that for the past five years I have written regularly for Beat, and that I have been contributing to Sound International since I was recruited by Tony Bacon, acting as front-man for the 'Save an old journalist for Britain' charity, last year. Apparently this qualifies me to give the story in perspective, and it might serve to provide an interesting background for magazine buyers who, by and large, are rarely told the truth about what goes on behind the magazines they buy. We've all known much-loved papers to just vanish with rarely a word to explain what has happened to them. This shouldn't be the case with Beat (which hasn't exactly vanished anyway), so here goes.

Beat Instrumental was started back in 1963 as the result of a brainwave by publisher/businessman Sean O'Mahony, who had come into considerable contact with musicians during the early beat music era which he helped on its way by launching a wave of successful 'fanzines', not least of which was the phenomenally successful Beatles Monthly, which is currently enjoying a considerable success as a relaunched publication.

For the first few years of its life, Beat was by no standards an equipment magazine. Arguably, there was little to know about gear back then but, more truthfully, there were few writers who really understood both equipment and writing (still true today?). The magazine, however, developed as a superb blend of interviews with musicians about music, the business behind selling it, and an endless stream of helpful 'how to do it' articles for wouldbe stars. As such it was the first of its kind in the world and all of today's specialist musical instrument journalists in Europe, America and Japan must pay their dues to a pioneering idea.

Back in the late Sixties, Beat was all there was. This was still the situation in 1975 when Beat's editor at the time (Ray Hammond) and advertising director (Richard né 'Rick' Desmond) left to found their own magazine, to be International Musician And Recording World. Needless to say, there was considerable bitterness caused by their departure and the resultant feuds are still to be felt echoing around the industry today

I joined Beat's staff as an assistant editor not long after the breakaways had left, and I found it in a bit of a state. Fortunately, when I was later promoted to editor, we had a good



beginning, always given the magazine a lot of help. After all, many of them were weaned on it.

Eventually I left, due to a health problem, and Tom Stock came in to take my place. Tom proved to be a capable editor and all looked fine until the magazine was sold lock, Stock and goodwill to a company called Campillos. The magazine was then managed by Liverpudlian publisher Alan Walsh and his partner John Thompson. The struggle against IM was still going fairly well until Tom Stock and assistant editor Chris Simmonds (a much under-rated writer, wit and cynic) left to start their own magazine, the ill-fated Gear Guide. In this they were joined by Beat's advertising manager Howard Rosen. At the time of writing, however, Gear Guide's future looks distinctly uncer-

What finally finished Beat off, however, was a combination of a bad business climate and, one assumes, a failure to take off in a really successful way for its new owners. A marriage was arranged between Beat and Sound International and here we are.

But Beat's story is really one of pioneering ideas. Under a succession of editors of varying capabilities it nevertheless broke ground in vital areas and is still, today, capable of reaching considerable heights in its ability to convey the really practical aspects of musicianship to its readers in a readable and infectiously enjoyable way. I can't pretend that its disappearance as a single entity really surprised me, or many others in the industry, though.

Speaking of people in the instrument industry brings us back to advertising revenues. People tend to forget that no advertising means no magazines, and that goes for any magazine and any newspaper that isn't funded as a charity. A healthy press is a sign of a healthy industry and the failure to support any magazine, or the over-concentration of revenue on any one paper to the detriment of all others, is a sign of ill-health.

The reasons why there will be one less separate magazine about musicianship on the news stands every month are largely due to the failure of the instrument industry to avoid a dangerous tendency to stick all their eggs in one basket. The results of that are plain enough to see for anyone who buys all the musicians' papers. Whether having such tremendous amounts of advertising revenue actually benefits a magazine editorially can best be judged by yourselves, with special reference to International Musician and Melody Maker

This isn't sour grapes, by the way, just a few thoughts about why Beat went into a merger and to try and show that comments about falling circulations are spectacularly irrelevant. Frankly, it doesn't seem to make much difference to the success of a magazine whether it sells in vast numbers or not. What matters is if its advertising staff can pull in the pages. Sad But True department, I'm afraid. Furthermore, it has been suggested that the success of an advertising department is as dependent (more so?) on the salesmanship of the ad people than on the quality of its journalism. That is something that I hate to think about because I do believe that it has been proved true in quite a few cases.

Anyway, the merged Beat Instrumental and Sound International (which will, henceforth, be known the other way round, of course!) is in a tremendously strong position. SI is part of Link House, a well-respected and large publisher. Beat's ideas are planned to live on as part of the new combined force.

Drums have been thumped elsewhere in the magazine about how great things are going to be and (from what I've been told) I think that's right. It's a pity, yes, that Beat has gone the way it has - but things can only get better how that it has married itself to such a healthy, young mag as SI (and I refer to the mag as an entity: the staff's health and youth I'll leave to your strained imaginations!).

The fact that Beat came from what can only really be called a 'show-business' background and that SI comes from what one has to describe as a technical' one gives SI/BI a distinct edge over the competition. Together the two could be stronger than anything else you've ever seen.

Beat Instrumental had its faults (plenty of them, like sloppy writing, bad layouts and hideous covers, believe me!) but it was mother and father to the whole range of specialist music journalists and papers which are around today, and many of our best musicians. To merge with SI is survival, not defeat. Still, Sic Transit Gloria

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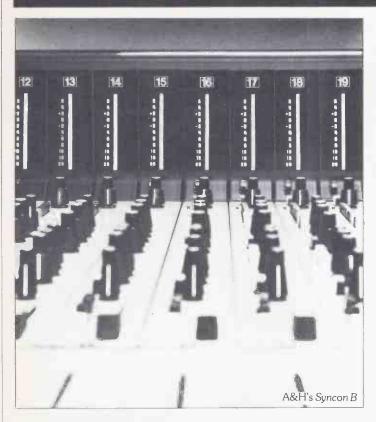
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Sun, Surf and AES

While the general trend in bigleague studios seems to be taking a definite lurch towards full microprocessor control of just about everything that hums, there were still plenty of odds and ends of interest to smaller studios at May's Audio Engineering Society Convention in Los Angeles.

Without a doubt, the standout exhibit was Allen & Heath's new Syncon B in-line console. Front-panel layout of Syncon B is a lot tidier and, I would suggest, better laid out than the early Syncon A design, and now offers full routing to 24 output busses. Separate routing to a stereo remix/monitor buss has also been provided for easier subgrouping during mixdown. Other features include a 3-band EQ section with sweep bassand mid-frequencies; four auxiliary sends plus pushbutton output assignment for various external reverb and delay units; in-place solo, channel mute and improved PFL switching; a switchable effects input to each monitor section for use as a spare input during remix; and VU bar-graph metering built into the end of each module (thus enabling any of the input/output, auxiliary or communication modules to function anywhere within the main frame; useful if you like working with equal numbers of channel strips either side of a central control section)

Syncon B desks can be supplied in a variety of 8-, 16- and 24-track formats, with up to 44 input channels. If your needs are more modest, a 20-input desk can be expanded at a later date by bolting on an extra subframe that holds 12 additional modules. Expected price of a 20-input Syncon B is around £8250; an optional Allison Fadex automation package with plugin replacement VCA faders costs an extra £8000.

Biamp, EV/Tapco and Tangent were also showing some interesting PA and recording mixers. The new Biamp 1642 live-sound console features 16-input, four submasters and two main outputs, 4-band EQ, three auxiliary sends, solo and mute on each input channel, submaster and output module, four echo returns, built-in headphone monitoring, and phantom powering on all mic inputs. US price is \$4700; larger 16/8/2 and 24/8/2 versions should be available in the near future.

EV/Tapco's Series 74 PA mixers are available with 8, 16 and 24 input channels routing via four subgroups to simultaneous stereo and mono outputs. A separate stereo input enables an introduction or effects tape to be replayed through the PA system without upsetting channel settings; alternatively the input could be used for effects return. A comprehensive talkback section has independent switching to each auxiliary, monitor and stereo output. Built-in headphone monitoring, with stereo/mono switching and full priority solo, 24V phantom power and fluorescent bargraph metering on subgroups and main outputs are also provided. Prices start at around \$2000 for a 8/4/2

The new Series 4 PA and 4/8-track recording mixers from Tangent offer simultaneous routing to any one of four submasters and/or left and right stereo outputs. Each input channel includes a 3-band EQ section, three auxiliary sends, peak overload LED, PFL and mute. Separate tape return inputs are provided on each submaster module for use during overdubs; alternatively they could be used for individual effects returns during remix or live work. Level monitoring is by means of 7-segment LEDs fitted to submaster and master output modules. For simultaneous 8-track recording and PA sound balancing,

each input channel has an individual line-out or direct socket. A pretty versatile mixer by all appearances.

A couple of new effects units also caught my eye at the Los Angeles AES. Dbx unveiled the 900 Series of modular signal processors, priced at \$300 each, and which should be available by mid-September. A rackmounting mainframe that holds up to nine plug-in modules plus power supply will cost around \$800. The Model 901 noisegate features variable attack and release times, threshold from +10 to -30dB, and attenuation limit from 0 to 60dB. A separate key input and front-panel switch enable the 901 to be triggered by an external source, such as a drum or vocal track. The Model 902 de-esser can be used in the normal way to remove broadband sibilance from a vocal track or, by adjusting a front-panel EQ control, for attenuating only a part of the highfrequency content. Up to 20dB of gain reduction can be selected by means of a range control. The Model 903 compressor features the same Over-Easy RMS-level detection circuitry used in the dbx 163 and 165 units (see SI March 1980 issue, page 53). Threshold is continuously variable between -40 and +20dB, compression ratio 1:1 to infinity (limiting), and output gain in the range -20 to +20dB. All three 900 Series modules measure just 54 high by 15 wide by 94in deep, and feature front-panel LEDs that display the amount of gain reduction taking place, whether in operation or not.

MicMix laid on an impressive demonstration of the XL-Series of Master Room reverb units. Model XL-210, which cost a very reasonable \$950, offers two completely independent channels of reverb for realistic stereo effects. Each channel is provided with input and direct/reverb mix controls, plus a very useful 3-band EQ section for realistically creating the sound of a live chamber, plate or concert hall. A pair of front-panel LEDs are illuminated when overload occurs anywhere within the unit. The slightly more expensive XL-305 stereo spring reverb (\$1500) features a 4rather than 3-band EQ section for even greater control over the sound quality. Both units sounded very nice with a wide range of input material; the 305, in particular, seems to be practically immune from boings, twangs, flutter and similar nasties you often get when a spring reverb is subjected to sharp listen.

Steve St Croix of Marshall Electronic was also demonstrating a new and improved version of the wellknown Time Modulator analogue delay unit. Model 5402 now offers up to 400mS of continuously adjustable delay at a claimed 15kHz bandwidth and 90dB dynamic range. Each pair of delay lines is now provided with no less than three separate output taps, thereby expanding the range of effects which can be created. A separate switch for selecting different modulation waveforms, independent flange and delay sections, plus LFO high and low indicator LEDs certainly make it easier to find your way around the new 5402's restyled front-panel layout. Improved delay circuitry is also said to eliminate unwanted side effects such as pumping and breathing. Price of the 5402 Time Modulator should be around \$1200 (see photo below).

Last, but by no means least, stumbled across a particularly useful device on the Raindirk stand, a company possibly better known as manufacturers of the budget-priced Concord 2000 in-line console available from EELA Audio. The new S20 Control Unit is a studio-quality pre-amplifier with switched inputs for turntable, tuner, two auxiliary sources and two tape machines. To enable it to be placed as close as possible to your turntable - to reduce hum and noise the unit's RIAA pre-amp is contained within a separate plug-in module. Two such modules are currently available, complete with fully adjustable gain and impedance matching to suit moving-magnet and moving-coil cartridges. Also featured is a 3-band sweep EQ section and in/out switch, active balance control, and a 22position level attenuator giving accurately-calibrated gain steps. A builtin 3W headphone amplifier has also been included for monitoring. The \$20 occupies just 13 in of standard 19in rack space, and costs around £325. In a future issue I hope to review Raindirk's new and rather interesting SV500 MOSFET power amplifier, of which I have heard good reports.

Marshall modules on display





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Of course, creative musicians thrive on change: anything from a change of personnel in the band, a change of rehearsal room, a change of musical instrument, or a change of socks. Joan Armatrading, if she fits into any category, is certainly a creative musician, and if you've heard the most recent album, Me Myself I, or seen her and her band on the recent tour to promote this album, you'll probably agree that she's been through some changes: style, pace and musical approach being merely the

more obvious ones.

Armatrading puts some of these stylistic changes down to a period of time last year when she was forced to spend three weeks in hospital and the following few months recuperating. This led directly to the songs on *Me Myself I* being written more quickly than any previous songs. 'I had a lot of time to sit and think about what I wanted to do,' she explains, 'and then when I did do it, it was just . . . easier. You know, 'cos normally what happens is something makes you want to write – I dunno what it is – and then you start, you write the words down, or you get the music together and then you do the words, or whatever. But you're not sitting for three months just *thinking* about it in your mind, which is what happened when I was ill. I had a lot of time when I couldn't do things, so I just spent that time thinking about what I was gonna do, and then when I could finally do it, it was all there, it was just a matter of sitting down and playing it.'

Here, again, we come across the 'unique' element in Armatrading's talent: her songwriting – which in the past at least has tended to centre on relationships and, she has often claimed, largely non-autobiographically based events – does not fit into any particularly rigid format of style or content, and defies the listener to say, 'Ah yes, a bit like so-and-so.' More likely, the listener will prick up ears and say, 'Ah yes, Joan Armatrading.' But on Me Myself I a new vein is identifiable, and musicians will be quick to point to the simpler structural basis of the majority of the songs. Armatrading doesn't feel, though, that the new songs' simpler chord structures had as much to do with the speed of writing than her enforced period of contemplation; however, she is keen to explain that the 'less jazzy' leaning was due merely to a desire for something more musically basic. To tie in with this change in direction, as the A & R department would no doubt term it, a new producer, Richard Gottehrer, was recruited (the three previous studio albums mentioned earlier had all been produced by Glyn Johns). 'I think I needed to do that to sort of bring out the sound that I was trying to get,' says Armatrading, with a slight air of uncertainty. 'I mean Glyn is an incredible engineer, but I felt that maybe to get that extra edge, not only would I need to record somewhere else, but maybe a different set of ears, you know?

The 'somewhere else' turned out to be the Record Plant in New York, for which Joan is full of praise: 'Great! Good engineer, good producer, good assistant engineer, very good studio – we never had one breakdown, I've never known that before!' Her three studio albums with Glyn Johns were recorded at Olympic studios in London, which she must have been getting very used to. 'Yeah,' she laughs,'I like it, but I fancied a change after three albums there.' She explains that she always went into Olympic prepared with songs and armed with relevant bits of paper, but stresses that she does like to give musicians lots of freedom within my restrictions. And I liked to hear all the little bits and bobs happening. That's how that used to work, but with this new one I got a bit more strict, a lot of the things I just worked out and the musicians really had to stick to that. I mean they've still got freedom, just a little bit less on this album.' She repeats her assertion that simplicity was what she wanted from the new songs: 'The chord structures are very basic, just major and minor chords, nothing fancy, no jazzy stuff. I just fancied a bit of simplicity.

This new-found speed of working was also facilitated by Joan's home demos - she points out that with Glyn Johns and Olympic. she'd get to the studio and just play through the songs in front of the musicians, who'd then start to write out their parts from that, each player wanting to use his own particular method of shorthand for each rhythm track or solo. This way of working was inevitably a lengthy one, although it seems to have suited the kind of tracks then being recorded. 'We could spend three days doing one song, it was really tiring,' she remembers. But Joan has recently taken to using a Revox at home for working out basic ideas, coupled with the occasional more extravagant studio demo. Songs for which she made Revox home-demos include How Cruel (which found its way on to the live Steppin' Out album), the January 1980 single Rosie, the unreleased song I Really Must Be Going, and the title track of the new Me Myself I collection. Sometimes, though, she'll take the home demo to a middle stage, and record a 'rough' studio demo, for which she's used Surrey Sound, Morgan and Matrix studios - she used this method for Is It Tomorrow Yet on Muself, for example. "I've talked about getting better facilities for me at home,' she says, following the successful musician's normal course in these matters by stating that she's 'thought about getting a Teac and that. Because it works really well the way I do it now, I think on this album it's worked the best. On this album I've used more demos for the studio than I have on the others - I really enjoyed it, and that also helped to make the album quicker, that saved a lot of time.'

But perhaps the most important event that may well influence her composing techniques happened during the normal equipment juggling that occurs - often at the last minute - before any major tour. The keyboard player suddenly realised he needed a synthesiser - a need which could well end up having far-reaching implications, as Joan explains: 'I've just bought a Prophet-5. You don't have to do anything! Just press a button, press a note and that's it. I'm gonna write on that, so I don't know what's going to happen: there's just so many things you can do on that. We needed a synthesiser cos Dick (Sims, ex-Clapton keyboardist in current Armatrading road band) didn't have one. Red (Young, keyboardist from previous Armatrading road band) used to play an Oberheim, and we talked about getting one of those, and then Chris (Myring, equipment manager) said: Have you heard about the Prophet-5? And I said: No. And then Dick said: Oh yeah, those are great! Chris went and got the pamphlet, so we said OK and got it. So we had it in the rehearsal room and that was it - I just went mad with it!' Of course, the actual mechanics of utilising such an instrument in her composing have yet to be fully worked out, and she's still at the stage of mucking around with the 5voice machine from California. So, when I ask how she's going to use it for writting, she shrugs, 'I dunno. I've no idea. It's gonna be great, though. I hope I find things I can use, it's going to be really interesting.

On a more conventional front, Joan's use of Ovation guitars is well documented, and the fact that she is an endorsee - that is to say she gets a good deal of her instruments free in exchange for her name being used in advertising and promotional material means that her judgement of the guitars is bound to be biased. Nevertheless, she chose Ovation initially because they were the best guitars which suited her purpose, and she is still experimenting with guitars and looking around for others. 'I'm looking for another acoustic to play,' she mentions, 'just for another sound on record, and I have been trying out a couple of things - not named things, but things that people make, I can't always remember the names . . . I'd really like to find something else, though. When I was doing this last album I got them to bring in all sorts of different guitars for me to try out, but I still ended up using the Ovation,' she laughs. She used an Ovation Folk Classic electric acoustic, and a 12-string too.

She tells me the story of going into a shop in London's Shaftesbury Avenue and being shown an Ovation for the first time – this in about 1972. 'I had a Yamaha then, used to put a Barcus Berry on it which kept falling off, so I tried different pickups and none of them worked, it used to be just a jangle. So



first of all I was looking for Martins, thought they would be a good one, and I tried all sorts of other things. Then the guy in the shop showed me the Ovation *Balladeer* that didn't have the pickup on, just straight – really nice, very mellow sounding. I ended up getting the *Folk Classic*; it had the pickup so I used that. But I don't use it with the pickup when I record – although I did use the 12-string with a pickup on some of *Me Myself I*.'

I mention that a criticism often levelled at Ovations is that their straight acoustic sound can be rather synthetic and gutless. (For other musicians' reactions to the 'straight' Ovation acoustics, see the Acoustic Guitar Test on p44.) 'It does sound different to a normal guitar,' she admits, 'but I really like the power of it. It does sound very loud – except if you've got like the Balladeer or other models, they are very sort of dead. The ones that I've got are very live-sounding, very loud. And now I have difficulty going to other quitars 'cos they seem quiet to me.'

Another area of development which ties in with the more basic, electric feel to much of the material on the new album has been Joan's adventures with solid electric guitars – instruments for which she has in the past indicated a degree of disinterest. Even now, her efforts seem to be somewhat jinxed. 'I have actually been playing electric on and off at home; when I do demos I play lead and stuff. At home I'm really good! On my own, you know? Every time I try and do it on the road, it never seems to work out. We did the Rock Palace thing (live German TV show that was broadcast by the BBC in the UK) and in the song How Cruel I was gonna play the solo with Ricky Hirsh. We started it, it worked out great in rehearsals, but every time we got to the gig my amp wouldn't work! Three times in a row - it either wasn't on, cos they'd forgotten to put it on, or it just didn't work, or whatever. So . . . I just thought: Forget it! But I keep threatening to play electric.' She owns a Gibson Melody Maker, a Strat and, inevitably, an Ovation Preacher. The Ovation solids have distinctly failed to attract guitarists in large numbers, although Joan - again, bearing in mind her endorsement relationship reckons she gets on well with the Preacher. Hmmm... gets on well with the Preacher, looking into the possibilities of the Prophet - next thing you know, Bob Dylan'll be round for tea.

Religious fervour aside, she finds the transition from her unique (that word again), ultra-rhythmic, percussive acoustic style to electric playing quite difficult. 'It's so different. The technique of it is so different, you know, and there's things you have to do with both hands when you're playing the electric, you seem to have to do them the opposite way round, or something. You've got to learn to stop the strings from ringing,' she says, and

admits that it really does come down to learning how to play all over again. Ringing strings may be a problem with electrics, but during her career she's managed to find the strings that suit her acoustic playing best. 'I used to use Picato light gauge, but now I use D'Merle mediums, just for that thicker, rhythmic thing. I've used those for years now. I used to swap about a lot before, but now I've found those and I just stick to them. And then on the 12-string I use the same strings, D'Merle.'

On stage, Armatrading uses a few effects boxes to add depth to the Ovations' sound now and again, and on the recent tour this was heard to good results on songs like the strident Kissin' And A Huggin'. 'I use some effects, like a Boss Chorus, and an MXR Phase 90 and 100,' she says. 'What I've been doing on the last couple of gigs is to try them on whatever I feel and, er, it hasn't been working out at all! People keep telling me the Phase 90 and the Phase 100 sound the same – well, they don't. There's four settings on the 100 and just one on the 90 – the 90 has got a very, it's gonna sound silly to say this, but it's got a very "melodic" sort of phase, you know? And this other thing, the 100, is harsher. No matter where you put it, it's harsh. The first time I started to use it I put it on the last setting, which is very "round", just keeps going, and you play a chord and hold it and it goes on forever.

'So, a song we do called *Tall In The Saddle* – the blues thing, very sparse at the beginning – I tried it on this and God, it was so annoying! The thing is I have my pedals a bit too far away from the mic and I have to keep singing, and I'd put this thing on before I'd started and I couldn't reach it to turn it off, so this annoying sound was just going on and on! I was stuck with it. I had to wait for a good place in the song to nip over and change it, which was half way through the number. I'm sure it got to the audience, 'cos it got to everyone else on stage! So now I've started using the third setting, that's not too bad. The second one is the one that's supposed to sound like the 90, but it doesn't. The 90's much better.'

A few words more about effects – use and overuse thereof – bring my short chat with Joan to a close ('Joan only does interviews for half-an-hour, and only two at a time,' the press officer informs me – après moi, the Mirror). As I packed up my carefully written-out questions – which I never got to look at – I muttered an old favourite: Has she been listening to any particular music lately, especially as she'd expressed interest in Pete Townshend's solo album at the start of the interview? 'Er, no ...' she says vaguely. I've read that Van Morrison is a favourite of hers ... 'Yeah, I like him. I should listen to more really: probably make me better to listen,' she muses quietly.



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The diagrams on this page show the stage and microphone layouts and routings used on Joan Armatrading's recent tour. The boxes right and far right describe the main desk routings and auxiliary equipment racks. Top to bottom, the diagrams illustrate: 1 Guitar routing and onstage monitoring; 2 Keyboard routing and monitoring; and 3 Stage layout and mic placement, including monitors.

Auxiliary Racks

Rack 1: Eventide Harmonizer H949 Chorus Echo RE301 Tasco communication module

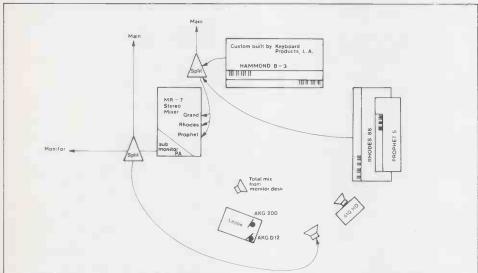
Sony tape deck

Rack 2: 2 x dbx 160 Comp/limiters White sound analyser

2 x Klark Teknik 27-way graphic eq

Tasco 4-way crossover

MR-7 Stereo Mixer HH \$500 D 1 L - 6 string HH \$500 D



Midas Main Desk Layout Input channels

- Cassette (Pink Floyd) 2
- 3 Pink Noise
- Keyboards Mix
- 5 Prophet
- 6 B3
- Rhodes L-R 8
- 9 Leslie
- 10 Ricky guitars Rick guitars 11
- 12 Stratocaster 13 Eopen nylon
- 14 12-string
- 15 LP standard
- 16 6-string
- 17 Joan Vocal
- 18 Bill Vocal
- 19 Ricky Vocal
- 20 Rick Vocal
- 21 Bass DI
- 22 Bass mic
- 23 Timbales
- 24 Kick
- 25 Snare
- 26 Hi Hat 27 Tom 1
- 28 Tom 2
- ,29 Tom 3
- 30 Floor Tom
- 31 Floor Tom
- 32 Overheads (drums)

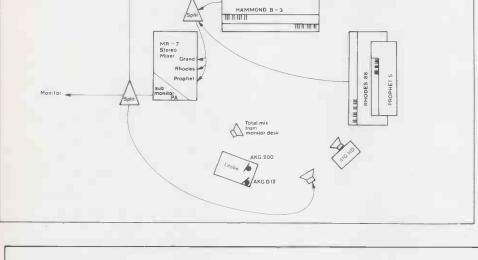
Effect Channels

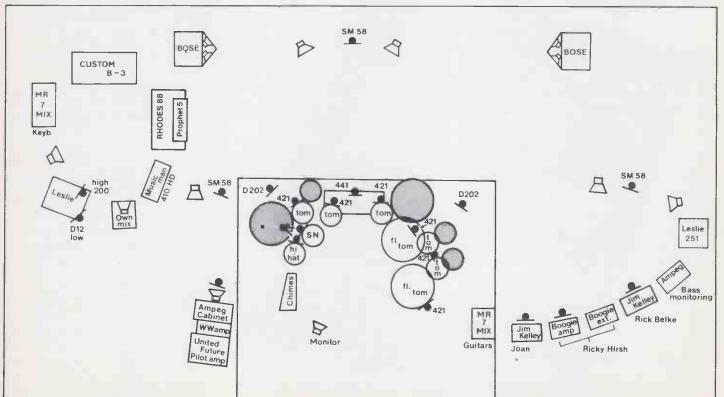
- 1 Echo
- 2 Delay (from Harmonizer)
- 3 Harmonizer R
- 4 Harmonizer L

Sub Mixes

- R Vocal and effects
- Keyboards 3
- 4 Bass
- R Guitars 5
- 6
- 7 R Drums
- 8

Main outputs L





when you try to separate two guitar sources in a mix: 'The Jim Kelley gives more of a Strat sound,' says Graham, 'whereas the Boogie gives more of a Gibson sound.'

Ricky Hirsh – formerly involved with Wet Willie, Bonnie Bramlett and Greg Allman – plays a late model Les Paul using a Boogie amp, plus a Boogie extension cab. He agrees with some of Graham's comments on the Boogie, while at the same time praising his amp as being versatile-sounding with a lot of bottom end – and conveniently fitting into the backseat of his car when he's off to a session!

In order to add a bit of body to the sound of his Les Paul, Ricky uses an Echoplex on a couple of tunes (eg Cool Blue Stole My Heart), yet not trying to use it with a slapback effect, but rather to give the music an air of spaciness and therefore elevating it a bit from the rest of the mix.

Joan normally plays acoustic guitar, with the exception of one solo which she performs on a Les Paul Special routed through a Jim Kelley amp (though see her comments in the interview on p19). Her rig, assembled with the help of equipment manager Chris Myring, consists of two sixstring and one 12-string Ovations with onboard transducers (ie electric/acoustic versions), feeding an MR7 stereo mixing system and then on to two H/H S500D power amps that provide her two Bose speakers located on each side of the stage with signal. These speakers are pointed towards Joan giving a perfect guitar monitor system. Joan tunes one of her 6string acoustics down to a standard Dtuning, the other to open-E, and she switches back and forth between the two.

PA

The PA cabinets used on Joan's tour were exactly the same as the ones used on Elton John's tour last year. Several other bands, for instance Manhattan Transfer, Donna Summer and Thin Lizzy, have had the opportunity to travel with the new Harwell design licensed by TASCO Inc, and there seems to be a tendency for engineers to classify them as highly efficient and smooth cabinets, comparable with hi-fi speakers (or studio monitors, if

Engineers Peter Schustel and Roger Harvey (owners of Harwell Ltd) developed these new cabinets from some of their older designs by finding a patented method of loading a low-frequency drive unit with a horn, a principle used with drive units of less handling power and less efficiency back in the 1930s.

Recent designs based on these principles have extended the Harwell line to include the upper-frequency spectrum, too. The two 4-way TASCO-designed crossovers are switched to have crossover points around 250Hz, 2000Hz and 5000Hz, and each PA stack is driven by BGW power amplifiers (models 750A and

250D) which aren't driven hard due to the efficiency of the PA. No limiter needs to be inserted after the two Klark-Teknik 27-band graphic equaliser as there is plenty of headroom; engineer Graham Thornton prefers to put in a peak for the vocals at around 2 and 4kHz.

Main Desk

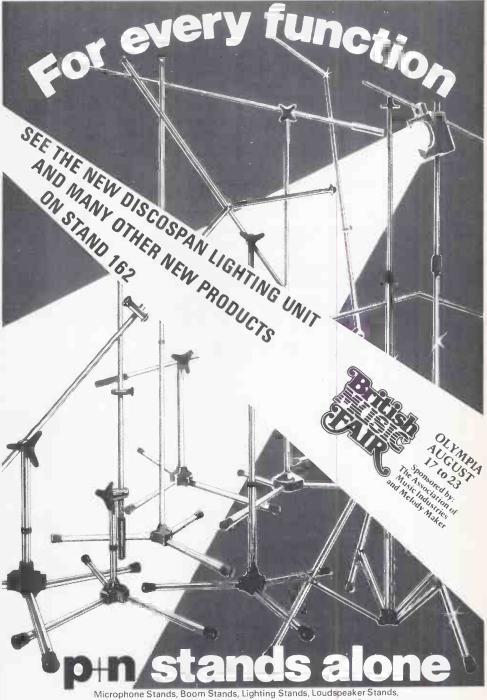
Two dbx 160 complimiters were used on the main output of the mixer, just to tighten the output of the whole system. There was no need to bring any huge reverb units – a *Chorus Echo 301* provided Graham with a short touch of reverb which was all he required for this particular tour.

The Eventide H949 Harmonizer, used on the vocals of several songs (like Ma-Me-O-Beach, When You Kisses Me, Me Myself I and How Cruel), is set to sweep 0.005 above and below the pitch as it

sounds more natural than leaving it on one setting. Joan does not find it difficult to keep the pitch, as the monitor signal does not include any harmonised signal (as opposed to Elton John's fx-laden monitors when he was touring with the system).

In the rig we find a White sound analyser and a tape deck which Graham uses to set up the PA. Because Pink Floyd albums are very well produced and have a very wide range of sound, Graham likes to listen to how they sound on the PA after having used pink noise to get the basic flatness without the extreme peaks often created by the design of a particular hall. The analyser is a very good guide, but it is never to be taken too seriously as it won't tell you at which frequency there'll be a pressure-build at the back of the hall (underneath a balcony, for example).

continued on p29



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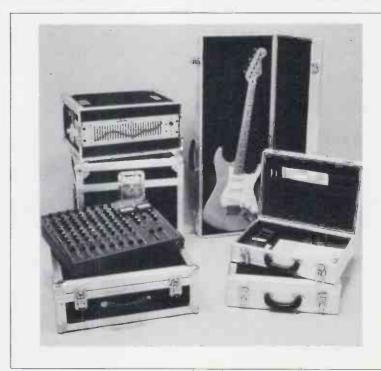
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28

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The 32-channel Midas main desk is quite orderly arranged. Input channels 5 to 9 are direct feeds from each individual keyboard instrument, whereas channel 4 is considered a spare input from the keyboard mixer located on stage directly by Dick Sims. This channel is a spare in case of equipment breakdown. Channels 10 to 16 are guitars, Joan taking three channels for her two six-strings (one 'stereoed' by a Boss Chorus, the other nylon-strung and mono) and 12-string (for songs like Love And Affection and I Really Must Be Going). NB The Strat mentioned on the desk layout as channel 12 should – according to Ricky – in fact be a Les Paul Special played on a solo in How Cruel.

All channels have got four effects sends pre or post fader - and are returned back into their own returns with eq facilities before being assigned to channels 1 and 2 on the submix. Only vocals get special effects. Guitars have effects added on stage with units like an MXR Dynacomp, MXR Phase 100, Boss Overdrive-1, and the Echoplex, plus, of course, volume pedals.

Monitoring

Monitoring is quite uncomplicated too. In order to get the on-stage balance right, extension cabinets (and, thereby, the 'location principles' described by Iain Scott in the article on 10cc's live sound in



A very special part of all soundchecks is trying to remember that great setting on the amp that you had

the July '80 SI) did not need too much of a separate mix for each musician.

Joan was thus surrounded by her own guitar sound through the Bose cabinets facing inwards (left and right), her own voice, some keyboards and bass from the wedge at her feet, and Rick and Ricky's guitars from behind her on the right. It all seems a very 'forward' and natural way of monitoring.

A 20/8 RSD monitor desk suited the purpose, and in the rig beside the desk were two Lindsay 4-octave graphics (7607s), two Pro Audio PA27 graphics,

and four H/H power amps (model S500D).

Stage set-up and Mixing

The stage layout seemed to be quite relaxed: session-oriented rather than show-oriented, which is a cosy, dynamic way to be creative. Bass and drums were close to one another - bass and keyboard were next to each other, with drums and rhythm guitars close by. Joan was in the middle, centre stage: a perfect, direct setup for ease of communication.

All vocals were picked up with Shure SM58s, with SM57s on guitars. The Leslie had an AKG 200 on top and a D12 on the bottom, while snare and hi-hat had SM57s. Bass drum sported a Sennheiser 441 and toms had Sennheiser 421s. The kit also had two overhead AKG D202s to pick up the high frequencies from the cymbals.

As mentioned earlier, all mic and DI signals were routed to a stage splitter box and so to the main and monitoring desks, but the keyboard player had a Music Man 410HD cab purely for guitar monitoring, whereas the guitar 'section' had a Leslie 251 for keyboard monitoring. The Ampeg is an extension cabinet for bass monitoring, and bass player Bill Bodine listens in on Dick Sims' Music Man. Bill's B C Rich Eagle bass is connected to a WW amp (built by Walter Woods of California) which powers his own Ampeg.

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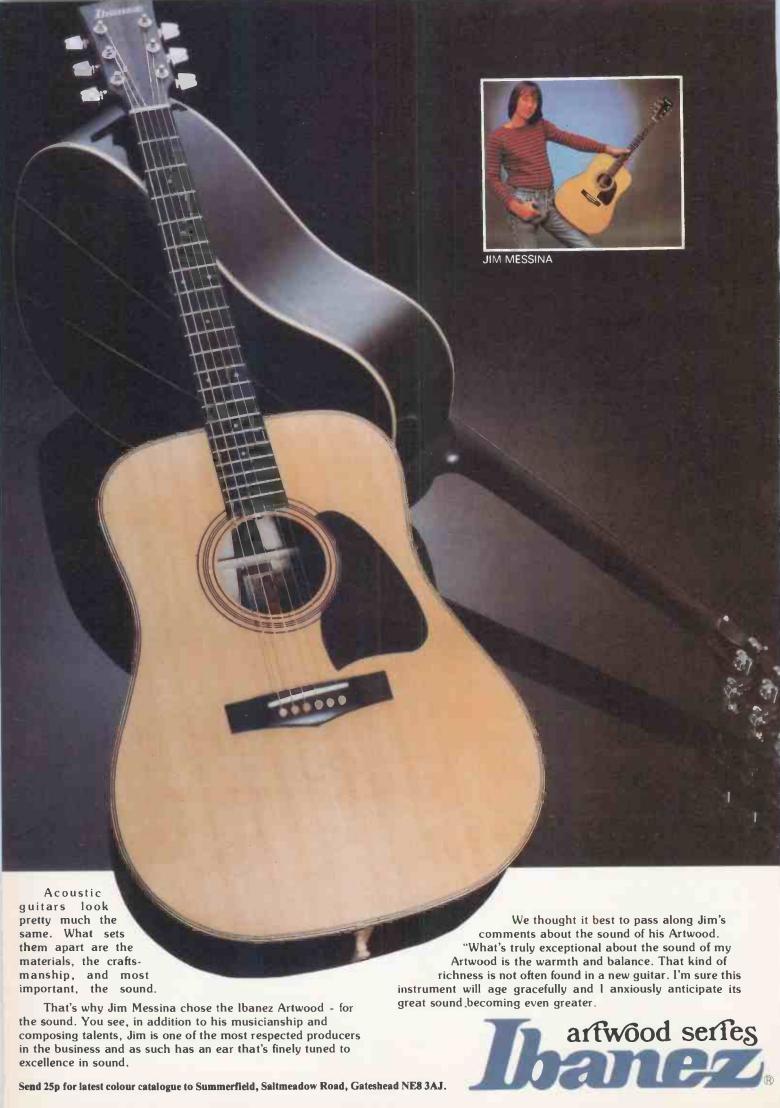
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Eddy Grant Equals Ice

I ce Records offices are situated in the north London district of Stamford Hill. The corner building's neat brickwork and white paintwork make it a little smarter than the surrounding residential terraced houses. As I was shown down the hallway, through one door I spotted the usual desks and telephones, while in another room, records are stacked ready for shipment. The boss had not arrived so I was given coffee and asked to wait in a largish room occupied by a stereo and comfortable furnishings.

On the wall are framed copies of the sleeves for Eddy Grant's Walking On Sunshine album and single. The single sleeve – like another close by for The Mexicano – bears Japanese writing. Also on the walls are the sleeves for

The fiercely independent
Eddy Grant continues
to do things his way.
Ralph Denyer asks him
about writing, recording,
producing and performing,
and takes some photos.

Grant's Living On The Frontline single plus the Equals' Mystic Sister album. There is little else to see except for a colour photo of Grant on stage and a work progress chart with headings like 'Mastering' and 'Pressing'.

The man arrived and quickly settled down, electing to spread out on the floor with the telephone and small switchboard within his

reach. With his Dreadlocks tucked underneath his woollen hat he has a slight facial resemblance to James Brown from certain angles. His voice is deep and resonant.

Being black has its disadvantages. Being in the music business – for anything more than a couple of years – also has its disadvantages. A combination of both can take a person down a long and hard rocky road. After a decade-plus in the music business, Grant's manner indicates that he has a tenacious yet unabrasive spirit. He has taken the knocks well and is more than just a survivor. In some ways he is unique.

In Britain his biggest success to date was with the Living On the Frontline hit single. Grant wrote the song, recorded it at his own Coach House studios, played all the instruments (bass, drums, guitar, keyboards, etc) sang lead and all backing vocals, produced and engineered the sessions, had the record pressed at his own plant (which manufactured all Ice records up until June this year) and released the record on his own label via a split logo deal with Ensign (who handled the actual distribution). Grant does at times recruit the aid of various musicians and recording engineers, but generally does the lion's share of the work himself, particularly on the creative side.

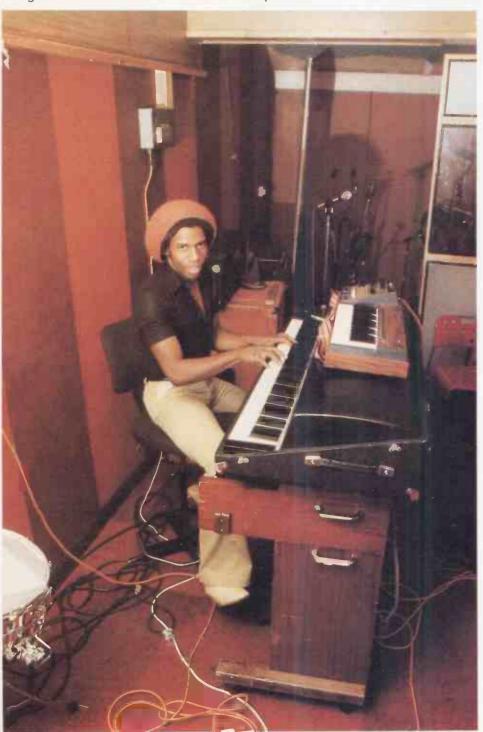
The Equals are not a band whose history has been meticulously documented in the annals of rock. They were not that type of group, they made straightahead commercial singles. Grant played guitar, handled the record production and wrote all the group's hits (including Black Skinned Blue Eyed Boys, Viva Bobby Joe and the number one record Baby Come Back).

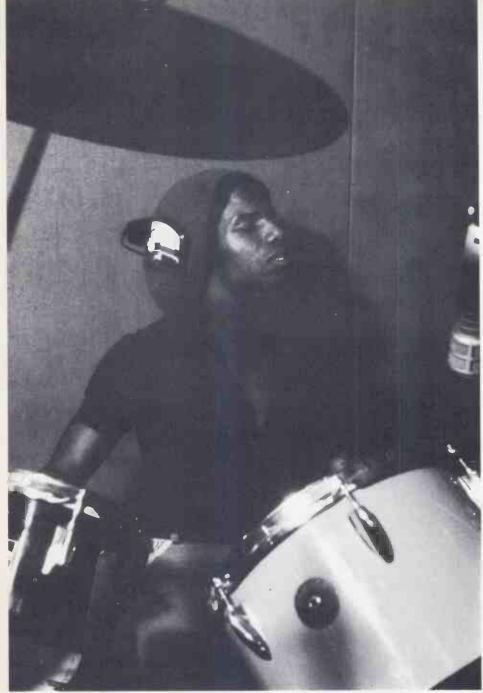
When Grant left the Equals he stayed with President Records – who released all the group's records – for one solo album. He wanted to break away from his previous image and 'the whole Equals syndrome' but initially contracts prevented him from leaving President. Eventually he was free and in 1974 he managed to get his own Ice Records underway. Though Eddy was raised in Britain, he in fact started his label back in his native country of Guyana.

'That was because when I left the Equals, the music business was not very receptive towards me,' he explained 'Since I really don't like to beg for anything I decided that if I couldn't get the kind of deal I wanted from a record company (in Britain) I would go somewhere and create a stir for myself and then – maybe at a later date – they d be more receptive to me. And I was proven right.'

Grant's records did well in Guyana and, with a foothold in that country, he was soon making a name for himself throughout the Caribbean. Soon after, Grant established Ice Records in Trinidad and by 1976 was also producing records by 90° Inclusive, The Pioneers, The Mexicano and Lord Kitchener. In 1977 Ice Records started in Nigeria, Canada and the

I asked him if he now was more interested in the record company or his writing, recording, production and performing. 'Music is my life,' he answered. 'To some people it's a job. I've never done anything else in my whole life





except make music. The only thing that came between me and music was school and even there I made music

'I can make every decision in this record company. I can go out and dig the garden. paint the house, anything you like. But at the end of the day the most important thing is that I have to make music.

With regard to his pressing plant, early in June Eddy decided to 'liquidate that situation because it was costing me the earth. That was purely and simply because of bad management. I mean, the industry is sick but I wasn't suffering from that. The state of the industry may have caused a bit of a problem but I'm not one of those people who blame the industry for everything. It was quite a large company. It was owned by British Homophone before and then by President Records who owned me at one time in my life. I think that it is now time for me to concentrate my efforts more on the artistic side. I've got certain plans that I want to carry through. Spending all my money on a factory is not the best thing for me to do at this time. in this economic climate anyway.

The Ice Records roster of artists has been reduced to Grant, The Mexicano, Henry

Barns, and a new signing, Stephen Ensinus. Grant is as aware of the problems in the record business as anyone else and plans to keep the label small and efficient, concentrating efforts on a small number of acts. 'There are people here to make the decisions. I'm just one of a team and I'm becoming less and less involved. I don't want to be involved too much in the dayto-day running of a record company. I think that the smaller we stay the better.

Right from the early days with the Equals. Eddy was in charge of 'all studio activities'. His fascination with the recording medium, allied with his talent as a multi-instrumentalist, results in him spending all the time he can in his studio. He has a working knowledge of recording equipment. On any given day he is most likely to be found in his studio multitracking away for all he's worth, frequently starting the tape rolling himself if there's no engineer around. 'I've always played as many instruments as I could lay my hands on. But my main instruments have been guitar and - at one time in my life - the trumpet. I started off playing trumpet, and then came guitar. To me, every instrument is equally valid. A euphonium is as beautiful as a violin. Some people believe that

only violins are beautiful. People believe that only a certain race is beautiful or a certain colour of hair or feature, but not me. I believe that all features are beautiful and it's relative to where you're standing at the time. I treat music the same way, all my instruments I treat with equal love and care.

'A cowbell can be as beautiful as any instrument you care to mention. You'll notice it in my music. Someone will say: Why do you put that tambourine so loud? To me, on that particular track the tambourine deserves to be left alone, you know. To play on its own and to dance or whatever.

Eddy agreed that his production can be disorienting for the listener hearing instruments recorded in a slightly off-centre way. He went on to talk about how he builds up tracks, one instrument at a time. 'It depends, and you can normally tell how I have put a track together because the first instrument that I record usually has the most important role in the music. For example, if I'm about to write a song like Say I Love You. By the way, thank God for Say I Love You because although it's never been released as a single here, it's sold more copies than most records I've had. That was the first song I ever recorded in Yoruba which is the language spoken by the Yorubas in Nigeria. it's a great west African language. But with that particular track (on the Walking On Sunshine album), when I started to write the song the first thing that came into my mind was the riff and I went through every instrument in the studio to find out which one would

'They can't concentrate all their energy and say: For the next 10 minutes I'm gonna think of a really nice piece of land with grass going up the hillside with a lake on the other side. Now I'm gonna play music that really sounds like that. The reason why a lot of people's music is used as muzak is because the music doesn't interfere with anybody's thoughts: They can't provoke thought. I defy anyone to play my music quietly and talk over it. If you turn it down something is still going to jog you for some reason and you will have to either turn the music right off or listen to it properly. Even if it is quiet in the background it will disturb you. Because when I'm making some music, my mind is so concentrated on what it is that I am representing that it does something to you, it will disturb you

'If I put people to play with me on my music, they disturb my thought. I ask them to play something and they think about the new Herbie Hancock riff just because it's flashy. I say one thing and they're thinking about the new Stevie Wonder riff. I don't want that, it's very difficult. Very few people appear on my music. If you listen to my music you can find

out, you can see it there.

'In the end it came down to a choice between the guitar with vibrato or the electric piano. I chose the piano and therefore without any metronome or click-track - I went over to the electric piano, told the engineer to start running the tape and I put down the basic riff for three minutes. Then on top of that I played the cabaça to give me a more defined time. After that I put down the rest of the instruments. Most times I would start with the drum track because I've got the song or part of the song in my head. Maybe I'll put down just the bass drum or the snare and the hi-hat.

What is his philosophy behind playing all the instruments himself? 'Nobody feels like I feel. On the other hand, I don't feel like someone else does. But I believe that the feeling that I

have is peculiar to me and although a lot of people can play music which is similar to mine, they can never play it in the same way. I find that when I play with people their personalities come in to the music. And most people have no personality at all in terms of music. They can't love for three, six or ten minutes, they can't feel good for that long. Most people are miserable bastards.

'Most music is made not with any creativity in mind, it's made to sell records. It's like going to take a driving test. People say: You've passed, you've become a driver. You haven't become a driver, you've just qualified by passing the test. People are called musicians because they play an instrument but a lot of them don't have their hearts in it. And if your heart isn't in the music it will show and it just sounds like trash.

'I know some people who are not really good musicians but they've got a lovely heart and they'll play two notes on any music and it will sparkle like the sun. A case in point is BB King who is not the greatest guitarist in the world but when he plays a note it rings, it sounds like heaven because there's heaven

going on inside him.

Eddy's new album bears the inscription Everything On Ice Is Twice As Nice, but at times it must have been hard to keep up the corporate smiles. The label has had more than one distributor. Pye distributed Message Man. which was Grant's first Ice album in the UK. The hit single Living On The Frontline was distributed under a split-logo deal with Ensign. (According to Rudolf at Ice the fact that the record was a hit was mainly down to the efforts of Ensign's Nigel Grainge and Chris Hill.)

Then Grant signed a deal with Virgin for Ice product. The first Ice/Virgin Grant album was Walking On Sunshine which also included the song Living On The Frontline. Obviously to go through all that kind of business hassle and keep on creating music requires a certain amount of determination. 'I don't like to compromise at all so that tells you how much compromise there is. I don't embark on a project unless I know I am right in doing so. If I feel that I'm even 10% wrong, I won't embark on any project. I know that I am right, I do everything because I believe I am right. I don't have any doubts when I have decided to do something. Before I decide I might have a doubt. That goes right through my life down to mixing my records. It's the same thing, I'm positive. People say: Oh, sometimes Eddy, you make such stark records. People say to me Message Man and Living On The Frontline are so stark. I say that is because that is the way I fee!

'I make the kind of music that my environment dictates, whatever is going on in and around me comes out in my music. I won't change that to get a hit record because long after I've lived and I've died my music will still be around representing the fact that I have lived. If I'm the 60th version of Gamble and Huff then that doesn't mean anything to me. What is more important is what I believe and feel. I suffer for it. And when I win I win because of me.

Most people know Grant as a solo artist through Living On The Frontline. The reggae feel of that record tends to make people think of Eddy as a reggae musician in spite of the fact that his albums defy musical classification. 'People expected me to be an out-and-out pop freak when I left the Equals. Then all of a

sudden people expected me to be doing Afrocalypso because of Hello Africa and so on. Then people expected me to be out-and-out reggae because they thought Living On The Frontline was reggae. To me that record only has a reggae feel, but the whole concept is not purely reggae. It's like anything else that I've done, it's never purely any kind of music, it's purely me. The central figure in the whole play is me. I will go through reggae, rock, symphony, any label you can put up because it's all music and I only feel music.

The lyrics on Message Man and Walking On Sunshine deal mainly with social and racial topics. Not so much the new Love In Exile album. Any reasons for this? 'The topics of Message Man and to a degree Walking On Sunshine were very centralised, direct and to the point because that's the way I felt at the time. This new album Love In Exile, a couple of tracks thrown in there ended that directness and just made it into a good album. I felt that it was necessary at this time to just make a good album. I wrote Preachin' Genocide for the new one which is very direct and to the point. If you put the whole of the two albums before together, they would not have as hard a message as Preachin' Genocide. I believe every word that I said in that song. I had a lot of interference from record companies around the world who didn't want me to have the song on the album.

Grant started his Coach House recording studio in 1974 as the first step towards his current independence. Though his equipment is now on a par with most major studios, in the early days the set-up was far more modest. 'Ah, that was a different game altogether', he laughed, 'we started off very uncertain. We had what was basically the guts of a Cadac desk, 8track goofed up to 16-track, and an old 4-track Studer which was goofed up to 8-track. They worked all right, we made a few hits off those. I did some 90° Inclusive, Pioneers, Equals. Then I bought one of the Cliff Cooper things, an Amity Schroeder 16-track tape recorder with the same desk. Then I had a Studer 80 which took me up to the present Lyrec 24track and Spectrasonics desk.

This sound basis of studio equipment is currently enhanced by various Ampex and Revox 2-track recorders, Dolby M24 noise reduction, an Audio & Design compressor/limiter/expander, a Klark-Teknik D24, and Grant is adding equipment on a continuous updating basis. These days he's in the studio himself a great deal of the time and generally speaking does not hire out on a commercial basis. 'Primarily now, the studio is just for my use. Before I used to let it out to people but they goofed me around a lot. There's not a lot of money about at the bottom end of the market, which is basically black guys and other people I know. Most top recording artists use the big name studios and so on. So therefore when I used to let it out my studio was primarily being used by black guys, a few punks and so on. They tend to have a lot of aggravation surrounding them.' And they've never got any money either? 'That,' Eddy continued, 'is why there's the aggro. So I just use the studio mainly for myself and Ice Records, the occasional whatever.

By now Eddy is well into a four-month coastto-coast USA radio promotion tour. Territory by territory by territory he has done radio tours which are followed wherever possible by gigs with his band. America is a new one for him,

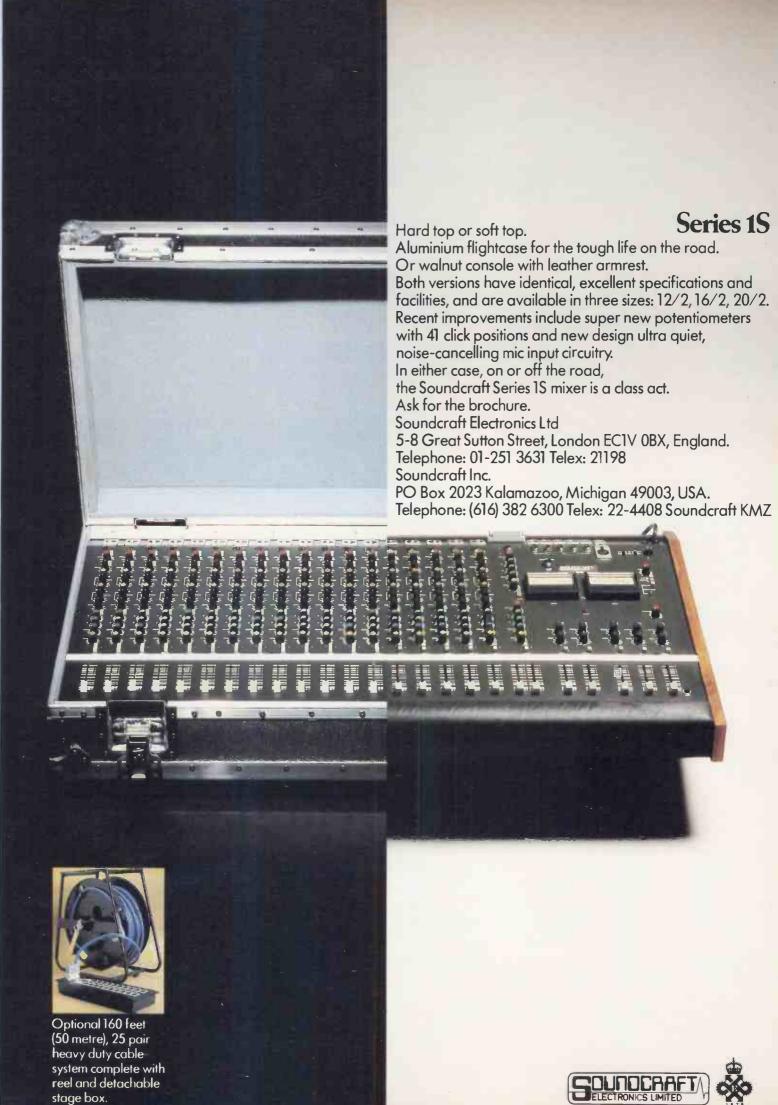
previously his records have only been available on import there. After America he moves on to Argentina and Brazil before coming back to Europe to meet his band for dates in Italy, a country he has already primed with a radio promo tour. In all he'll be on the road for six to eight months. 'The world's a big place and this is the beginning of my career, you see? I wish it had been the way I wanted it from the Sixties but it was never in my hands to do anything about the way I toured before. We were just told to go somewhere and play and whatever. Now that I've got a hand in the decisionmaking as far as what I do, I'm gonna do it

Grant's current band has the same line-up as he used for last year's Knebworth Festival. They are Mark James (from Zapata) on bass, Tony Scantlebury on drums. Tony Edmonds (from Zapata) on keyboards, Sony Akpan on congas, Gordon Gaynor on guitar, Winston Henry (from 90° Inclusive) on percussion, plus Rose Hibbert with Sandra and Pamela Mayers on backing vocals.

'We got a stage sound which is nothing like the records and I'm proud of it. I don't go out to recreate the records. I go out to do a show and entertain people which is a totally different game to making records. I couldn't get the sound on stage that I get on records because most of it is played by me. So I don't try. People come and see me and say the band is better than the record because live we experiment and try things out. You know, we ad lib a lot. We try to entertain, try to put people in a different frame of mind, it's like mass hypnosis really. Once you've got people on a wave you just suggest things to them. You speak with them and it's great. If it's a good night it's great and if it's a bad night it's good.

Eddy's only problem is he obviously won't have the time to get into the studio so much. 'Taking as much time as I do (to record) I'm afraid I might be tempted to start using session musicians or my band to get things done quickly and I think that would be a great loss. If I find it's getting like that I'll stop touring for a while. I don't want to make quick records. I've noticed that a few friends of mine in the business have started to compromise themselves and make quick records. I won't call any names but they know who they are.'





The Spectres

Road Works is a new regular feature which will deal with the thrills and spills of new bands both on and off the road – what's it like finding somewhere to rehearse? Should you believe everything managers tell you? Are record contracts worth the hassle? Are grownups getting you down? Adam Sweeting gets going with words and pictures on and off the Spectres. Now read on . . .

As terms like 'punk' and 'new wave' slide back into the mists of time to be pored over by the lexicographers of rock, it's intriguing to chart the progress of the survivors. The Spectres have only been underway since the beginning of the year, and the band brings together ex-Sex Person, ex-Rich Kid Glen Matlock (see Rich Kids Rhythm Section, SI Jan '79) and erstwhile Tom Robinson Band guitarist Danny Kustow. So far they've played a few gigs, layed down a handful of demos and are currently negotiating a hefty-sounding deal with Arista records.

Glen Matlock, a dark-haired and slight figure, was feeling a little the worse for wear when we met. This was due to an unpleasant eyeball-to-eyeball confrontation with a cluster of skinheads outside Camden's unfashionable *Music Machine* niterie the night before, which had left the lad with a split and swollen lip. The event hadn't dented Matlock's quiet air of confident self-determination.

Kustow was still *en route*, so Glen filled in a little personal background. After Rich Kids bit the dust, leaving one interesting album behind them, Matlock found himself involved with Iggy Pop. He played bass for the wayward great uncle (or something) of punk throughout one English tour, one album and one American tour, each time finding himself surrounded by a different line-up of musicians. 'That was quite a good schooling,' he estimates. 'You begin to think: Oh yeah, I like that and I like that, and you begin to formulate a few ideas.'

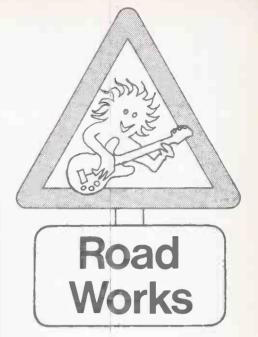
In between playing and recording with Pop in this country, Matlock played a few gigs with an ad hoc line-up which included Steve New, also a Rich Kid, Budgie, who now drums for the Banshees, and Danny Kustow. He and Kustow felt particularly comfortable together, so they agreed to get together when Matlock got back from Stateside duties with the Ig.

And so ... 'I finished that at Christmas, and after Christmas we started slowly putting this thing together.' Initially The Spectres sported a brace of sax players, Art Collins and CC. CC has recently quit, and Mark Ambler has stepped in on keyboards. Ambler used to play with Tom Robinson too. Explains Glen of the decision to install brass: 'We had this idea for a brass section, but not a soul kind of thing, like Q-Tips – which is fine but it's a bit old hat. Well, it's very old hat, and I can't see the point in just replaying old musical styles. The idea is to move forward, I would've thought.' Quite. 'Bands like that, they just remind me of Showaddywaddy a bit.

'To me, saxophones and blues harp and guitars, when they're all kinda screaming away, they sound very much the same, and we thought of getting this brass section to take over from the rhythm guitar. Though it's not exactly the same, it's very much that kind of sound. We tried that for a bit. As you go along the numbers change, and it became a bit more keyboard-orientated. So we've ended up with one of the sax players leaving and we've just got Mark Ambler.'

The remaining saxist, Art Collins, plays saxes from baritone up to soprano. Matlock voices a fairly ambitious musical approach. 'We're aiming for, like, a little orchestra really, because everybody plays different things. You can do very orchestrated versions of tunes. I've always been into people like John Barry.'

All this is some distance removed from Matlock's debut in the public eye with those loveable spike-tops, the Sex Pistols. The



Pistols, in fact, were the first band with whom Matlock ever played, and he regards the experience as a valuable one, though his approach to music is a good deal less straightforward nowadays. 'I was quite lucky really — I've never had to work in a biscuit factory, I've always done music full time.' But in Matlock's case, luck probably isn't the right word. He puts it like this: 'It's not so much down to luck, it's intention of purpose. If you make your mind up that you're gonna get on with it it's quite easy.' He gets a little irritated about stories of the alleged incompetence of the Pistols (eg from self-styled Svengali M. McLaren in The Great Rock'n'Roll Swindle), quite rightly.

'I totally refute the claims that we couldn't play an' all that. There was some good playing for that particular style. And I don't think it was particularly limited. I think there were some interesting things there. It was very basic, it was like let's cut the crap and get down to it.' Matlock decided to leave the Pistols when the media brouhaha became overwhelming, at the expense of the music. 'I aspired to be more than ... I dunno ... an agent provocateur.' He flashes a quick grin.

Enter, about here, Danny Kustow, dressed as for extended touring by motorcycle. Under a menacing Darth Vader helmet and gauntlets, he's friendly and a bit fidgety. He immediately picks up an Ovation acoustic lying on the floor, and we get into a diversion about how Pete Townshend plays guitar. Matlock is happy to do most of the talking and theorising. With Kustow, there's a strong impression of emotions held in check.

'I don't really listen to a lot of records,' explains Danny, 'but sometimes I go through phases when I really do listen to a lot.' He's not too happy when I describe his guitar playing as being 'off the wall.' 'I think you've gotta think about things to a certain point, haven't you? I really like something fresh to come out. Sometimes it does, sometimes it doesn't. Sometimes I really don't like listening to music, and sometimes I like to leave it for a bit and then come back. New things come up. But I don't practise much. I don't sit down, listen to a record and get riffs down and things.'

Glen vanishes, then returns with cassette machine plus Spectres demo tape. He plays a



A rare Spectres action shot as Danny Kustow (right) feigns enthusiasm for Glen Matlock's wedding photos

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WISHAW, Lanarks. Magnum Sound. 67 Stewarton Street. Tel: 069-83 78761 song called *Jumpy*, which the band recorded after a single run-through. It leaps along over a threatening minor-key riff, and Kustow throws in a frantic overdriven solo. Also to hand is a limited edition pressing of *This Strange Effect*, which was a hit for Sheffield's own Dave Berry in 1965 and which The Spectres have recorded on the Direct Hit label. The label is the brainchild of Matlock and some friends. It's a pretty impressive record too.

To backtrack. The conversation returns to what we may loosely call 'influences', a much overworked term badly in need of replacement. Glen: 'John Barry, TV themes and stuff. I think there's a wealth of material there that goes unnoticed because it's got the titles coming up over it. There's a lot of interesting playing and stuff and it's outside of the mainstream of rock'n'roll. That's where my influences come from.' To prove the point, The Spectres have a song called 13 Ways To Love You, which is based on the theme from Police Surgeon – the sort of programme which you're always surprised to find coming on late at night after the pubs close, as Glen points out. Again, the band have recorded a demo of the tune, and again it's not at all bad. It would hardly be surprising if they chucked a version of the Hawaii Five-O theme into their live set. Book him Dano - murder one.

Despite these mysterious musical roots, The Spectres have apparently had little trouble in arousing record company interest. Because of the accumulated track record of the band members, they've been able to wait for the right sort of deal to come along. Says Glen, 'If we hadn't had any money in the kitty, I dunno if we'd have been able to hold out for a good deal, y'know. We'd more likely have 'ad to do something a little bit shitty which we'd wish we hadn't done in retrospect. You can do one-off deals with small labels and all that kinda stuff, but if you do that and nothing happens with the first record, the record company loses interest and you're up the spout. Cos sometimes with bands it takes a long time before anything happens.

Matlock's experiences in the past have taught him more than a thing or two about how to approach record contracts, etc. He reflects on how to go about making a record. The Spectres, for example, will have studio time paid for by their record company, and they will then have to repay the money laid out from their earnings later on – but there are other options. 'There's lots of different ways of doing



'I really like something fresh to come out. I don't practise much.

it. Some bands have all the money up-front and they pay the recording fees themselves, but they've still got to pay the advance back. Some companies pay recording fees and you don't have to pay it back, but that's a bit rare. The best situation is a lease-tape deal, where if you've got some money in the bank which is yours because you've had success before, then you can lay out say £20,000 or more for an album.

'Then you pay the recording costs yourselves and you just lease the tapes to the record company for a period of time. Then you get a better percentage off it because the company has less costs to pay. The company might lease the tape for three years, then after three years you get the rights to all the songs. You get the tape back again and you can go and lease it to another company for a compilation album or something, and you're in a much stronger negotiation position. That's the way the Bee Gees do it.'

Dazzled by all this, I wonder aloud if Danny and Glen suffered in the past by being ignorant of these finer points of playing the music biz game? Matlock's riposte is suitably hard-boiled. 'You learn as you go along. I dunno if you suffer, cos you can't really know better if you don't know nothing. That's just the way of the world. I didn't really come unstuck too much, though I did with Rich Kids a little bit. That was

down to like a management situation more than dealings with the record company.

'But now we're more or less doing it ourselves and we don't have so much need for a manager. We have got somebody who's working with us who's like a manager (John Martin), but we're still very much our own men and we're negotiating the Arista deal ourselves. So yeah, we've benefited from past mistakes, but you can't cry over spilt milk.'

Alors! Danny Kustow: 'I dunno about with the Pistols, but with all the worrying about everything, I just used to get on and have a good time. Like when you're in the studio it's great to learn all that, what sounds good and what does what. You remember a lot of things.'

Business acumen notwithstanding, neither Matlock nor Kustow has any intention of compromising their music to fit any record company's preconceptions about market penetration, units-sold-per-colour-TV-household or any of that crap. Danny: 'A lot of people have said: Oh, I think you'd be good in America...' He grins wryly.

Glen-continues: 'I always feel a bit out on a limb. Because we'd got saxes and stuff, they were saying in the music papers that we were a soul band – none of them had even seen us, and nothing could have been further from the truth. We're just doing our own thing. Maybe

it's a bit of a problem.

'But if you aim deliberately for a particular market, you end up compromising yourself and you end up sounding half-hearted. I think that's the last thing we want. All these bands like the Lambrettas (of *Poison lvy* fame) – oh dear me. It's shocking! Good luck to 'em. It's like a take-the-money-and-run situation. It seems these days if you do a half-decent version of an old song you'll achieve some success from it.'

The Spectres are emphatically shooting for the big-time. They want a long term deal from a major record company and they want success, and they wouldn't think twice about following the Clash's lead and heading for the States. They had to go to the States,' says Danny about the Clash. 'You've got to really,' adds Glen. 'How many times can you play in Birmingham? People get fed up with seeing you, and you get fed up with playing the same places. The idea with a rock'n'roll band, I always thought, was to keep on the move. Who wants to work in a factory? You always need a



'The music papers said we were a soul band. Nothing could have been further from the truth.'

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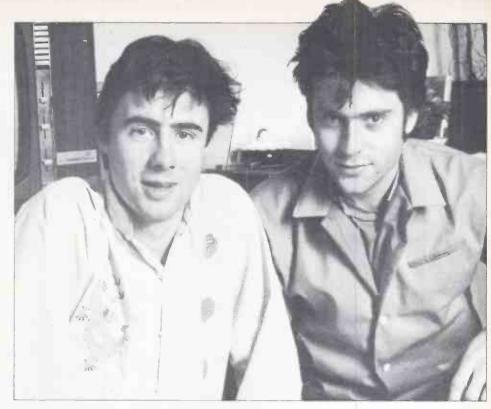


challenge to keep you going.'

And so to the more mundane but vital subject of the gear necessary to propel oneself onward and upward. Danny Kustow uses a Marshall 50-watt head with a Marshall 4x 12in cabinet, through which he plays a Les Paul, sometimes via an MXR Flanger and Roland Space Echo and Chorus units. There's still no substitute for that ol' valve sound. 'Even if you're doing the quiet stuff, it's still nice... you have something grating against something else, that's how I see it. With a lot of transistor amps, it sounds like it's skating and not grating. Is that a good analogy? I like to dig into the sound.'

Glen Matlock has similarly clear-cut views on his personal gear. 'Once you get to like something you tend to stick with it. I've had my amp maybe three or four years and it's fine. It needs a new set of valves every six months.' The amp in question is part of an Ampeg SVT bass stack, which Glen uses to power either a Fender Precision or an old Les Paul Junior bass – 'a little tiny one, which I really like using. It's really good for live work, but it's not so good in the studio cos it doesn't really have the depth. And that's all I've got really, it's pretty straightforward.' Apart, that is, from an Ampeg Portaflex Combo, which has a 15in speaker driven by a 60-watt amp.

The Spectres' sound is further coloured by keyboardsman Mark Ambler's *Prophet* synth and Hammond organ. The latter is not a *C3*, but 'a T-something,' according to Glen. (*He'll obviously have to read next month's* Hammond Story – *Ed.*) Ambler also plans to add a Yamaha *CP-70* electric grand piano. PA-wise, the band adhere firmly to a hiring policy. As Glen says, 'I always find it better that way, cos



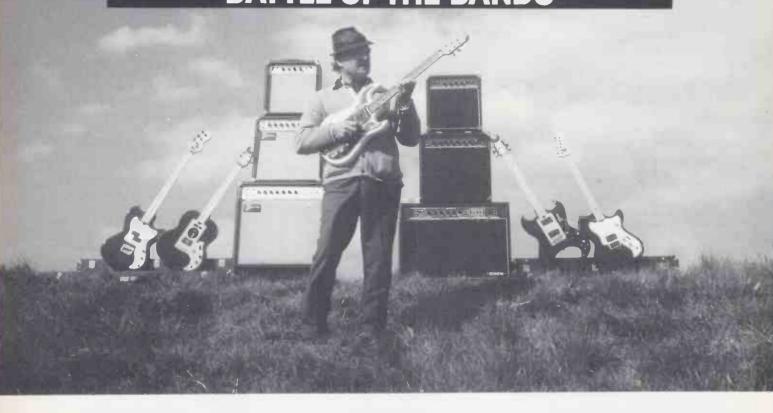
it's such a pain to actually own a PA and maintain it and store it and hump it about and get a couple of people to do it and stuff.

'When you hire a PA, especially when it's from someone who's got their own system, it's like their pride and joy. They really look after it – like some people we used down in Swindon. Just this bloke and his girlfriend. She did the monitors and he did the house sound outfront.'

That, for the time being, is that. By the time you're reading this it's more than likely that The Spectres will be signed to Arista and already recording an album. Chris Thomas is the most likely candidate for producer, though Clive Langer is in with a chance too. David Bowie was interested but was eventually ruled out for one reason and/or another, while Bruce Welch was approached but declined. The results are likely to be worth hearing.



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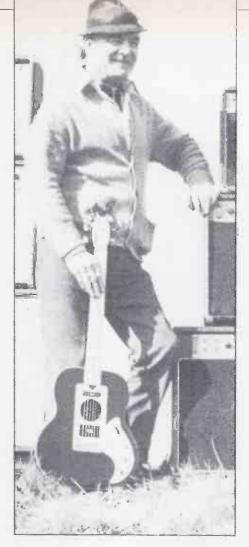
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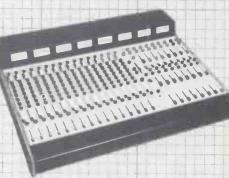
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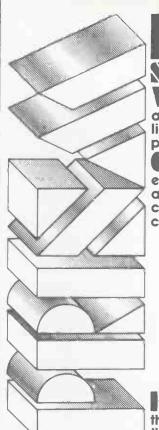
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AUGUST 17-23

The Acoustic Guitar Test

Tony Bacon & Gary Cooper

M ost electric guitarists start their playing careers on acoustic guitars – for the most part, cheap and nasty ones. Later on, they usually find that they need a good one, either because their skills have improved and they just want an acoustic to enjoy, or because their recording commitments call for one. In fact, if you listen carefully to many top bands, you'll hear an acoustic in the mix – often low and subtle, but playing a vital role.

But how do you choose a good acoustic guitar, if all your experience is based on electric criteria? You may not be an aspiring Bert Jansch or Stefan Grossman, but you may still want a nice acoustic.

We assembled a panel comprising both primarily acoustic players, and those for whom it is a second line of attack. They were asked to assess a

very wide range of instruments of differing prices, with value for money being of prime importance.

In the presentation of this multi-review (previous ones were: the Copy Guitar Test SI Nov and Dec'78; the Combo Test SI June and July'79; the Oriental Original Guitar Test SI Jan'80; and the Electr(on)ic Piano Test SI Jun'80), we are breaking with tradition in an attempt to give you the information in the most accessible form we can. Criticism of the previous multi-reviews has centred on the density and unreadability of the information, and we have decided that a general summation of the panel's comments, plus direct quotations where relevant, will make it easier for you to see exactly where each instrument stands, without having to wade through endless quotes of 'Okay,' 'Awful,' 'Yes,' 'No,' and, 'Maybe.' Also, it avoids the use of endless strings of initials. This time, we name the guilty men! Speaking of whom, the panel comprised Duncan Browne, Isaac Guillory, Steve Howe, Gret Knowles, and Robin Millar. See opposite page for more details.

Our criterion for selecting each instrument was pretty random. We wanted to avoid cheap, laminated-topped beginners' guitars, which automatically eliminated the vast majority of acoustics available in the UK. These instruments are short-term purchases; you will buy one and resell it as you grow more discerning. Solid-topped guitars will, generally speaking, provide a better, more professional and more rewarding sound, and will, with luck, improve with age. This, by the way, is not a mere re-run of the, 'My '54 Les Paul is better than your '55 model,' argument. Quality acoustics improve as the wood matures and settles. Further, it is arguable that the wood used in acoustics has more influence on the overall sound than it does in electric solids. Obviously, we could not anticipate this maturing effect, but if an instrument starts its life with a good sound, one would hope that it will only improve – not always the case, alas!

These, then, are professional acoustic guitars, ranging from probably the least you can pay for a suitable instrument, to well up the price range. However, we have not been totally comprehensive – there are too many guitars on the market to allow for that degree of completeness. Obviously missing are Gibson and Fylde. Norlin, UK distributors of Gibson and Epiphone, were unable to supply us in time for our test with a Gibson, largely due to their distribution centre being located in Rotterdam. They were able to lend us an Epiphone. The absence of a Fylde, however, was our fault (actually, mine – GC!). The name occurred to us (me!) late in the day, and we (he! – TB) just didn't get it together (sorry!).

You may also note the absence of Aria, a name you may well have expected to see (so did we!). The story here is a little more complex. Regular readers of SI may remember our Oriental Guitar Test in the January '80 issue, in which the Aria RS850 solid electric received less than fulsome praise from our panel. As a result of this review, and indeed the multi-review format itself, Gigsville, Aria's UK distributors, declined to supply us with an acoustic for this test. This is a pity, as we feel sure that their guitars would have acquitted themselves honourably. Still, that's their decision.

What we have got are guitars from Epiphone, Guild, Martin, Moridaira, Mugen, Ovation, Washburn and Yamaha. The Moridaira is an oddball inasmuch as it has what the manufacturers call a 'semi-solid top'. This was surprising at the price, and we are forced to question their terminology. Surely the top is either a solid or a laminate? Own up please, Moridaira's UK distributors, Hohner! The rest of the instruments are the sort that you will see hanging on most music shop walls – and about which, in our experience, the retailer will know nothing, apart from the fact that you don't have to plug it in!

We hope that this review will help you choose an acoustic guitar, and please do drop us a line and let us know of your experiences and problems in this field.



All pics Norman Hodson

People I-r: Steve Howe, Robin Millar, Duncan Browne, Greg Knowles, Isaac Guillory

-The People-



Duncan Browne Classically-oriented guitarist with two solo albums on Logo to his credit, *The Wild Places* and *Streets Of Fire*. Duncan is busy writing new material presently for a forthcoming recording



Isaac Guillory Busy session player both on the road and in the studio, and at present on tour with the Barbara Dickson Band. An exceptional acoustic guitarist, although many think of him as primarily an electric player.



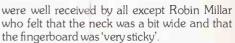
Steve Howe Founder member of Yes, has often included acoustic gultar pieces on Yes albums and in live Yes performances. Steve is currently working on a book which will document his vast guitar collection.



Greg Knowles Guitarist with the Movies, whose most recent album is *India*. Considers himself first and foremost an electric player, and therefore represents the electric-player-looking-for-first-acoustic opinion.



Robin Millar Currently playing and recording with French band Extraballe, whose second album will be released soon. Keen to use acoustic guitar live and in the studio whenever the opportunity presents itself.



Robin again dissented on string height: 'mucho fret buzz', but everyone else was happy about this department. Intonation on our sample was generally acceptable.

Robin and Isaac identified the fretting as being troublesome, Robin finding 'the frets too high, rectangular and stubbom'. Isaac said, 'A bit proud, especially at the edge.' Again, everyone else was happy. Bridge and saddle were OK except for Robin (again!) who didn't like the angle of the strings on the bridge being so sharp due to the shape of the pins.

Tonally the guitar was liked by all except Duncan Browne who found it dull, and Robin who liked the treble but agreed about the dullness of the bass. 'Noisy rather than loud,' was Robin's comment on the volume of the Epiphone and the rest of the panel were not 100% convinced by its overall loudness.

Projection was felt to be good by everyone except Isaac who stressed that for him it was, 'The only way to tell it's not expensive.' The guitar scored consistently highly for resonance and sustain.

'Characterless was the sum feeling of the panel about the Epiphone although they felt it was generally good value for money. Robin, however, obviously did not feel at home with this guitar and summed it up thus, 'If you're making an absolutely standard folk guitar you should make a good job of it, and this is not even right for a beginner.' Isaac, on the other hand, said, 'A very playable, well-balanced guitar, for a bargain price.' However, this one was generally liked by the panel.



Epiphone PR 735 £195 inc VAT

Manufacturer's spec: Solid spruce top, rosewood back and sides, rosewood fingerboard, mahogany neck.

Made to Epiphone/Gibson US design in Japan.

UK distributor: Norlin (UK), 114 Charing Cross Road, London WC1, Tel: (01) 379 6400.



General opinion was that this guitar looked OK – if a little ordinary. It was, the panel felt, rather light, but it was appreciated by Isaac Guillory who said, 'It's light, therefore efficient.' Balance and feel were fine. The neck and fingerboard

Guild D40NT £419.75 inc VAT and case

Manufacturer's spec: Spruce top (solid), mahogany back and sides, mahogany neck, rosewood fingerboard and bridge.

Made by Guild Guitars, 225 West Grand Street, Elizabeth, New Jersey 07202, USA, Tel: (212) 227-5390.

UK distributor: Guild (UK), Saltmeadows Road, Gateshead, Tyne & Wear NE8 3AJ, Tel: 0632 770431.





BRØDR JØRGENSEN 983 GREAT WEST ROAD, BRENTFORD, MIDDLESEX





By common consent this was a beautifully finished guitar, but Greg Knowles felt that it was a bit shiny, 'Which accentuates the lack of grain on the top,' (fussy, eh?). The Guild carried on scoring 100% throughout the weight, feel and body dimension questions, and the only dissenting voice for a long while was Greg who didn't like the sharpness of the pegs, feeling that they could have caused lacerations.

The neck and fingerboard were also A1, but Robin Millar found it 'a little thick' (the neck feels the same way about him).

The Guild came well set-up although Isaac described the supplied strings as 'duff' and Greg found that the intonation was 'good until the top end'. Frets were generally OK although Isaac identified a few buzzes on the 5th and 6th strings. The nut didn't fare too well, a few finding it, as Steve Howe put it, 'A little tatty.

The sound (treble, bass and tonal balance) didn't impress as much as one might have expected. Duncan, for example, found the tone 'a little dull overall, compared with the others', but the actual tonal balance was generally praised with Isaac summing up the feelings of the panel when he described it as being 'really mellow'.

Volume and projection were felt to be OK, but Duncan Browne, strangely, found it to be 'very quiet', and Greg found it muted compared with the Martin. Value-for-money wasn't the Guild's strong point, the panel felt. 'Just a little overpriced,' said Steve Howe, while Duncan put it stronger: 'The guitar isn't a bargain at £419 . . . I would be cautious about this one.

Generally, the Guild was felt to be very wellmade, a workmanlike job, but somehow it didn't seem to inspire anyone to great heights.

Martin D19£569 inc VAT and case

Manufacturer's spec: Solid spruce top, mahogany back and sides, mahogany neck,

Made by C F Martin, Nazareth, Penn 18064,

UK distributor: Philip Yorke.

ebony fingerboard and bridge.

Moridaira W617£197.50 inc VAT

Manufacturer's spec: 'Semi-solid spruce top', maple neck and sides, rosewood fingerboard, maple neck.

Made by Moridaira, Japan.

UK distributor: M Hohner & Co, 39-45 Coldharbour Lane, London, SE5 9NR, Tel: (01) 733 4411.



'Cheap' was the word consistently used to describe the look of this guitar with its black plastic binding on the head being singled out for particular criticism. The blonde maple finish didn't win any awards either. 'But doubtless some would be charmed,' Duncan felt. A couple of murmurs were heard about the heaviness of this guitar but nothing over-much was said about this aspect. Steve raised the point that it was surprising, if this guitar did have a laminated top, that so much effort had been spent on such nice inlays. Robin added that the colour of the heel ('ugly, brown heel' to be exact) drew attention to the joint. It certainly was strange to look at in this aspect.

Steve and Robin both found the neck 'triangular', although the rest found it OK. Greg said, 'Surprisingly, it plays well.'

Setting up was not a strong point of the Moridaira. Everyone agreed that the intonation wasn't spot on. The frets were a good point but the supplied strings were criticised by everyone except Isaac.

Soundwise, the guitar was quite successful, though 'not stunning,' as Duncan put it. Not a loud guitar, then, and as Steve Howe says, 'Not exciting.' Price drew mixed feelings. The general opinion was that, cosmetically, the Moridaira was very disappointing, although Steve Howe thought they'd had a good try at making it look good for the money. Robin felt that it was too expensive for a laminate (if, indeed, it is a laminate) and Duncan reminds us that the Mugen is £20 cheaper and, in his opinion, a little more inspiring. The fact that this guitar overcame the general condemnation of its looks is pleasing in that it shows our intrepid reviewers to be capable of being talked round by a guitar's sound. On the other hand, the lack of detailed comment from the panel tells of the guitar's overall lack of character for the price.

Ten-out-of-ten for the Martin on appearance, except for Steve Howe who felt that it was 'a little over-contrasting, white edging doesn't complement the rather dark spruce top'. Everyone else seemed adequately seduced by the 'aged' look of this guitar. Weight, feel and body dimensions went down well, although Steve found it a little heavy and fat (mind you, he did warn us that he was biased in favour of the 0018 size, which he prefers). Greg felt that 'you have to work hard to play it' and this was echoed by the others. This was accentuated by the fairly heavy strings and high action that the D19 came with but, it was generally agreed. you couldn't alter these points without seriously degrading the basic nature of the instrument.

On the design side, Martin's refusal to use adjustable truss rods caused Greg to wonder what would happen in five years time. Other points were raised too, such as Steve's criticism of the 12th fret tuning which he felt to be a little worse than he found normal on Martins, Isaac felt that it 'doesn't look like a normal Martin'.

Despite all this, the guitar carried on well through the neck-check session. It also sailed through the setting-up test. And so to sound.

Isaac and Steve found the treble lacking on this guitar, although Greg summed it up well for the rest by describing it as having a 'big bright chord sound'. Steve Howe put it another way, calling it, 'Singer songwriter.' Overall sound quality brought supreme praise - and that really is no exaggeration. Greg said it all with his final comment: 'Rich, subtle - the best guitar of the eight for quality and beauty of

Price is difficult. At £569 Greg felt that you could look around for an aged, secondhand one. Duncan suggested a custom-made guitar as an option at this sort of money. However, Rolls Royces cost Rolls Royce money, and everyone else accepted with a shrug what seemed to be if not a bargain, then a fair price for such a good guitar. Again Greg said it all: 'It has the feel of a handmade guitar, and in the Martin tradition - definitely a specialist guitar and probably the hardest to play. The sound of this guitar is the real point.' Or, if you prefer, there is Duncan's comment, 'The most subtle and rewarding of the set. From my point of view it rewards a classical approach with subtlety and variation of tone, but would equally satisfy the extrovert strummer.'

18

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Salem House, Garforth, Leeds LS25 1PX.

Mugen Heritage 78 £179.95 inc VAT and case

Manufacturer's spec: Solid cedar top, 'hand stained', ovancol back and sides, nato neck, rosewood fingerboard and bridge, brass nut and saddle, gold-plated machine heads.

Made by Mugen, Japan.

UK distributor: Rosetti & Co, 138-140 Old Street, London, EC1, Tel: (01) 253 7294.



This instrument, featuring unusual woods, came out well in the looks department with only Steve Howe dissenting. He felt that it looked 'less than satisfying, and over-plain'. Everyone praised the feel of the guitar and similarly everyone found it a comfortable guitar, although two members of the panel found it a little heavy.

Very unusually for an acoustic, the Mugen features a brass nut and saddle. These features drew praise for their appearance and had some effect, it was felt, on the guitar's sound qualities – particularly, of course, the Mugen's

brightness of tone.

Steve and Duncan found the fingerboard 'scratchy' and 'sticky', although Duncan admits that he's used to ebony (the swine!). Otherwise, the neck drew no comments – which we assume to be a good point as the guitar generally fared rather well. The setting-up was also pretty good, but three members of the panel would have liked a more precise intonation

Soundwise the Mugen was, er, bright. This was liked by almost everyone but there was a general assent to the feeling that this brightness was paid for by a lack of bass or, perhaps, a general thinness of tone. Steve said, 'A hollow bass,' and wasn't totally happy with the sound. Isaac reckoned it to be the brightest acoustic that he has ever played. Duncan found it to be 'not particularly subtle, but very bright, clear and forceful'. Both Isaac and Greg commented that the guitar would be good for ensemble playing. It wouldn't be lost along with other guitars and Isaac felt that it would fire the others' playing by virtue of its sound.

Value-for-money was a strong point of the Mugen. Duncan felt it to be the best value of

Summing up, Steve said, 'It tries to be impressive looking but goes too far.' Robin says, 'It's lovely to play and is cheap – perhaps an uncompromising sound.'

Ovation Legend £347.13 inc VAT

Manufacturer's spec: Sitka spruce top (solid), lyrachord body, ebony fingerboard, walnutbridge, gold-plated machines, pearl inlays, mahogany/maple neck.

Made by Ovation Instruments, Blue Hills Avenue, Bloomfield, Conn 06002.

UK distributor: Rose-Morris & Co, 32-34 Gordon House Road, London, NW5 1NE, Tel: (01) 267 5151.



An Ovation is an Ovation and, as two members of the panel pointed out, you either like the appearance or you don't. Steve Howe didn't, and described it as looking 'Pretty' orrid.' Robin did, and said, 'Pleasing and attractive.' It's one of those guitars folks!

This particularly comes across all the way through this instrument's comments. The Ovation was either loved or hated. In overall feel, Duncan says, 'Perfect, all Ovation guitars I find to be perfectly balanced,' while Robin says, 'Tends to tip backwards,' and Steve says, 'Is unbalanced... hindered by silly back.'

Duncan wondered whether the acousticonly version (ie without transducer pickup) justified the use of the design and materials that he feels are best utilised in the electric/acoustic version. Robin wondered what the same shape would sound like if the instrument was made of wood. Nice thought?

The neck and fingerboard were felt to be a little classically flat and wide, although this was generally praised and Isaac described it as having a fast neck. Greg found it 'a cinch to play'.

The setting up of our sample was universally praised and most found that the low action suited them. Two players criticised the intonation, but the string spacing, while close, posed no real problems, except for its straightness which Steve disliked.

Soundwise, the Ovation drew the predictable mixed feelings. Duncan liked the 'bright treble, good bass and fine tonal balance. Not a guitar for loud strumming but perfect for my classically-oriented style'. On the other hand, Steve Howe described it as being 'naff and plastic-sounding with a rattly bass and a thin, whispering treble.' And so it goes...

Value-for-money comments reflected the basic love/hate attitudes that this guitar drew. If you love it, it's worth it. Some people obviously wouldn't take one free with a packet of *Com*

Flakes. It all depends on you, we would suggest.

Overall, the construction and materials drew further comment, but to avoid repeating ourselves could we pose one final question: Without the pickup system, what is the advantage of this instrument over a conventional acoustic guitar?

Washburn Prairie Song Custom (!) £271 inc

Manufacturer's spec: Solid spruce top, rosewood back and sides, mahogany neck, ebony fingerboard, bone nut and saddle, abalone and maple inlays, scallop braced.

Designed in USA by Fretted Industries, 1415

Designed in USA by Fretted Industries, 1415 Waukegan Road, Northbrook, ILL 60062, USA.

Made by Washburn, Japan.

UK distributor: Brødr Jørgensen, Unit 6, Great West Trading Estate, Great West Road, Brentford, Middx TW8 9DN, Tel: (01) 568 4578.



Appearance of the Washburn was rave reviews time, except for the still, small voice in the wilderness of Isaac who disliked 'the terrible looking pickguard'. Weight, feel and body dimensions were OK – a couple of people found it a little heavy but not objectionably so. Generally all right: 'One of the best,' said Duncan.

The neck and fingerboard went down well, in fact very well. Greg (the electric guitarist of the bunch) said, 'Feels like an electric guitar neck – fast, due to the fingerboard with flat frets'

Setting up was also pretty fine although Duncan and Robin were very slightly critical of the intonation. Steve found it 'below average'. On the other hand, action, frets, etc were well praised

The E-string on our sample was thought to be duff by all reviewers but the guitar was bright and clear in the treble registers. Generally, the sound of this instrument was liked, and volume and projection ratings were from average to good. Isaac felt these aspects to be 'excellent',

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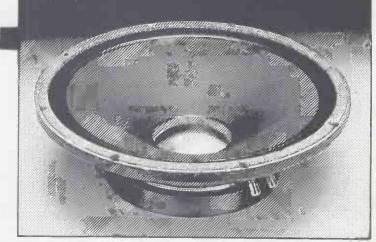
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whereas Steve said, 'Three feet,' for projection.

General reaction was that the Washburn is reasonably priced, although Duncan and Isaac were more positive in this area, while Steve felt that it would only be a good buy at £200. Robin says, 'Must be a guitar to look at if you want just one good all-rounder at a medium price.'

Overall likes and dislikes drew some good comments from the panel. Greg said, 'I think a genuine acoustic player might not find it forceful enough but it gives every impression of being a carefully designed guitar.' Duncan said, 'Seems on cursory inspection to be as good in many ways as guitars £200 or £300 more expensive — classic six-string acoustic, very good buy.' Robin was impressed by all aspects of the instrument's performance. Isaac says under 'likes': 'Producing a guitar that lives up to the old name,' and, under 'dislikes': 'Using the old name.' Can't win, can you?

Yamaha FG375S£189 inc VAT

Manufacturer's spec: Solid spruce top, rosewood back and sides, mahogany neck, rosewood fingerboard and bridge, gold-plated machines.

Made by Yamaha, Nippon Gakki Co Ltd, Hamamatsu, Japan.

UK distributor: Kemble Yamaha, Mount Avenue, Bletchley, Milton Keynes, Bucks MK1 1JE, Tel: 0908 71771.



Overall, the appearance of the Yamaha seemed to be a little too 'slick' for most of the panel's tastes. Steve liked it, though: he said that it was 'neat, smart and well-balanced'.

The area of feel drew contradictory reactions: Isaac and Robin disliked the Yamaha, Duncan and Steve liked it, although Duncan did add the proviso 'considering the price'.

The neck and fingerboard were odd. Duncan liked the feel of the neck and the fingerboard which he likened to ebony, although he felt it was rosewood. Greg, however, felt that there was something wrong with the neck. This came out in repeated criticisms of the intonation and, although some of the panel put this down to the nut being oddly set, there was a definite feel that something somewhere was horribly wrong with the intonation.

'Bright and thin,' was the overall comment on the Yamaha's sound. Duncan felt that some people would consider it too thin. Robin said that it was 'just a set of strings making a very percussive sound'. The panel by-and-large did not respond well to this aspect of the instrument, although Steve was a little more tolerant of the sound, and Greg said, 'A clear all-round sound. Not subtle—ordinary.'

On value-for-money terms, Steve and Duncan felt that the instrument was good value, Duncan commenting, 'Ideal for a beginner seeking a playable acoustic,' while Isaac is a little more guarded when he says, 'Reasonable if you like the cosmetics and play quietly.'

Overall, Isaac said, 'It seems they are trying to make an expensive-looking guitar and have sacrificed sound to this aim.' Greg said, 'Make sure it's a good one before you buy it, I suspect they vary.' Robin absolutely hated this guitar, saying, in a nutshell, 'It's not a musical instrument, it's a machine. I think they should stick to motorbikes. Ouch!

CONCLUSIONS

S urprise, surprise! After years of seeing famous name guitars slagged into the ground for not living up to their reputations, the Martin passes with flying colours. It wasn't an immediately astounding instrument, but each player seemed to warm to it, finally accepting that it was a true great. Not easy to play, perhaps, and certainly not cheap, but it really does seem like a case of getting what you pay for.

Surprise number two was the Mugen. Virtually unheard of, not coming from a big-name manufacturer, it impressed us all with its bright, alive sound and its unusual looks. Excellent value-for-money with this one, although you'd need to make sure that you could use this brightness – if you could, you'd be on to a winner. Well worth tracking down, but not too easy to find in the average shop.

Star number three was the Washburn. The most expensive Japanese guitar under review it was, nonetheless, a good one. It would particularly suit an electric player who needed a good acoustic and who wouldn't feel at home on the hard-to-play types. Easy to find in most shops, and a good buy.

Now it gets hard. The **Epiphone** was generally liked but seemed to lack character. Does this matter? Yes, according to our panel. It is a good price and a well-made instrument: but what a pity that the once illustrious American name of Epiphone is now applied to Japanese mass-production techniques.

The **Guild** may well have inherited some of Epiphone's former glory (Guild certainly absorbed some of the old Epiphone craftsmen when the company was sold to Gibson). This Guild, however, failed to inspire our guitarists. It was a great instrument for playing while sitting on the fence, although it was well-made. For this money one might have expected a challenger for the Martin. It wasn't.

The Ovation is capable of testing anyone's prejudices to the full. Our panel was no exception. Try one, you might like it: people certainly do buy and use these guitars. We weren't sure, however, that there was much justification in buying an Ovation unless you bought an electric/acoustic model. Very much a matter of personal taste.

Yamaha certainly have a lot to live up to. The panel all remembered those beloved early models which established new standards for cheap, Japanese, folk guitars. However, Yamaha have lost ground in this area in recent years, especially true if this sample is anything to go by. Overall, this guitar just didn't.

The Moridaira baffled us all. Universally it was agreed that it looked decidedly tacky. It didn't actually sound too bad though, and played reasonably well. This business about laminated tops, however, is worrying. A guitar that retails at £197 has no business having a laminated top. So is it, or isn't it? The point is that a damn-nearly £200 guitar should age and mature, but a laminate won't allow this to happen. We are dubious. Tread carefully!

Tony Bacon/Gerry Cooper





Thanks for help in this test go to firstly the panel, who were all very helpful and amazing players. Roka's, who lent us the Martin, and Phil Yorke of CF Martin for arranging the loan (can we keep it, please??). Robin Millar, for letting us wreck his penthouse suite and patio. Jim at Rose-Morris, Trevor at Rosetti, Jerry at Norlin, Gary at Hohner, Denis at Yamaha, Dave at Brodr-Jorgensen and Kevin at Guild (Alan will be contacting you all later!). Erratic and expensive communications by discourtesy of British Telecoms (GPO to you, squire!). Alcoholic sponsorship by the Frascati Brothers.







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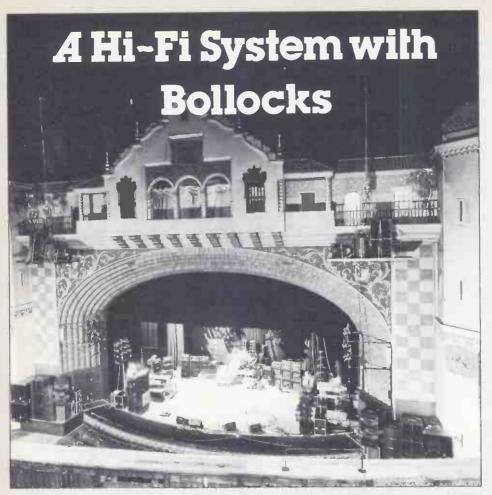
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oday, Muscle Music probably has the best monitor system in the world, and is on the way to becoming the hire company with a concert sound system with few equals in terms of fidelity. Yet it's a small, independent – and British – company (shock, horror). Take a deep breath and read on . . .

In the summer of 1976 two working drummers, Alan Wick and Mark Hardy, got together to provide a PA service to 'earn a bit of pocket money'. They felt they could do it as well as anyone who was in the business at the time and, both having played in support bands, they were used to the rigours of the road. Their first rig boasted 2kW and used one of the earliest MM Electronics 16/2 mixers, the original stacks being composed of six original Dave Martin 15in bass bins and four very unoriginal midrange 12in horns. The top end used an Electrovoice 1829 driver coupled to a Vitavox 4-cell dispersive horn. Interestingly, active crossovers were used from the very start.

The first gig, in the late summer of '76, was a bit of a disaster; promoted by an American producer in a hall in Clapham, south London, after many problems the band turned up and played to a mere four or five friends in a hall seating over 1000. Somebody had forgotten to advertise the gig! The autumn, however, saw their first 'name' concert, with the Drifters and the Bay City Rollers, to whom they hired their backline gear. Muscle Music was on the road.

Looking for the Drum Sound

Being ex-drummers, Alan and Mark naturally used the drum sound – one of the best tests for a rock PA system – to judge the set-up. Right from the start, they were searching for 'A Hi-Fi system with bollocks' which was compact, yet loud. Most of all, they wanted high sound quality. Loudspeakers are the most imperfect part of any sound system, and many companies were of the opinion that the way to get a good sound was to 'buy any old bins and use dis gizmo in the rack to make it sound good' – an approach which found little favour with Alan and Mark.

A typical 2kW rig in 1976 might have been 2-way (the signal being split into bass and treble drives only), with a JBL 2482 being expected to handle everything above 800Hz. This was the sort of rig that Muscle thought they could improve upon. Says Mark, 'We didn't want a system that rips your ears apart.' The 2482 not only has a painful peak around 1.5kHz; it also rolls off sharply above 5kHz, so even vocals are inadequately handled, let alone the drum sound, with its wide frequency range and hard transients. Today, companies like Clair Brothers in the US do the obvious and limit the bandwidth of the 2482, driving it well above its lowest usable frequency: over the range 1.2-3.7kHz it sounds fantastic, the moral being never to slag off a driver, or horn-loading in general, until you know how to do it properly!

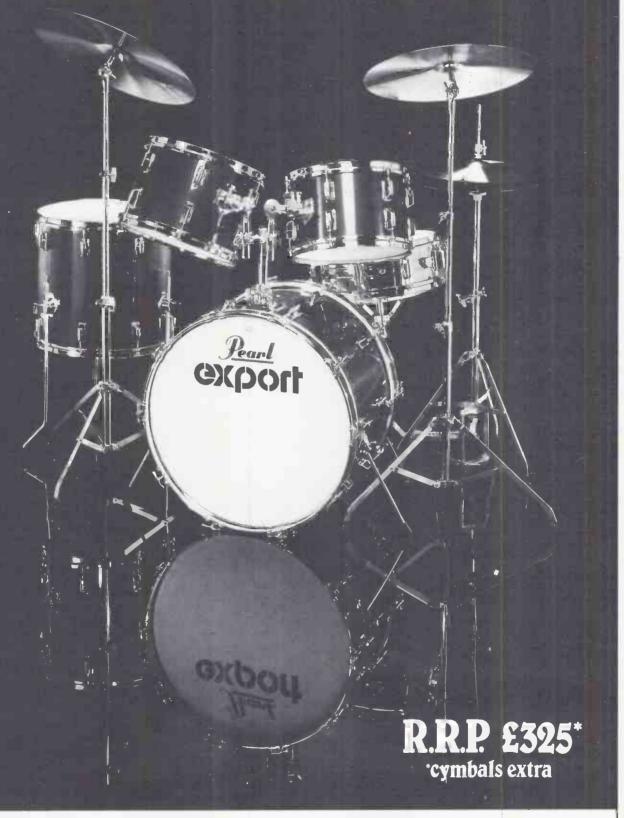
At the time, Alan and Mark didn't fancy having their ears ripped off, and without the benefit of hindsight they avoided the JBL drivers, choosing instead Gauss HF4000 units for their MkII stacks, simply because they sounded smoother and more natural than what they were used to hearing. This was perhaps unsurprising, as these units extend up to the region known as 'treble' apparently unheard of by many hire companies at the time. Harshness was avoided by driving these units above 2kHz. This underlines a useful principle: to get the excellent sound that hornloaded drivers are capable of, cross them over at least an octave above the recommended crossover frequency - in other words, see that the lowest frequency they are asked to handle is twice the recommended value.

At the bottom end of the system, Alan and Mark used some of the Martin 2x15in bass horns, while for midrange they utilised 3x12in speakers. This system was used on the 1977 Hawkwind tour, but while working with the Heavy Metal Kids at around the same time, they found that the addition of an Electrovoice 1823 driver with a Vitavox 4-cell horn made up for the shortcomings of the midrange drivers at the top of their range. The 1823s added clarity and presence to the sound, much in demand by the Heavy Metal Kids. In a somewhat pragmatic fashion, these units were fed with signal between 1.5 and 2kHz. Although primitive, this rig had some features which remain to this day: the Gauss drivers gave it 'bollocks' and thanks to the judicious use of the other drivers, it had none of the harshness which still prevails in some systems.

During 1977, Muscle had been working with Colosseum II extensively, and the band liked the system so much that they bought one of the 2kW rigs outright. At the time, Muscle were using 5kW, split into two or three rigs. Soon afterwards, they had an offer from someone in west Scotland who was mass-producing Dave Martin copy bins at less than half the price. Muscle bought several, and filled them with Gauss 5840s. Then they bought a pair of Dave Martin 212 horns (known as 'phillishaves' because of their shape), which replaced some of the 3x12in midrange cabinets and greatly

improved the sound in this region. In 1978, they decided that the Martin bass bins just couldn't give the bass they required and the heavy metal and reggae bands then on the way up needed a system which offered ribcage-belting bass. JBL 4550s didn't suit their requirements and RCA W-Bins were too large for a 'compact' system. They also wanted something different, and better than everyone else's - intuition told them it existed. Not long afterwards. Bob Jeffery, one of their sound engineers, returned from a Steve Gibbons tour enthusing about some Cerwin Vega bass horns that had been supplied by the hire company. The owner of the system was understandably cagey. He knew that the bass was the best part of his rig, but after a deal of persuasion, he parted with the designs and Mega dutifully built four 'Earthquake Bins' - as they are known for Muscle Music. It turned out that these bins had been designed by a guy at Cerwin Vega for a one-off Californian festival. They were first built around 1976, and only eight were made, under the label L48-DD. The 'DD' meant 'double-door', a reference to the extension flares. They were later used for a CSN Wembley Stadium concert, where they were more than enough for a 40kW system (just

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eight bins, remember!), and after that they fell into disuse. Disavowed by Cerwin Vega, the bins nevertheless retain the specified pair of Vega 189ES drivers, though these have been specially modified for Muscle so that each bin handles 1kW!

The Earthquake Bins score over the giant W-Bins by having 18in speakers which can handle high power and unusually low frequencies — important when you consider that 30-40% of the power of a rig is concentrated in the bass end. These bins are one of the few in the world specifically designed to handle low frequencies at high power, as many of the bass bins in current use were originally designed as long as 40 years ago for cinema use, where 40Hz was the usual lower limit, and power requirements were small.

A simple arrangement of four pieces of wood gives the Earthquake Bins a large mouth area (about 16 ft2), leading to more guts at the bottom end. However, the arrangement of these bits of wood needs careful design to give a smooth response. The large mouth area means that the bass travels a long way, so that the bass is not only heard but felt in the back of the auditorium. Owing to their massive powerhandling capacity, the four bins replaced 28 Martin 1x15in cabinets, making not only for fewer trucking problems but also fewer phase problems because there are fewer bins to interact with each other. This extra bottom-end punch is one of the secrets of Muscle's realistic drum sound: it would seem that the 'old fashioned' idea that an audio system should extend down to 20Hz is no myth.

In fact, the Earthquake Bins were so good that it took Muscle a year to bring the rest of the system up to the same standard! The next improvement was to replace the rest of the 3x12in direct radiators with Martin 212 'phillishave' horns, which have a first-rate reputation to say the least. The EV 1823 'presence fillers' were also dropped and 'piezos' (special high-frequency transducers) were added at the top end, driven with signals from 10kHz up. Alan admits that while the piezos sound reasonable when crossed over at this frequency, they are very inefficient, and 24 per side were needed to achieve an audible 'tsst'.

Shortly after these modifications had been made, Alan toured with The Jam in the States working with the FM Productions rig. He was amazed by the naturalness of the upper-mid sound, and discovered that they were using fibreglass horns. This natural sound is due to the fact that fibreglass horns don't resonate (for the same reason, Altec Multicells in the '30s

were daubed with bitumen - why don't horn manufacturers still do this?). As a result, Muscle ditched all the metal flares in their rig and they decided to split the upper-mid and treble bands to make the sound smoother, making the system 4-way (bass, low-mid, hi-mid and treble). The Gauss HF4000s were dropped and the trusty 1823 drivers - plus nowmandatory fibreglass flares - were reinstated with separate amplifiers to be driven in the band 1.3-3.7kHz. Emilar drivers were added to cover the treble, together with H/H 'bullets' passively crossed-over at about 10kHz. The bullets conveniently fitted either side of the Emilar horn, so that each treble cabinet had an Emilar plus two bullets, covering low and high treble respectively. This arrangement has significant advantages in terms of compactness, and the spacing between the bullets avoids interaction. Judicious angling of the cabinets gave a dispersion comparable to most diffraction horns of conventional systems. This treble arrangement also highlights another discovery that Alan made in the States: that it is a bad idea to place drivers handling like frequencies close to each other, as was often the case in British systems at this time. When two speakers handling the same frequencies are positioned side by side, they interact and produce unpredictable phase effects, producing 'beaming' of the sound and phase distortions. Stacking is much easier if you use the bare minimum - one speaker per frequency range. But for big rigs, until Gauss or ATC announce their new 10kW 12in driver, you should avoid placing high-mid next to highmid. Instead, put one high-mid cabinet on top of another. Build your stacks high, and get the dispersion with careful spacing and angling.

The latest development in the speaker system to date came in November, immediately after the 1979 Jam tour. Alan noticed a gap in the high-bass region, between 130 and 250Hz. The Earthquake Bins aren't at their best up there, so Alan went looking for a highbass bin, and finding nothing suitable, turned to David Lyth of Mega, who were planning to design a high-class bin. Mega worked on the bins with Alan, who made clear what they were after. Muscle's confidence in Mega was so great that they didn't even try the prototype they just wrote out a nice cheque, and shoved 10 of the bins in from 110 to 450Hz and made the system 5-way - or 6-way if you count the passive crossover-driven bullets (the majority of the system uses active crossovers - in other words the signal is split into separate frequency bands before the amps, while the bullets are driven via a passive crossover which splits the

amplified signal at the speaker end). This development was well-timed for an onslaught of heavy-metal gigs – Judas Priest, Iron Maiden, Praying Mantis and Girl.

Groping for the Killer Desk

The first development at the console end of the system was to bring in a Soundcraft Series I desk (with Series II cards added to better the performance) instead of the original MM 16/2. As Muscle had no monitor mixers in those days, a crucial modification was the addition of two extra cue sends, giving two sends for foldback and two for the effects rack (which was a mere Roland Space Echo in those days!). When this desk went on the road, bands couldn't understand how an apparently very ordinary Series I could sound so good!

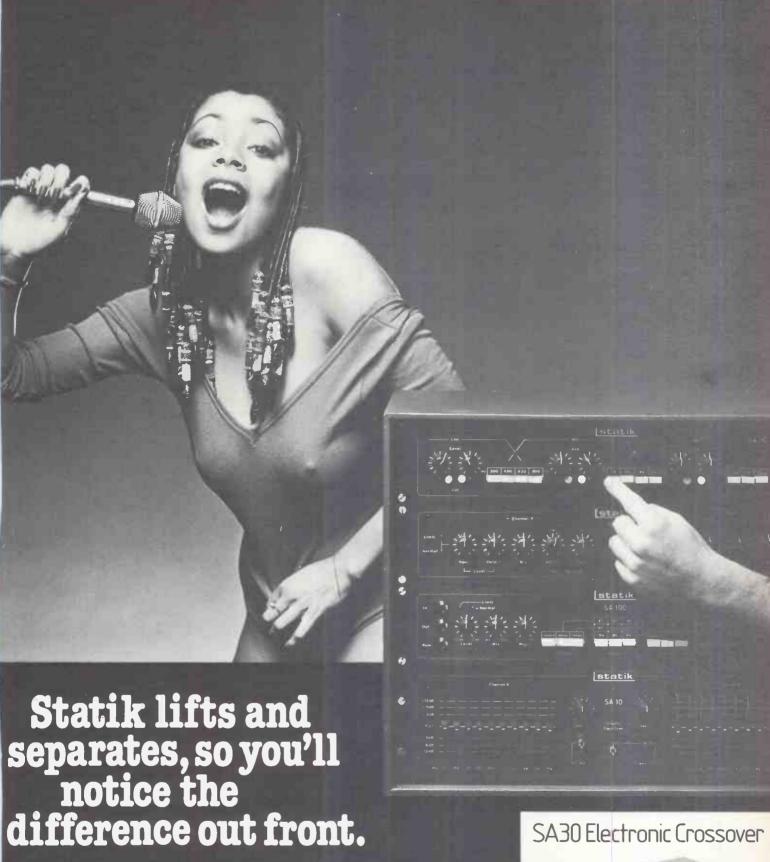
But in 1978, Muscle decided to make an attempt at their own desk, from scratch, 'to get both the sound and the facilities we wanted - at the right price', says Alan. So Alexandrou, at one time the original test engineer at Soundcraft, built his first two 'Alectron' desks, one of which was ordered by Colosseum II because they were so enraptured by the sound of the rig. He also modified another Soundcraft as a backup in case one of the other desks misbehaved. At this time, Muscle's 6kW rig was often split down to two or three systems, so this plethora of desks was no luxury. A small but helpful innovation in the 24/2 Alectrons was to put the output groups in the middle, making it possible to see and reach all channels with ease.

Summer 1980 saw the start of work on the 'killer desk', after over two years of experience and prototypes: the Alectron MkII. By the time you read this, it'll be finished, but at the time of writing, half of it is on the road. It's a 48/16/4, and to avoid the necessity of knocking down the odd wall here and there, it's been built in two 24/8/2 sections. Says Alex: 'Although it's possible to buy a high quality studio desk and put it on the road, they aren't designed for the rigours of that application. My desk has everything on it that any decent studio desk would have, but it's also designed to be roadworthy. So, really, apart from Showco and Clair Brothers in the US, who build their own desks, the Jethro Tull Cadac and the Midas models, ours is the only purpose-built road desk of studio quality. The desk has 4-band parametric eq on each channel, every subgroup, every cue send and every output. They're real parametrics with continuously variable boost and cut, frequency and 'Q'; not a common sweep equaliser.' Back in the early days, Alan felt very strongly about the need for 4-band eq, because 'midrange is dualistic: lowmid is warm, high-mid is hard. Using a 3-way eq, you can never balance out the degree of hardness and the warmth of the sound'.

'My desk has eight subgroups,' says Alex, 'and the left and right outputs on every channel can be routed to any subgroup by flicking a thumbwheel switch.' Another feature of the desk is that it is all unity gain: in other words, there is little difference between the input and the output in terms of level, apart from the input stage, which has an active gain control. Thus there isn't the usual trail of attenuation, amplification, attenuation . . etc. In fact, there's little need for amplification, because the output of an average mic at a live gig can approach _10dBm, and as the input transformers have a gain of 10, the input stage sees 0dBm - zero level! This calls for different







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design considerations compared with a studio console, where -40dBm is a normal maximum. Because of the unity gain design, the noise on Alex's desks is a very creditable 90dB below the output over the entire audio range, 20Hz-20kHz. Another advantage of the unity gain structure is that an overload indicator can give a true indication, not often the case in conventional desks where overloads can occur in different stages of the console depending on the signal and the amount of eq - a single overload LED in a conventional desk can seldom tell you any more than that there is (or isn't) an overload in a specific stage. Rather than give each stage its own overload light, Alex's design ensures that a single indicator really is a failsafe warning.

In practice, many people like to see the overload lights flashing merrily away - even engineers who should know better. The trouble is that most overload indicators are set a mere 6dB below clipping, so if the light is flashing you can be sure that you're already getting hard distortion on transients, particularly at the top end. To counter this, Muscle Music's 'killer desk' has overload LEDs that illuminate 20dB before the onset of distortion. So if the person out front likes to see a row of flashing LEDs, they can do so safe in the knowledge that dirty sounds are a full 20dB away. And if you're good and don't let the LEDs flash at all, you can be sure that not one transient, even from a snare, is clipped.

The desk itself has a 'sound' - a warm, friendly sound reminiscent of a valve wireless on a cold January morning. Muscle tried a variety of input transformers on their prototype channel, and found one they really liked the sound of. And whilst Alex did all the hard work on the guts of the desk, Alan designed the panel printing and the control layout. Of particular importance is the position of the labels, which are all below the controls, facing towards the side nearest the desk centre. The result? You can actually see which knob you're twiddling in a dark hall. Very obvious, very Alan Wick. Since a desk, like a Harley-Davidson, is an extension of your body, it's obvious that the person who's going to be using the console should have a hand in the design from the user's point of view. If a desk is well laid-out then the person using it will develop a relationship with it and the partnership will bear fruit a good sound; somehow, if you're designing a good desk, you have to make the quality of both the guts and the ergonomics close to perfection. The Alectron MkII desk has been on the road since February 1980, and Alex already has orders for versions of the console from other hire companies.

Amplifiers: A Pain In The Output Stage

The ideal PA power amplifier, unfortunately, does not yet exist. Alas, there are probably only half a dozen good transistor amps around. The Quad 405 is one, but it's not a PA amp, even if you rack-mount it and put XLRs on the back. The ideal amp needs to meet a number of exacting specifications, and as yet, it's a fait non accompli. In the beginning, Muscle played the name game, and bought a lot of Amcrons. They burnt their fingers badly - they blew up as fast as they left the workshop after the last repair. Each one would stand around waiting for up to three months for parts to appear. Alex comments: 'One thing I just couldn't stand about them is that they're just prehistoric; even if they were near-perfect amps, I still wouldn't

have liked repairing them because they're shoddily built. They reminded me of old TV sets. When I tested them, I found that the graphs in the manual marked "disclosure prohibited" were in fact a cover-up for grossly inadequate specifications . . . 'So Muscle Music went looking for a British amp which was reliable and easy to repair if it went wrong. They found that the RSD 800b met their needs - and remember that at that time, RSD amps were virtually unknown or were looked down upon as being cheapo. The gamble was worthwhile, for the RSDs turned out to be extremely reliable and their sound quality was excellent. Notably, they sounded good when overdriven. They had only two shortcomings: the VU meters didn't take kindly to the boot and the fans had a none-too marathon lifespan. Fortunately, the imminent demise of the fans was signalled by a very audible series of rodentine squeaks. When RSD introduced the 800c, these foibles had disappeared and Muscle snapped them up. The only other amps in the rig are Quad 303s, which are used to drive the top end of the monitors.

As with desks, Alan 'frankly doesn't like the sound' of many highly reputed amps, and unlike many hi-fi journalists who find it trendy to knock such amplifiers, he hears live music every day of his life - you just have to trust his judgement. He reckons that RSDs, Phase Linears, the old Midas 'block amplifiers' and Quads have a punchy, warm, gutsy sound, and he stresses that they all sound good when overdriven. Others, he finds. have a cold, clinical sound to them. Strangely, all these amps he likes have a resemblance in circuitry. particularly in the output stages. It is notable that the Quad 303 is still popular as a studio monitoring amp, despite the fact that its specs are nothing to boast about.

Mics, Lines and Earths

Muscle Music have a large collection of mics,

from a 30-year-old BBC ribbon, through Sennheiser 441s and 421s and Beyer 201s, to dozens of the classic stage mics, the Shure SM57s and 58s. Alan also talks of buying some Calrec and AKG capacitor mics in the future. As far as DIs are concerned, Alan enthuses about Countryman and BSS active DI boxes.

According to the Sound Engineer's Guide To The Galaxy, a strange disease afflicts all those who pass along the time axis on 'THD-Zero': the urge to 'go balanced'. Muscle suffered the symptoms about a year after they began, and in went the output balancing transformers . . . and out they came again. There was no doubt in Alan's mind that the transformers had an untoward effect on the drum sound, notably causing a loss of clarity, punch and attack, and despite the comments of les exponents de balancing, 'Whaddya expect if ya use cheapo transformers,' Alex tried all the decent transformers he could lay his hands on, and to this day, Muscle Music must be about the only major PA hire company that uses unbalanced output lines.

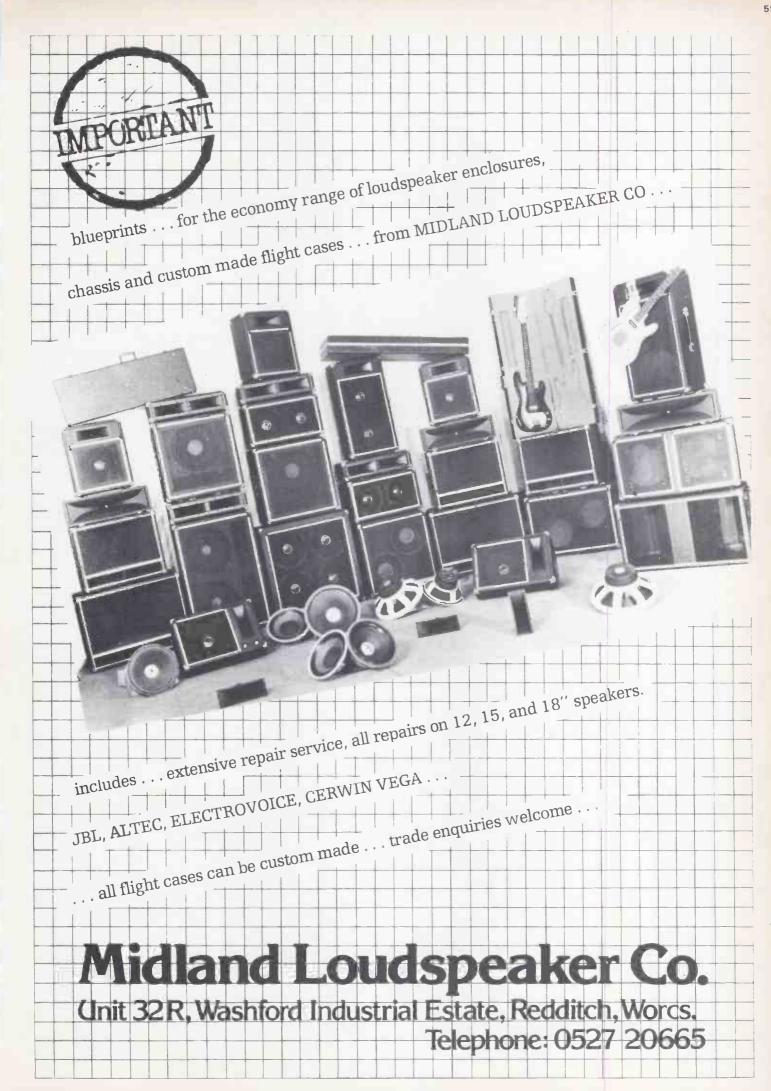
Without said balanced lines, it's inevitable that Muscle's earthing system is different from everyone else's. In fact, it's the time-honoured 'tree method'. The front desk is the 'trunk' and everything else is symbolised by the 'branches'. The branches are earthed via the trunk: in other words, only the main desk is grounded. Everything else floats until it's connected to the desk. Three years after instituting the 'tree' system, Alan discovered that both FM Productions and Clair Brothers in the States, with over 20 years experience between them, also use this method.

In theory, the benefits of balanced lines include low hum-pickup and good rejection of the type of radio-frequency interference (RFI) commonly caused by solid-state lighting dimmers. But most, if not all, rigs hum quietly to themselves and go 'Bzzzzzt' . . . zzzzt' . . . zzzzt'

The amplifier and eq rack







Sound International August 1980



The current wedge monitors

when the people on the lighting desk edge up a fader (particularly on the blue lamps!?), and Muscle's rig is no worse than any other in this respect. Why bother, then, to use balanced lines? A recent article in Studio Sound reinforces the feeling that output balancing transformers are not the universal panacea they're often claimed to be. Why then, are Muscle happy to use transformers on the mic inputs? This is a sticky question but, briefly. irrational subjective effects invariably appear when circuitry interfaces with transducers, so the six bêtes noires of audio are the 'sound' of: 1 mic input stages; 2 disc input stages; 3 power amps; 4 horn-loaded versus direct radiator loudspeakers: 5 speaker cables; and 6 input connection cables. This amazing summary doesn't answer the question, but it's food for thought - please eat! Subjectivity aside. however, input transformers are essential if tolerable signal-to-noise and treble response figures are required.

The Art of Brain Damage

The MkI Muscle Music floor monitors had two 12in drivers and a piezo tweeter. Whilst basic, this was similar to that used by other hire companies and was adequate for the bands they were then servicing. But when Muscle toured with Hawkwind they added an Electrovoice 1829 driver coupled to a Vitavox 60° horn which naturally improved the top end and made the wedges louder. Even so, they sounded like everyone else's did at the time: very loud between 800Hz and 3kHz. Mark explains, 'In the summer of '78, Alan had got well into the out-front system and was wanting to expand the outboard gear, but I was saying: No, we've got to go for the monitors; that's what a band wants on stage. They can't hear what goes on out front, it's only what punters or their managers tell them. It's the band who are paying for the rig, and they want to be happy with their sound, and they're happiest when the monitors are good. This is the most important ingredient of the show, and no-one else is specialising in it; we ought to go for it.' Alan was convinced. They went for a full-range floor monitoring system which handled 40Hz to 15kHz - which is required just to make a voice come alive, let alone the instruments. So

they went to David Lyth of Mega, who was delighted to be involved in the project. They ended up using a Gauss 15in on bass, ATC 9in on mid and a JBL 2305 'pepperpot' plus Emilar driver on treble. The wedges were triamped (driven by three separate amp channels, each driving a specific frequency range) with RSD 800b's and a Quad 303 on the top end. When the prototype had been back and forth to Mega enough times, it was deemed 'the best' and another 13 were built. As far as Muscle know, this was the world's first triamped wedge, and after two years and numerous refinements, they are renowned as the loudest and cleanest-sounding floor monitors around. 'At the same time. the sidefill and side/drumfill monitors were developed,' says Alan. 'We had a modular concept, and to this day, each monitor rack has an active crossover, a Quad 303 and two RSDs, and this rack can be used to power any part of the monitor system; everything has identical crossover frequencies.' The sidefills were again built by Mega to Muscle's specs, and contain two Gauss 15in drivers, two 12in ATCs. an Emilar driver with the now-ubiquitous fibreglass horn, and six piezos. The latter were crossed over at 10kHz to give some added 'tsst'

What do musicians think? Well, as far as Paul Weller, Bruce Foxton and Rick Buckler of The Jam are concerned, Muscle's monitors are the only ones in the world that they'll entertain. They even flew them to the States for their last tour! And American band Molly Hatchet (who use 2kW of backline) described it as the best monitor system they'd ever heard, to the extent that the lead vocalist said that it was the first time he'd ever heard himself at all (poor chap)! This month's brain-damage hero, Phil Lewis of Girl, also (if predictably) enjoys the monitors. At 450W each, triamped, they'd make excellent in-car entertainment speakers!

Crossovers and sundry deviations

There is no doubt in many people's minds that for serious applications, passive crossovers are largely obsolete, though many companies who should know better stubbornly defend techniques that are archaic, inefficient and even

dangerous. Muscle Music were determined to develop a high-fidelity concert sound system where flatness of response and overall clarity didn't louse up people's ears - and, inevitably, active crossovers were part of it from the word go. The first crossover was an MM, but it was replaced by a 3-way Cetec with switchable frequencies. Cetecs were used later in the monitors, and in 1978 Muscle bought their first Brooke Siren System crossover (designer Chas Brooke builds these at home). These were simply fantastic, with a good tight slope, programmable frequencies and a modular arrangement that made the change from 3- to 4-way, or whatever, simple and easy. There is a limiter on each band, this arrangement virtually eliminating frequency-shifting effects, which are common with a single limiter on the desk output. This will protect the speakers and amps, but louse up the mix. Muscle now use BSS crossovers throughout the front and monitor systems, a new development being the use of a very advanced frequency-sensitive limiter on the low bass and LED metering.

Apart from their versatility, active crossovers allow very steep slopes to be attained – limiting the power to an exactly-specified frequency band more accurately – without losing a lot of power from the amps. It is a fact that a sound system becomes cleaner and louder as the signal is split into smaller frequency bands, each driving their own speakers, even if the total power is the same, and a crucial part of good multi-amped design is discovering the best crossover frequencies between the bands. The BSS systems use plug-in cards, and each time the rig was modified, Chas Brooke lent Muscle a box of cards to experiment with to get the right sound.

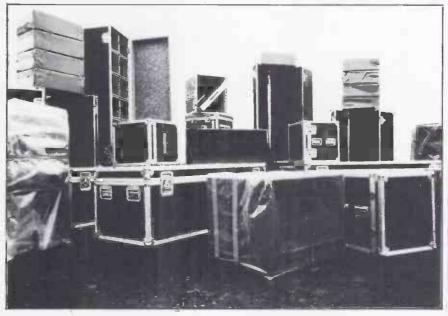
Politics and Philosophy

Mark explains their philosophy briefly, 'We've steered away from the standard deliberately: lots of people have said "Its impossible" or "it'll sound bad", but we've wanted to try it ourselves before we'd believe all that, and nine times out of ten we've been right.' But technical excellence won't automatically bring you hordes of customers. This is especially true if, like Muscle Music, you never advertise but rely solely on word-of-mouth recommendations for business. One example is how they picked up The Jam: Alan Black from Polydor heard their system at a gig and took their details because he liked their sound; some eight months later The Jam's management phoned up to ask if Muscle could do a gig as their regular hire company was unavailable. They agreed, and the band said they'd keep Muscle in mind if the same thing happened again. The Jam's engineer left later to join Siouxsie and the Banshees, and Muscle got the job - the band were knocked out with the monitors and Muscle have done every tour subsequently.

Muscle's distinction is that their crew is made up entirely of ex-musicians. Says Mark: "We really understand what it's like to be on stage – what it's like to want monitors (ask lan Gillan!). We know what it's like when a musician feels nervous and asks for things that you know damn well, as a technical person, are impossible or unnecessary. Many roadies with hire companies have never been musos and they just don't understand – and musicians sense this. We're only interested in building up relationships – we go for the personal service thing. We'd rather service a few bands regularly than lots of bands frequently it gives us much

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more pleasure to get into a band, to get to know the people and get into what they need and want. Part and parcel of the service is your crew - your men in the field. One of the factors instrumental in us going down to one rig (from two and a half 5/6kW rigs to one 15kW) was our desire to build up a crew that knew the rig and were also into the service angle and were nice people who'd get on and do their job to the best of their ability, get on well with the band and give everyone a good service.' Part of that service includes the fact that when you call Muscle Music on the phone, you'll get someone who knows what you need - not a secretary who tells you the boss is out to lunch for the day. It's not just service - it's personal service

And service is not just 'The Rig'. Muscle can provide musicians with a rehearsal studio, backline gear, and, for tours, a complete package of sound, lights and staging, Mark has some advice for bands: 'We were contacted by Bethnal's management. They were looking for a company to do their PA so they very sensibly hired a sound stage at Pinewood for a week. Each day, they hired a different sound company to come along and set up for the band.

Quite sensibly, they were looking for two qualities: the equipment and the people who were running the thing.' Mark was pleased to say that they won hands down; yet the band weren't asking for anything exceptional: just a good rig and nice people to work with. He continued, 'So they sorted out the PA from the beginning without having to go through the grief of finding out the hard way on the road. Our obligation just doesn't stop with the rig it's to the band.' For example, Alan is the Jam's permanent out-front mixing engineer, while Bob Jeffery does the same for the monitors, whether it's the Muscle rig in Europe or another out-front system in the States or Japan. Muscle Music have just taken on two excellent sound engineers, Doug Hall and Michael Kenny, who are currently working wonders with Iron Maiden along with general manager and Muscle Music veteran Peter Brotzman.

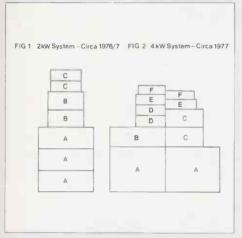
An aspect of Muscle's philosophy is attention to detail. All the way from the lettering on the desk to the stacking of the horns, excellence pervades, with a feeling of 'tightness'. In physical terms, the 'tightness' manifests itself in the compactness of the rig, which saves on

trucking - clearly a plus point, and one which led to a comment from Paul Weller. On seeing the 10kW out-front rig for the first time, he asked casually, 'When's the PA going to turn

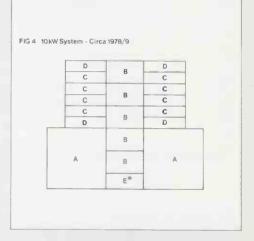
And finally, as if the best monitor system in the world wasn't enough, a MkII floor monitor is being developed. While still on the secret list, Alan reveals that on tests so far, 'it washes twice as white'. A single MkI monitor achieved 121dBA at mic level, and the MkII has so far touched 125dB, which is amazing seeing as no frequency shifting is needed to prevent feedback! The motto for the new wedge is predictable: It's not the best - that was the MkI version

- it's better than the best: it's brain damage!" ■

Muscle Music (Services) Ltd can be contacted at 74 Great Suffolk Street, London SEI 0ES. telephone 01-633 0065 - Ed.







3'9" wide x 8'4" high (approx)

Martin 1 x 15"/Gauss 5840

JBL 1 x 12"/ATC

Vitavox metal radial/EV 1829

Crossover points: 250Hz, 2kHz 3-way active crossover

7'6" wide x 7'0" high (approx)

- Martin 2 x 15"/Gauss 5840 Martin 3 x 12"/ATC
- C
- JBI 1 x 12"/ATC
- D Vitavox metal/EV 1823
- Vitavox metal/Gauss HF 4000
- Piezo tweeter array

Crossover points: 250Hz, 2kHz 3-way active crossover, D and F passively crossed-over

10'11" wide x 7'3" high (approx)

- Martin 1 x 15"/Gauss 5840
- R Martin 'Phillishave'/RCF
- Vitavox Metal radial/Gauss HF 4000
- Piezo tweeter array

Crossover points: 250Hz, 1.5kHz 3-way active crossover, piezos passively crossed-over

10'5" wide x 8'9" high (approx)

- Cerwin-Vega 18"/Cerwin-Vega
- В Martin 'Phillishave'/RCF
- Fibreglass radial/EV 1823 C
- Fibreglass radial/Emilar + 2 HH bullets
- Dummy (shaped like the front of a Phillishave)

Crossover points: 250Hz, 1.5kHz,

4-way active crossover, bullets passively crossed-over

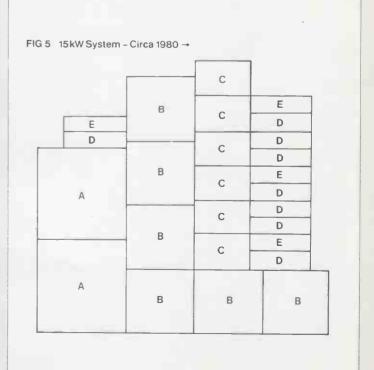
Fig 5

13' wide x 12'3" high (approx)

- Cerwin-Vega 2 x 18"/Cerwin Vega
- Mega 2 x 15"/RCF
- Martin 'Phillishave' 2 x 12"/RCF
- Fibreglass radial/EV 1823
- Fibreglass radial/Emilar + 2 HH bullets

Crossover points: 110Hz, 1.3kHz,

5-way active crossover, bullets passively crossed over



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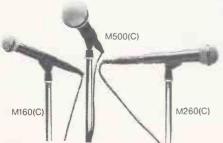
A specialfy shaped short ribbon, 0.002 mm thick, weighing only 0.000438 grammes guarantees that the M260 NS gives absolute fidelity of reproduction.

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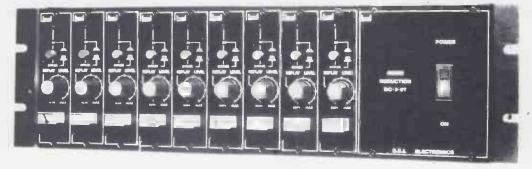


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The Revox Revealed

Mel Lambert offers some hints and points to look for when buying an A77 secondhand

bviously the most important thing to establish when contemplating buying a secondhand Revox A77 is exactly which version is being offered. Over the last 13 years since its introduction in 1967 Studer/Revox has produced literally dozens of variations of the basic 3-head/3-motor A77 transport: $\frac{1}{4}$ - and $\frac{1}{2}$ -track models; low $(3\frac{3}{4}/7\frac{1}{2})$, high $(7\frac{1}{2}/15in/s)$ and special logging speeds; metal chassis, walnut cabinet and 'suitcase' versions complete with built-in power amps and loudspeakers; optional Dolby B noise reduction, and so on - all of which will affect the selling price. Not to mention the various factory-approved (and other) conversions, such as sel-sync, varispeed and 'flatbed' editing versions, which have appeared during the A77's lifetime. (Incidentally, although the A77 is now coming to the end of production in Switzerland – to make way for its newer and improved cousin, the B77 - your local Revox dealer should still have stocks of brand new A77s for the next year orso.)

Assuming you know which particular version you're after – say a ½-track, high-speed A77 in a walnut cabinet - the first thing to find out from the seller is the model number. Although, annoyingly, this information isn't actually marked on the machine anywhere (it's printed on the packaging), the model number can tell you a lot about the A77 being offered. A Model 1104, for example, is a low-speed 1-track machine in a walnut cabinet; 1222 a low-speed 4-track in a carrying case; 1302 a low-speed 1-track in a metal cabinet; and 1106 a high-speed \-track in a walnut cabinet. In fact the second digit in the model number corresponds to the type of packaging - 1 for wooden cabinet, 2 for carrying case complete with lid, amps and 'speakers, and 3 for metal chassis; the third digit to the inclusion of power amps (but not speakers) or Dolby B-0 with and 2 without amps, 3 for Dolby; and the last digit to the track format - 2 for \-track, 4 for ‡-track, 6 for high-speed ‡-track NAB record/replay EQ, and 8 for high-speed IEC EQ. (No high-speed ‡-tracks were ever produced by the factory.)

Since the age of your chosen machine is equally important, the next thing to establish is whether the A77 on offer is a Mkl, II, III or IV. Don't be misled, however, into thinking that a MkI A77, for example, is any less desirable than a later MkIV. While it may be reasonable to assume that an older machine would be in a worse state of alignment and general condition than a newer model, it's relatively easy (and doesn't cost the earth) to update a secondhand A77 to include the marginally improved features of a MkIV. In fact, it's often possible to buy a pretty abused machine for practically next to nothing, and then have it brought up to full MkIV spec for less than the cost of a newer machine.

What's what

Major differences between each of the four different Mks of A77 are listed below:

■ MkI. The earliest A77s, dating from 1967, had a brushed aluminium front control panel, a shiny top-panel or drive cover and grey reel turntables. Control knobs were grey with clear plastic skirts and silver end caps; scale markings and switch positions being printed on to the top panel. Transport pushbuttons were in grey plastic, with the pair of record safe/ready buttons beside each VU meter coloured red. VU meter scaling was in black, with internal lamps that lit up when record mode was selected. The hinged cover between the deck cover and front control panel was in chrome, and finished with a Revox badge just above the meters. Apart from cosmetic and styling differences, however, the easiest way to tell a MkI from later versions is by looking at the tape tension arm between the feed spool and first tape guide. Very early A77s were fitted with an unsprung arm mounted

beside a different headblock. Lack of spring tension can affect start-up performance on a *Mkl*; in other words they are slightly more prone to throw a tape loop than later models. It's not too difficult, however, to replace the tension arm and headblock assembly for an improved design. Also the brakes were slightly different on *Mkls*, often resulting in fiercer braking that required more frequent adjustment.

● MkII. Around late 1968 the first MkII A77s appeared with a modified tape tension arm and headblock assembly. A solid tape guide between the tension arm and erase head was also replaced with a roller-bearing version

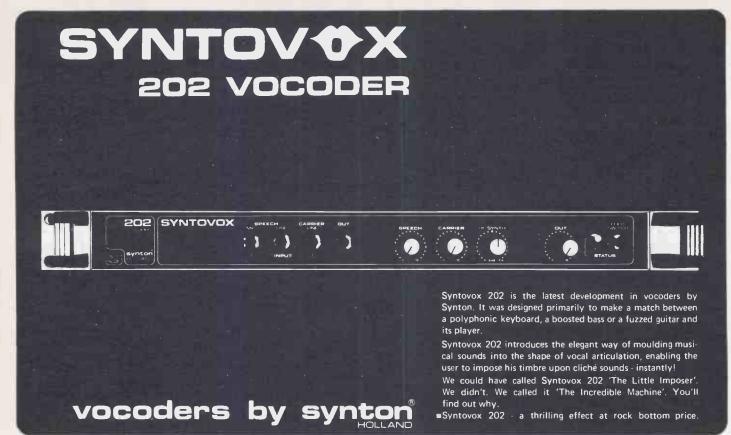
to improve tape handling.

■ MkIII. During 1971 slight cosmetic changes resulted in the introduction of the MkIII. While the same MkI/II style knobs were retained, the colour of the front-panel became grey. Spool turntables were a silver finish, and the flip-down head cover assembly brushed aluminium rather than chrome. (A simpler Revox badge design, comprising silver lettering on a grey background, was also introduced.) VU meters were changed to the present black scale markings on a silver background, and which are permanently illuminated whenever the machine is on; a pair of red lamps in the centre of each meter now light to show record mode has been engaged. MkIII A77s were the first to be supplied by the factory in a highspeed version - although, as we shall see later, it's possible to convert any model to run at 71 /15in/s. MkIlls with Dolby B noise-reduction were also made available, but only on slowspeed models. (Beware of high speed MkIII and IVs that are said to be fitted with Dolby B; in theory no such animal should exist, since Dolby has never licensed its B circuits for use on a 15in/s Revox.)

Midway through production of the MkIII, Studer/Revox introduced a radically improved head design. Original heads fitted to MkI, II and early IIIs had an estimated life of around 900 hours. Later design heads, however, which were also provided with improved screening between the pole pieces to reduce crosstalk, have an expected life in excess of 5000 hours. In the perhaps unlikely event that you come across a secondhand machine still fitted with older heads, it's worth pointing out that new, long-life heads can be fitted by your dealer (or, of course, you can do it yourself). The easiest way to tell the difference between these two types of head is to examine the mounting plate assembly. Older designs use two screws to hold the head down on to the base plate, while new heads are fitted with a single mounting screw for improved azimuth, pitch and wrap adjustment.

■ MkIV. Latest version of the A77, released in 1974, features a grey, conductive finish on the spool turntables (to reduce static build-up, which occasionally causes problems on earlier machines), surrounded by a grey crackle-finish drive cover. Control knobs, rotary switches, and transport pushbuttons are now silver with scale markings applied to a grey skirt. The Revox badge is now in blue silkscreened ink on a brushed aluminium hinged cover as before. Later MkIV machines are also fitted with a quieter tape counter design, in which a toothed nylon belt replaces the previous drive cogs.

The only other major change made during the life of the present MkIV was to the speed control or tachometer printed-circuit board. All early A77s make use of a discrete transistor



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100 Hamilton Road, London NW11 Telephone: 01-458 9133 Telex: 87515 WISCO G design PCB, which only offers up to $\pm 7\%$ varispeed (where fitted). Integrated-circuit versions enables $\pm 80\%$ speed change to be achieved. (I'll discuss the various varispeed modifications later.)

Looking inside

To date a particular machine accurately you need to gain access to the spool motors, on which are stamped the actual month and year of manufacture. You also need to delve inside to check whether or not power amplifiers have been fitted – a useful extra for mobile recordings – and to look for the later-style speed-control of tachometer board.

Having placed the machine face down on something soft to protect the front-panel knobs from being damaged, undoing four screws on the rear allows the cover to be removed. (You will also have to take out the remote control plug.) Taking off the back cover also disengages a pair of shorting plugs and sockets that prevent the naked machine from being powered up. (Safety first and all that.) Don't, whatever you do, short these sockets together with a length of cable or a bent nail, since each one carries either live or neutral mains supply. Instead, obtain from your dealer a couple of proper shorting inserts (or use plastic-ended banana plugs) so you can pursuade the machine to work with its rear cover removed.

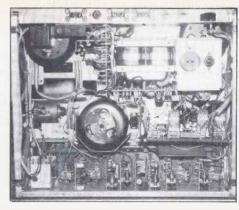
Internal layout and construction of a basic A77 hasn't changed since the *MkI*, which means that there should be no problems in fitting replacement *MkIV* PCBs and parts to earlier models. One model that is *completely* different, however, is the version fitted with Dolby *B*, which has a heavier duty mains transformer and lots of other changes. As a result it's virtually impossible – not to say prohibitively expensive – to add Dolby noise-reduction to an original *A77*.

To remove the upper front-panel you simply undo a pair of screws located below the hinged cover and pull it off. Having taken off the control knobs and rotary switches, the lower panel is removed by unscrewing a second pair of screws beneath the hinged cover. It's worth putting back the hinged cover to its closed position before pulling off the lower panel, to prevent it being scratched by the metal covers fitted to the VU meters.

Access to the various pre-set bias, record and replay EQ and level controls can now be gained by removing the two self-tapping screws holding the lower metal screen in place. A paper label stuck on to the front of the screen identifies each of the presets.

Is it what it appears to be?

If you want to find out even more about the history of a secondhand A77, FWO Bauch, sole importers of Revox equipment in this country, keep a complete history of every machine they have sold since taking over the dealership from CE Hammond in September 1976. From the machine's serial number Bauch can tell you when it was sold, and through which dealer; they also have a list of serial numbers from A77s sold by Hammonds during 1975 and early 1976. Provided that the machine's previous owner doesn't object - and is willing to provide the relevant invoice number - Bauch can also let you have details of any recent overhauls and repairs that may have been carried out by their service department. (Useful if somebody claims that a secondhand machine was recently refurbished with new heads and brakes, for example, and



you want to make sure for yourself.) Many other Revox dealers, including Music Laboratory, REW, Turnkey, Studio Equipment Services, Plan Audio, Buzz Music and ITA, also do repair and servicing work, and should be able to supply similar information.

Modifications – factory approved and others

With so many machines around - well over 300,000 have been sold worldwide since 1967 - you're bound to come across one or two models that don't quite resemble an original A77. Plus one or two that, externally at least, may look like the real thing, but are in fact rather different inside. Within this latter category, one of the most common modifications is the conversion of a low-speed A77 to a high-speed one. When a certified Revox dealer carriers out this conversion, the entire capstan motor assembly is changed to retain correct tape path alignment, and the record and replay equalisations are adjusted properly. Some high-speed modifications, however, weren't quite as thorough. Having simply fitted a larger capstan shaft, quite often the original motor was left in the same position as that of a lowspeed model. As a result, tape guides and mounting brackets had to be altered and repositioned to ensure that tape passed correctly across the replay head and around the larger-diameter capstan. This quite often resulted in unusual wear patterns developing on the record and replay heads, as well as inferior frequency response compared to a factory high-speed A77.

The simplest way to spot a proper highspeed conversion is to examine the gap between the upper part of the capstan motor and the surrounding deck cover. On a genuine, factory-approved high-speed machine – either original or converted – there will be a crescent-shaped gap at the front of the capstan housing, whereas slow-speed machines have a gap at the rear. Also on a properly-converted high-speed A77 you'll find that the rotary input/output switch will only provide IEC or NAB replay equalisation, dependent on how it's been set up, but never both. Be suspicious of a high-speed model fitted with a switch that can be set to either replay EQ.

And be equally suspicious of an A77 equipped with sel-sync; no such versions have ever been produced by Revox. Although this modification works perfectly satisfactorily in most instances, the extra wiring involved can sometimes degrade the signal-to-noise performance.

One of the most useful A77 modifications and one which, if done properly, has factory-approval – is the flat-bed or editing version. In the past, several companies, including Music Laboratory, Sound Associates and Radio Re-

cordings, have modified both new and used machines by adding spacers to raise the motor chassis assembly by about ½-inch, which greatly improves access to the heads during editing. A new, one-piece top deck is then fitted, complete with restyled transport pushbuttons.

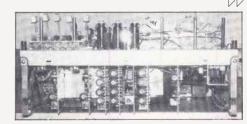
One little funny to look out for, though, is that the pair of muting contacts fitted to the underside of the now raised pinch-wheel arm still make contact with the printed-circuit board mounted below. These contacts are designed to mute the machine's output in stop, rewind and fast-forward; if they have been bent, or don't in fact quite reach the PCB, 'monkey chatter' will be produced while spooling a tape. Occasionally, you'll also find that the signal-tonoise figures of a flat-deck A77 aren't quite as good as an unmodified machine. Because the metal plate mounted beside the capstan motor is now slightly displaced, it doesn't do such a good job of screening hum and noise from the rest of the electronics. And while removing the metal cover fitted to the record head may make editing and head cleaning a lot easier, it doesn't do a great deal in keeping hum down to reasonable levels.

One version of the A77-if it can be classed as such - to which Revox hasn't given its blessing is the Itam 3.77 manufactured by Industrial Tape Applications (ITA). The major objection, I understand, is that the inclusion of three speeds puts quite a strain on the capstan motor; particularly for the lower speed where there is often insufficient tachometer signal to maintain an adequate wow and flutter performance. Revox also point out that only two record equalisations adjustments are available, resulting in a fan from optimum frequency response, especially at the low-frequency end. Tape path on the high-speed 7½/15/30in/s model in particular is also considered to be very much of a compromise. Rapid head wear is said to be fairly common on a 3.77, something to bear in mind if you're after a machine for regular use in a tape copying room or for pre-reverb delay.

FWO Bauch go as far as refusing to take in an *Itam 3.77* for servicing. However, there's no getting away from the fact that many 3.77s have been sold to satisfied customers; the choice of buying one secondhand must therefore be judged on its own merits.

Varispeed is a useful facility to have on any reel-to-reel, but check that a later style tachometer board is fitted if you're after the wider range. Several add-on varispeed units have appeared over the years, including one that plugged into a pair of modified front-panel headphone sockets. Watch out for an A77 fitted with an early-style speed control circuit and varispeed, but which is claimed to offer more than a maximum of $\pm 7\%$ speed adjustment. While it's possible to persuade an early A77 to run at speeds outside this range, once again lack of sufficient tachometer signal at low speed will upset the wow and flutter performance.

A genuine Revox varispeed is designed to plug into the rear-panel DIN socket, which is changed during conversion from a 5-pin to a 7-



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Pembroke House, Campsbourne Road, London N8 Tel. 01-340 3291 pin to provide the extra connections. As with similar modifications, Bauch can supply all the necessary circuit diagrams and hardware for what amounts to a fairly simple, but effective, conversion. Later-design tachometer PCBs are also relatively easy to fit, and only need a frequency counter for setting up correctly. Even if you only expect to need small speed variations for flanging, flutter echo and prereverb delay etc, swopping to a later tachometer board is still worth the trouble and expense. Revox say that speed stability is much improved, and the machine is less prone to drifting.

The inevitable question: Price

With a new A77 MkIV costing anything between £500 and £600, dependent on trackformat and operating speeds, it's surprising how well secondhand machines hold their price. Don Larking Audio Sales, for example, quoted a 'typical' price for a secondhand MkIV high-speed A77 of between £350 and £400, or £450 with built-in power amplifiers; while an older - and, admittedly, rarer - MkII can be had for between £250 and £300. As they rightly point out, the only major difference between the condition of a good MkI/II and IV would be motor wear, hence the small price margin. And once a machine has been properly overhauled, and possibly fitted with new heads, both machines should then cost pretty much the same in terms of routine maintenance and

Another well-known secondhand dealer, TRAD Electronics Sales, quoted £230 for a high-speed *MkI* machine, and between £375 and £400 for a *MkIV*. Each machine they offer receives a full line-up and inspection before it is sold, *except* if it's in a really tatty condition, in which case it's offered for sale as seen. After all, a neglected A77, like any other tape machine, can cost a lot to put right. In such cases I would advise a prospective customer to check out the cost of replacement parts and/or servicing to see if it's really such an attractive proposition.

Probably the company best equipped to service a secondhand A77 for you are FWO Bauch, who have an enormous amount of spares and replacement parts at their Borehamwood headquarters. By way of an example, a pair of replacement record and

replay heads, plus a full alignment check up, would cost around £120 plus VAT, including £24 each for the heads. Labour on all work is calculated at a fixed rate of £10 an hour; changing the heads takes about four hours. Estimates will be prepared free of charge. You can either specify that the repairs are carried out regardless of cost, or that a maximum amount is spent before Bauch service engineers check back to see if you want to proceed with laying out any more money. All their work, by the way, is guaranteed for one year. Prices for A77 spares can also be quoted over the 'phone; if you send cash or a cheque with your order (no COD unfortunately) quoting the relevant part numbers, Bauch say they can get almost any spare part to you within a couple of days. Most Revox dealers also offer a full range of A77 service facilities. Re-alignment of heads and electronics will cost you between £15 and £20, a general service about £40 plus parts, high-speed conversion £120, editing conversion £100 to £120, and replacement of a Mkl tension arm approximately £35.

And if you feel up to handling the job yourself, the A77's Workshop Manual, which

costs just £10.95, covers in great detail just about everything you'll ever need to know to keep your machine in good shape. Bear in mind, however, that new manuals have been written for later *MkIV* machines, and include descriptions of the IC-style speed control PCB. Circuit diagrams of the older tachometer board, together with full notes on the proper high-speed modifications, varispeed and remote controls, can be obtained free of charge from FWO Bauch's service department.

So long as you buy a machine that has been cared for reasonably well during its life, with a small outlay on routine maintenance a second-hand Revox A77 should last for many years. Certainly I can think of very few reel-to-reels that have proved as robust and reliable after nearly 13 years in production.

Acknowledgement

I am indebted to David Neal, Vaughn Waller and Mick Elliott of FWO Bauch (telephone: 01-953 0091) for their invaluable assistance in providing the information on which this article is based. If you need any further details about your A77. I'm sure they will be happy to oblige.





Yamaha

SG 2000

uite right, it's not a new guitar. But, in keeping with the policy of this magazine, I offer an appraisal of an instrument which appears to be establishing itself as a tool of great artistes. This I believe to be a more worthwhile enterprise than an examination of this week's 'new release'. It is all too difficult to see past the barrage of endorsements and extravagant claims on the part of manufacturer and distributor alike when attempting to evaluate a new guitar, and it is nice to be allowed the opportunity, as a guitarist with no particular axe to grind, so to speak, to get to grips with an instrument over a comfortable period, purely out of choice, and with no feeling that one may be helping to make or break the launching of a product before it has had a chance to gain a position in the estimation of musicians based on its own merit, or lack thereof. Here, quite simply, is a player's opinion of a guitar.

Background

The look of a guitar determines what will be the player's first approach to playing the instrument. You do not, for example, take a Guild Artist Award or Gibson Johnny Smith from its case and start hammering Anarchy In The UK out of it.

With the Yamaha SG2000, however, you have a problem. A few bluesy phrases, perhaps? Some jazz-rock runs? Straight jazz? Power-chords? Choppy funk rhythms? Stars from most of these fields of music have used this instrument. The common denominator is one word: 'class'. From the moment you open the case and savour the quality of the finish (come on Yamaha – 'brown' just doesn't do it justice!), you want to play your best stuff whatever your style. The sequence goes like this: 'Mmm, nice case - looks expensive! I'll just .' At this point you lift the open it up and guitar out of the finest quality plush lining, the colour of which sets off the brown, goldaccourted instrument within to perfection, and you start playing. Hours later, you stop and realise that Yamaha have got it just right. What you need doing to it after that depends on you, but believe this - straight from the packing, this guitar was set up to be played. I took it straight to a rehearsal session and after the first number I forgot about the guitar but thoroughly enjoyed the rehearsal. There's no better compliment I can pay.

You've all probably seen or tried a Yamaha SG2000 in a music shop. Failing that, you may have seen Bryan Ferry pretending to play one on Top Of The Pops not long ago. I mention him, as the sight of that gentleman with a guitar at all is unusual, so you probably noticed it. To be blunt, it looks like the offspring from the mating of the two best known Gibson solid electric designs (and I don't mean the Firebird with the Flying V, get it?). In other words, a Les Paul with two sharp cutaways instead of one blunt one. I should emphasise that this is merely a spontaneous reaction to the styling,



Roger Adams

and that there is no conceivable way that this guitar could be termed a Gibson 'rip-off, as there are vital differences.

I am informed by a reliable source (Mr Bacon reading aloud from the Yamaha catalogue) that the SG2000 is in fact available in five choices of finish; black, brown, cherry, brown sunburst and cherry sunburst. This selection confirms the impression that Yamaha have aimed their current range of electrics at the traditionalist element among us axe-wielders, taking no chances with exotic woods or flashy colours. The designers at Yamaha would seem to have stood back, taken a long and patient look at the world electric guitar market, and launched a new model to cater for each main area of taste. The range includes a Strat-type, a deep-bodied jazz guitar, a slim twin-cutaway semi-acoustic, the rather more experimental SF series and, of course, the body in question, not to mention a Fender-inspired bass guitar. Each model, however, on closer examination, exhibits distinquishing features which are pure Yamaha.

All of this is fairly fundamental stuff, and many Japanese companies started off similarly, before branching out into a bewildering

diversification of models, colours etc somewhat parallelling the Japanese automotive industry's overwhelming assault on Western taste and gullibility. The difference with Yamaha is that here we have a company, founded as far back as any 'big name' in America's musical instrument scene, who have decided not to emulate or to undercut, but to compete on level terms with the more famous names in guitars, covering the same repertoire of designs, but adding innovations thought up by craftsmen of equal, if not superior, talent to their American contemporaries. Sure, Yamaha used to make Les Paul copies. But when they were told they weren't rivalling the originals, they bothered to find out why, rather than performing an about-face and designing some weird-looking creation based on whim and fancy, just so they could shake off any accusations of plagiarism.

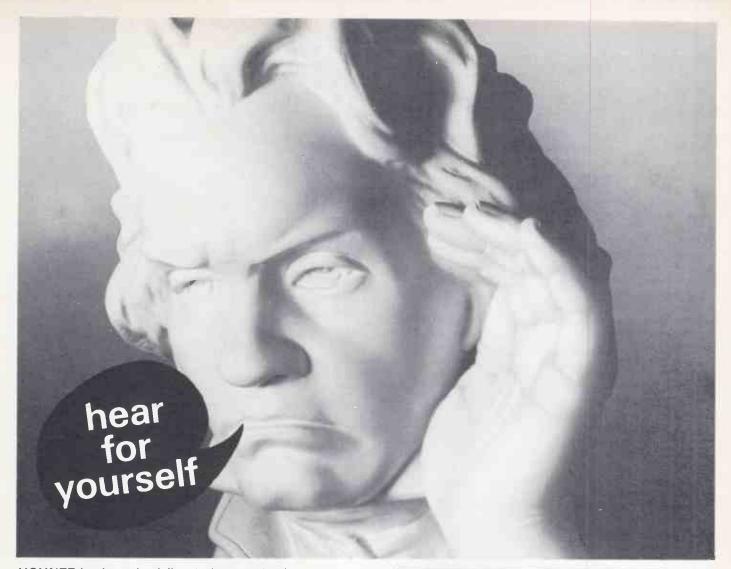
Appearance and Construction

The SG2000, judging from past press, my own opinion. and miscellaneous pieces of hearsay, would appear to be the outstanding success of the range. On looks alone it would be a strong threat to the domination of this sector of guitar design by Gibson. Yamaha's gold-finished hardware is massive and secure-looking, the binding around the head and the arched top is unsurpassed to my knowledge in a production guitar of this type, the balance is superb, aesthetically and physically, and the overall finish is impeccable.

Starting with the head of the guitar, we see a neat, balanced size and shape, beautifully finished in the traditional manner. The inlay design is neatly executed, but in such a musicianly and otherwise artistically conceived guitar, the Yamaha logo looks a little prosaic with rather 'blocky' lettering. In fact, the very name Yamaha, so uncompromisingly Japanese, looks almost at odds with the overall design of this guitar, so successful is the instrument in evoking all the qualities of craftsmanship and restraint in design valued by top players in Europe and the States. However, full credit to Yamaha for retaining pride in their name and their work. unlike so many Japanese guitar manufacturers whose assumed. westernised brand names can sound pretentiously comical.

The fingerboard is unblemished ebony, again with neat block inlays and binding. The frets, although of excellent width, height and shape, would benefit from a touch of refinishing here and there on the edges, although I have seen far worse fret-jobs on more famous instruments. While playing the guitar, in fact, there appeared to be no shortcomings at all in the fret department; I only discovered one or two very slightly sharp corners after a concentrated search for such things.

The frets may also be to blame for the fact

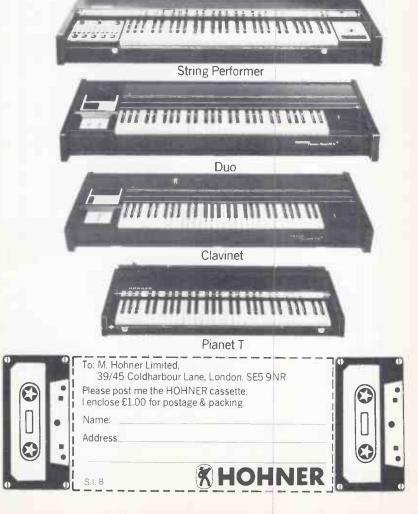


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that the action won't go much lower. A little stoning, as with 99% of production instruments, would not go amiss. The curious thing is, however, that I found this guitar more comfortable to play than my usual instrument, despite the higher action. Indeed, it has given me cause to rethink my taste for a thin neck, low, wide frets and a low, slick action, which have distinct drawbacks regarding tonal strength and expression of playing, especially during emphatic solo work.

Incidentally, the fingerboard is lightly cambered, but at no cost in ease of string bending. A bent string, even above the twelfth fret, has a satisfying duration, which is a clear sign of quality and accurate design and contributes to the highly playable state of the instrument. I am of the opinion that too slim a neck reduces tonal quality and sustain, and I was therefore pleased to discover that the *SG2000* features a neck which, although comfortable, looks and feels substantial. The secret lies in a combination of quality construction and finish, and a perfect choice of dimensions.

The neck is constructed in three pieces which extend to constitute the central block of the body, where they are flanked by the upper and lower bout pieces, the whole being surmounted by a one-piece carved arch-top, whose curve is extremely generous. The danger, of course, with straight-through necks, if not carefully conceived and executed, is that the holes cut for mounting the pickups can cause greater interference with the rigidity and density of the structure between the nut and bridge than does a good neck joint. Yamaha's design predates, and may have helped to launch, the current fad for multi-ply, straightthrough necks, and it is apparent that many guitar builders have missed the trick of this design feature, reducing it to the level of 'gofaster' stripes.

The secret is obviously to ensure that the neck/central block section flares out sufficiently where one would normally find the neck joint, so that the central part of the body is deeper than usual. The highly arched solid top adds still more depth, with the result that the loss of wood due to pickup emplacement is proportionally insignificant. The only other popular guitars I can think of which come near getting this right are the Washburns, but these, good value though they be, have a severe balance problem as a result.

Yamaha have not only given us a perfectly balanced instrument (was that second cutaway purely cosmetic?), but they have simultaneously solved the other difficulty caused by too deep a body, namely comfort when the guitar is in use on a strap. A deep, graceful contour at the rear of the upper bout is the answer here, again assisting balance, and enabling the player to 'lean' right into the instrument from above with good visibility of the fingerboard whenever necessary and a snug fit to the body. It is obvious that considerable forethought went into the design of this instrument, and it is good to see that, mass-produced though it is, the designers' good work is having justice done to it in manufacture.

Hardware and Electrics

The machine heads are substantial, wellgeared and, like the rest of the metal-work, beautifully finished in gold. The machine relating to the G-string is in need of a little tightening, but full provision is made for adjusting as, although the covers are stamped Yamaha, Japan, the machine heads are of a familiar and reputable design which does the guitar full justice.

The bridge is very solid-looking, similar to a Tune-o-matic with scale adjustment on each string, but no string spacing adjustment as featured on the Guild variation of this type of bridge, where versatility of adjustment is achieved perhaps a little at the expense of bulk and solidity. The most notable feature of the bridge is that it is mounted in a huge block of solid brass bonded tightly into the body of the guitar which replaces the usual pair of threaded collars into which bridge height adjustment bolts are normally screwed. This has obvious benefits regarding sustain and tone, far more so than any brass nut could achieve. This unorthodox feature has been successfully incorporated with no adverse effect on the balance of the instrument, and must therefore have been an integral part of the concept of the guitar. The height adjustment bolts are a snug fit into the threads in the brass block while remaining easy to use with finger pressure, even when the instrument is at concert pitch - a fine piece of precision engineering.

The tailpiece has a tasteful piece of engraving in the design of a lyre, which is one of the instrument's few bits of pure show but which is still in keeping with the whole tasteful concept. It is mounted more conventionally than the bridge by means of threaded collars which give provision for height adjustment, allowing a variable angle of 'break' of the strings over the bridge saddles. One wonders whether Yamaha's design team tried the brass block approach to mounting the tailpiece and deliberately discarded it, or whether expense was a limiting factor. Was any attempt made to mount both bridge and tailpiece in an extended brass block and, if so, what were the results and the problems?

Lastly, the strap buttons are of a sensible shape with wide flanges which should prevent disastrous plunges to the floor.

Although I once used an SG2000 briefly (when trying an amplifier) which had been fitted with coil taps in the form of push-pull pots, this is not a standard feature and I believe that particular one had been rewired by Ashley Pangborn, who was minding the shop at the time. At any rate, the SG2000 benefits greatly from this simple piece of customising and I would strongly recommend it for added versatility. Indeed, could it not be adopted by the manufacturer?

In its standard wiring format, the SG2000 is absolutely conventional; two humbuckers, tone and volume controls for each (the former being of limited use as usual) and a three-way selector switch mounted above the neck pickup. The knobs are comfortable and easy to grab in a hurry, and the pots feel good. The selector likewise sems to be a quality component and free of quirks. My only quibble with the layout is the fact that, although the jack socket is mounted in the best position, namely on the front of the guitar, there is no protective surround, which leaves the guitar vulnerable to scuff marks from hastily stuffed-in jack plugs. It is to be hoped that Yamaha's finish is as durable as it looks, otherwise a neat (brass?) disc, if you can find one thin enough, might do

the protective job without adverse effect on the appearance. It would probably be easier just to be a little careful when plugging in.

To put a stop to this nit-picking, there is one important point regarding the pickups. Do not, under any circumstances, contemplate changing the pickups for any of those 'ingredient X' power-boosting replacement jobs that lie in wait under the shop counters these days. I admit some guitars benefit from such customising, and I have had it done on my own instrument - but, as I have said before, Yamaha have got this one just right! My own guitar has a Di Marzio Super Distortion humbucker, and yet it barely matched the output from the pickups fitted as standard by Yamaha. The SG2000 will easily overdrive your amplifier if you want it to so it's just not worth thinking in terms of replacement pickups. Plus the fact that, despite all that output, the Yamaha humbuckers have a sweet, full tone and will hang on to the good inherent sustain of the instrument to the bitter end without any of that brittle, artificial roughness of the Super Distortion and its many rivals. To stress this point, here's a little quiz. Which guitarist, above all others, is renowned for his use of soaring sustained notes and what guitar does he use these days? Answers on a fivepound note to the Editor (Carlos Santana competition), Sound International, etc.

To Conclude

This is not a budget-priced instrument, but because of the sheer idiocy of market trends, I was recently informed by the manager of a well-known West End music shop that the SG2000 is currently changing hands for well below the recommended price (£550 inc VAT). It's been around a few years, so secondhand copies can be found at fair prices. But there is no arguing with the fact that, if the majority of guitar buyers could see further than the letters G and F when considering a purchase, if they took time to appreciate that many classical virtuosi are using Yamaha instruments nowadays, that Yamaha have virtually grabbed the professional electric piano market from the previously undisputed American leader, and that, whatever may be their shortcomings in the field of amplification (where they are still struggling in my opinion) they certainly know how to produce the finest electric guitar in its class, then the SG2000 would be even more widely regarded as the classic it undoubtedly is.

The sample reviewed was supplied in a shaped case of exceptionally high quality, with unusually luxurious plush lining. In the accessories compartment were a fairly good strap and a straight lead with (ahem!) moulded jack plugs. The review instrument was not supplied with an owner's manual or any other paperwork such as guarantee, registration card, etc. The serial number, by the way, was engraved in the back of the head \square

Test amplifier: Peavey Pacer (a successful marriage). Measurements: scale length $-635 \, \text{mm}$ fingerboard width at nut $-44 \, \text{mm}$ fingerboard width at $12 \, \text{th}$ fret $-54 \, \text{mm}$

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o you've finally bought that new bass that you've had your eye on for all those months. You can't wait to get home, get it out of the box/case and start practising your favourite player's riffs

Hold it right there. If you want to get the best out of your bass then you'd do well to spend some time on a procedure known as 'setting up'. This is really a two-fold operation.

The first part consists of correcting any (often many) minor faults that shouldn't really be there on a brand new instrument but, unless you're extremely lucky, usually are. The second part is that of tuning and pickup adjustments and possible alterations to suit your own personal preferences and style of

playing.

Most buyers will have checked out the bass in the shop for things like neck alignment and straightness and will have made sure that the electrics work properly and quietly. But if you get your bass by mail-order or as a present (lucky devil), then obviously these are fundamentals which should be looked at very thoroughly. If you do find any faults in these areas, particularly on the neck, then get it back to the shop pronto. Truss rod adjustments are, in most people's opinion, a no-go area unless you know exactly what you are doing. If you try to correct a manufacturing fault yourself you could invalidate the warranty.

Right then. Firstly, wherever you decide to work, make sure that the working surface isn't going to do any damage to the paintwork and that you've got the neck and body of the guitar

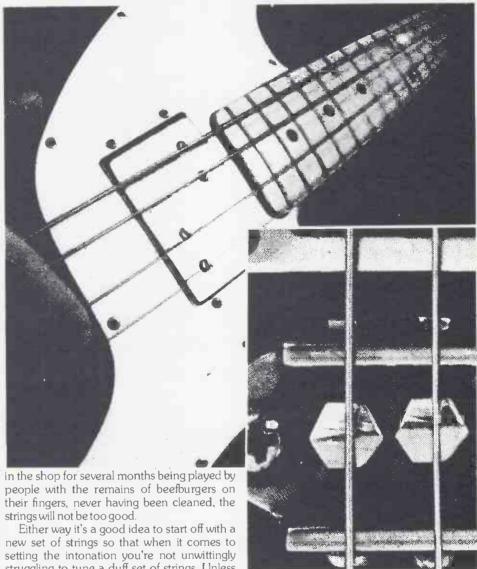
well supported.

To release the tension on the neck, machines, bridge and tailpiece, and also to make things easier to get at, remove the strings. Now, certain screws are meant to be tight and others secure but adjustable. The important ones, that need to be really tight, are those holding the neck to the body (where applicable); the machines to the head; the bridge/tailpiece assembly to the body and, to a lesser extent, string guides and strap buttons. So get yourself a set of screwdrivers to fit all the different screws on your bass. It's worth getting a good set otherwise you'll end up chewing bits off all over the place (re-sprays are expensive). Once you've got those good and tight you shouldn't have to worry about them too often. For the rest of the non-adjustable ones it's sufficient that they just stay in place. Don't give yourself a double hernia screwing down the scratch plate!

The two areas that commonly give unwanted movement problems are the small screws for adjusting the height of the bridge saddles, and adjustable pickup polepieces. If your bass has either of these and they feel a bit slack, here's a tip. Take them out and give them a thin coat of one of the 'chewing gum' type of glues (Evostik etc). Let it dry and then replace them. You should find that they will now stay in place a lot better and not vibrate (particularly nasty with polepieces) and yet still be freely adjustable. Here's another tip; don't use superglue.

Time to put the strings on and get down to the trickier bits. Unless you've bought a fairly up-market bass there's an excellent chance that the strings that came with it won't be too good. Maybe they are simply bad strings or maybe they've become bad during the time they've been on the bass. If the guitar has been

Setting up a New Bass by Paul Henderson



struggling to tune a duff set of strings. Unless you already have a preference I could suggest Rotosound Swing Bass - roundwound strings which are pretty good and not too expensive. But keep the set you take off. After a clean they may be perfectly acceptable. Make sure you get

strings of the correct scale length. If in doubt tell the dealer what type of bass you've got and you

may get the ones you need.

It's very important that the strings fit properly into the nut; tight enough so that they are held firmly but not so tight as to prevent the string moving through it when being tuned. The slots in the nut should also be of a precise depth. If the strings are too low they will buzz against the first fret, and if they are too high you won't be able to set up a low action. You could also find yourself with tuning problems. If your bass has a fret right up next to the nut this is not the first fret, but is known as a zero fret. If this is the case then the slots in the nut must be low enough to allow the strings to rest firmly on the

You can enlarge the slots in the nut by careful use of a small file. But if you have the opposite problem of the slots being too large, fit a new nut or get someone to fit one for you.

Don't try to pack an ill-fitting nut with bits of cardboard etc. As with everything, do the job properly, or get it done properly, and it will pay off in the end

When you put the strings on, try to apply equal tension to all of them at the same time rather than tightening them up one at a time. The same applies if you remove the whole set. This will keep a more or less even side-to-side strain on the neck.

I know that some of these points may sound very minor, even petty, but over the years every little bit helps keep your instrument in that little bit better condition than it might otherwise be.

Now comes the job of actually getting the thing in tune, which is more than simply getting E, A, D, G if you're going to do it properly. Firstly you need to tune to something approximating concert pitch (A-440). For this you need some sort of standard to refer to; pitch pipes, tuning fork, some other in-tune instrument or, if you are lucky enough to have or can borrow one, an electronic tuning device (see survey of these in SI Feb '80). You don't need to be too accurate at this stage as you're going to throw it all out again in a minute.

Now you need to adjust the height of the bridge saddles – if your bass has them – or of the whole bridge to obtain a good playing action. Generally, aim to get the strings as low as possible without having them buzzing against the frets. Don't forget that the height of the strings in the nut will also affect how much you can do this. Your playing style will also have a bearing on the optimum string height: if you hit the strings really hard then you will not be able to set them as low as a player with a light touch. As long as it's not set outrageously high or low it should play OK. You can experiment later, so let's tune up.

The objective is to get each string to be in tune at all positions on the neck – known as setting the intonation. This involves adjusting the playing length of the strings by moving the bridge saddles. The procedure, which has to be repeated for each string, is as follows:

1 Sound the string's harmonic at the twelfth fret and then compare it to the actual played (fretted) note at the twelfth fret. The aim is to get these two equal. (This is where an electronic tuning device is extremely useful.)

2 If the fretted note is flat, move the bridge saddle slightly toward the nut and then compare the two notes again. Continue the adjustment until the harmonic and the fretted note are equal. If the fretted note is sharp move the saddle in the opposite direction.

3 When you have completed the operation for each string check them all again in case one of them has gone out during adjustment of the others.

Different gauges of string will require different settings to get the intonation right, as will strings that are old which will have changed their harmonic characteristics. So make regular checks and adjust accordingly, at least when you change strings.

The next item that's going to need fiddling about with is the pickup(s), if they are adjustable that is. If they are not, then without some sort of modification or replacement I'm afraid you are stuck with what you've got.

Many pickups have two areas of adjustment; the position relative to the strings, and the height of the individual polepieces. Basically, we are aiming to get the pickup in the best possible position for it to collect the full harmonic range of the strings, and at the same time produce a matched, even sound from each individual string. It's very much a case of altering the pickup angle and height, and the polepiece height, together on a trial-and-error basis until it sounds right. It's one of those subjective things which is partly determined by your style of playing. Spend some time discovering what differences in sound you get relative to pickup adjustments and you will eventually work out what suits you best. But be careful not to have the pickup or its poles so close to the strings that when you hit them hard they touch each other.

Your bass should now be correctly set up as far as all the above points are concerned. It may not be *exactly* as you would like it but at least it will be playable. Getting it to suit *you* is the next step.

Let's consider a couple of things you might try doing which are more related to individual preference but which are also often useful in themselves. Earlier on, when you took the strings off, you may have had to remove a bridge cover (eg Fenders) to be able to do so. Don't bother putting it back. It will just get in the way and restrict your playing style. Likewise any covers over the pickups. These two chunks of metal limit access to the strings quite substantially as well as being dangerous to fingers. An important point to consider is that if you are on a gig and you break a string, you don't want to have to hunt around for a screwdriver and then have to spend time removing the bridge cover before you can even get the broken string off.

Look carefully at any other bits of hardware (eg dampers incorporated in the bridge assembly). Do you really need or want them? If not, get rid of them. Thumb/finger rests are often in the most useless places. If you decide that you would prefer it somewhere else, then move it. Don't simply accept that things are supposed to be where they are. Change things to suit you.

A good idea if you haven't got calibrated controls is to replace them with some that are calibrated (in other words have numbers or markings on them). True, they are ridiculously expensive for what they are. In that case what about putting markings on the controls that you have? Get some decent sized strapbuttons; put on string guides if you don't have them.

Think of your new bass as a starting point. Figure out how you can change it to suit you rather than the other way round. And before you decide to spend good money on things to put on it, consider how it might be improved by taking things off it. It's much cheaper





The Practice Problem

ll musicians with aspirations of improving their playing ability must practise. For drummers this produces a curious dilemma. On the one hand, drumming is the easiest activity in the world to simulate. Wherever drummers may find themselves, they will doubtless have the four limbs necessary for the job and this is enough to tap out various rhythms; feet on the floor, hands on knees. Drumming in the most basic sense is the formulation of rhythmic patterns, and the human body can produce rhythm completely independently of any instrument. But on the other hand, modern rock drumming requires an extraordinary amount of unwieldy equipment, and to practise properly the full range of percussive functions that a drummer is required to perform needs more gear and general accoutrements than any other instrument. Drums also make a good deal more noise than any other acoustically played instrument.

The solution of course is the practice kit, and there is nothing especially new in this. Peter Randall covered the subject of practice kits with his customary thoroughness and élan in the Oct '79 issue of SI. To recap briefly: there are various makes available from the Bill Sanders four-drum kit made from a wooden frame with rubber pads (astounding value at £55) to the Inperpro basic five-drum kit with facility for additions made from a tubular steel framework with proper tunable heads (impressive quality at £130).

One addition worth noting which has emerged in the world of practice kits since Peter wrote his article is the arrival of a convincing practice cymbal, the absence of which was previously a big drawback to using these kits. The cymbals, made by Pearl, are called Dead Ringers. Made of fibreglass in a multitude of pretty colours they come in 14in, 18in and 20in sizes and cost £45 for a set, £15 each. When struck they produce a completely dead tapping sound. (Apparently the BBC have made and used them for years on their famous miming programmes such as Top Of The Pops, but it is only recently that Pearl have made them commercially available.)

The practice kit provides a valuable half-way house between tapping on the knees and setting up the real kit, lock, stock and barrel with all the attendant problems of effort, space and, above all, noise. It is possible to achieve a reasonably close approximation to the feel of actually playing a drum kit and this affords the



David Sinclair

opportunity to work up technique far beyond the limitations of tapping out rhythms on the knee. However it can't replace the real thing. Bearing this in mind, what does the drummer actually do when sitting down to be faced with this rather dull-looking collection of unresonant rubberised discs? There are of course certain maxims that apply to practising any musical instrument. Qualities required range from patience, diligence, self-discipline and enthusiasm, to endurance, bloody-mindedness, and a sturdy (psychological) constitution. There is nothing so infuriating and at the same time rewarding as serious practice. And if you're going to do it properly you have to lock yourself away in your garret and stop the clock. Whatever your standard of playing, practising can improve it.

The practice kit doesn't sound or feel like your real kit. But, settle into a rhythm you can handle, speed it up to a point where you can only just cope with it, and then figure out some embellishments and breaks that you can work into it. Always aim a bit ahead of yourself. This can be fun. One area which can be pretty tedious, though, is rudiments (paradiddles and so forth: RLRR LRLL). But they are extremely important for developing stick control, strength, and co-ordination (if played around the kit incorporating both bass drum and hi-hat pedals). A book I would recommend for this is Joel Rothman's Everything You Always Wanted To Know About Drum Technique. It contains an abundance of fascinating combinations, and approaches the subject of technique with commendable thoroughness, from beginner through to advanced.

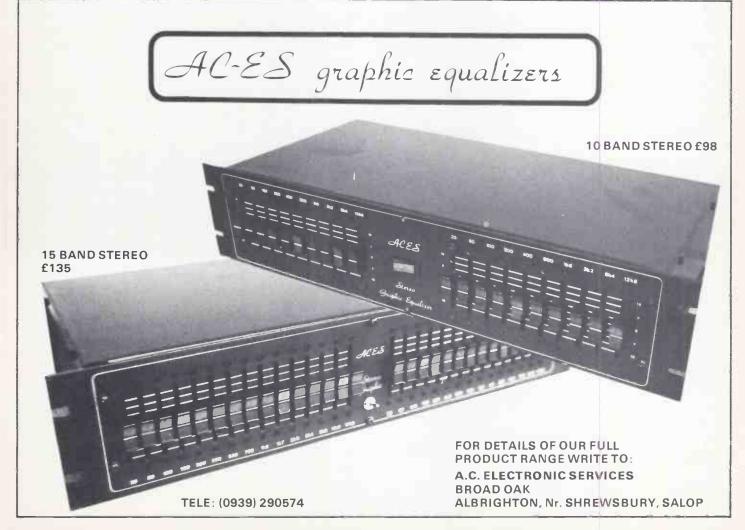
An important source of inspiration when practising is trying to copy what other people have done. Playing along to records can get you started here, but where the material is a bit more advanced it can be difficult to pick out exactly what's going on (have you ever tried drumming along to a Billy Cobham record?). A book that can help in this respect is Billy Mintz's Different Drummers which is a compendium of exercises and solos in the styles of various drummers (Tony Williams, Buddy Miles, Elvin Jones and Billy Cobham are among those included). It's tricky stuff - it takes me a morning to work up four bars of some Cobham patterns – but it's worth tackling. The book comes with a record so that you can actually hear what the exercises are supposed to sound like.

At the end of the day, though, it doesn't really matter which book, if any, you use; successful practising hinges on the right frame of mind. Often it's very difficult to translate what you've practised on the pads into what you play on the kit with your band, and it's easy to become disheartened. What you must remember is that drumming depends more than other instruments on the interaction with other musicians for its application. So obviously rehearsing with other players is vitally important but you only bring to the rehearsal the technique you've built up through long hours of practice. You maybe won't need to use, say, paradiddles straight off, but having practised them will undoubtedly benefit your playing of even the most simple pattern with your group. Incidentally, I have always found it a good idea to practise with sticks that are a good deal heavier than the ones you play with normally. (If you really want to develop a muscular style, Pro-Mark sell a line of solid stainless steel sticks - best not to use them on your normal kit though!)

This is all pretty simple stuff, but sometimes I think it doesn't hurt to state the obvious. I played in a band for years, blithely assuming that I'd soon be a great drummer and wondering why it was taking so long to happen. Truth is that it doesn't happen unless you settle into a steady routine of regular practice. The problems facing the drummer in this respect are greater than for other musicians (bagpipes excepted?) but I hope I've shown that for some cash outlay and a lot of application they can be surpassed. The benefits that accrue are enormous. The superior command of your instrument will bring great satisfaction and enjoyment to

your playing.









Synth Accessories

Dave Crombie

I don't know about you, but it's about this time of year that the old finances start to dwindle. What with the summer hole and excessive alcoholic consumption to worry about, there's not quite so much in the kitty as there should be (there never is). So, with this backdrop of poverty I thought it wouldn't be such a bad idea to take a look at some of the accessories and ancillary pieces of equipment for synthesisers which have appeared over the past 12 months. You may be in the process of changing synths with more facilities available to you, but why not save a bit of cash and upgrade your instrument? Or, if you're buying a first-time synth, consider the following gadgets that may allow you to get more out of a cheaper instrument. I've selected a few devices that strike me as being either interesting or particularly worthwhile, so bear with me, you may find something to your liking.



Sequential Circuits Model 700 Programmer £752.50 (inc VAT)

Now this is particularly useful for modular/semi-modular synths (ie Roland 100M, Arp 2600) owners, though it was originally designed for use with a modified Minimoog. In fact, this device has been around for quite a few years now. It was with the money made from this programmer, along with the Model 800 sequencer, that Sequential Circuits were able to design and manufacture the fantastically popular Prophet-5 polyphonic synthesiser (see review SI July 178).

One of the major problems of the synthesiser is that it is difficult to use live if you want more than a few simple sounds. The programmer lets you create the 'patches' you want beforehand – all you do is select which of the possible 64 memorised sounds you want the synth to produce. There are a few limitations to this as well as a few additional spin-offs, but we will come to these in a minute.

The programmer produces no sounds itself, it's a device that generates and memorises control voltages. If we consider it in the context of being hooked up to a *Minimoog*, then the way in which it functions will become clearer. Firstly, the *Minimoog* has to be modified to accept three separate control voltages for each of the three oscillators. Normally the *Minimoog* has a socket that controls all three oscillators simultaneously – to split these lines is a relatively simple job which is explained in the instruction manual, though if any problems are encountered, several shops offer engineering facilities,

and they will modify the *Minimoog* at a fairly reasonable cost (at least it should be, considering the small amount of work involved).

So you have three lines feeding control voltages to the VCOs, a line to send a voltage to control the filter, and another to the VCA. It is also necessary to send a trigger pulse, generated whenever a key is pressed to the Programmer, so that's six lines in all - a bit messy, but quite workable. Now the Programmer is interfaced with the synth, it is necessary to set up a basic patch on the instrument. This could, in the case of our Minimoog example, be something like OSC 1, 2 and 3 at 8" with triangle waveshapes; the filter shut down; the position of the envelope controls doesn't matter. Once this is set up, we move to the Programmer to work out the sounds. Firstly, the relative pitches of the three oscillators are set by the three voltage knobs, then Envelope 2 is used for the filter. The Model 700 Programmer has two five-stage envelope generators (DADSR) as part of its complement which are triggered when a key is pressed. Envelope 2 is used for the Filter as it has both an offset (which corresponds to the synth's frequency control) and an envelope amount control associated with it. Envelope 1 has just a five-stage generator and amount control.

Right then, it should now be clear that the *Programmer* will store information pertaining to the frequencies of the three oscillators, the filter, and the shape and amount of the filter and VCA's contour. This information can be put into one of the 700's 64 memory banks – the location of the bank is indicated by a two-digit LED display on the front panel. To select a certain memory voicing a rotary switch selects one of eight groups of memories and a pushbutton momentary switch selects one of the eight locations (8×8=64).

The Model 700 Programmer does have one or two other nice little features about it. A program increment socket on the rear panel enables the operator to step through the various programs by means

of a footswitch, so you can be wailing away on a synth solo one moment and then touch the footswitch step on to the next memory location, where you could have programmed a bass voicing. This feature can be taken one step further when using the 700 in conjunction with a modular system. If instead of hooking up a footswitch to advance the memory location, you use a low frequency oscillator, the *Programmer* can be used as a complex multi-level analogue sequencer, with a step length of up to eight. This can produce some pretty startling effects.

The Programmer is obviously not a cheap accessory, but it is extremely useful if you use synths a lot for live work. It can save you money, as it does enable one synthesiser to take the place of several if you need to make quick changes. Unfortunately, with the Minimoog (and to some degree with modular instruments) it cannot program all the parameters - you still have to select the waveshapes and the filter resonance, as well as adjusting the fine tune of the synth if you want beating effects. However, for the normal range of synth sounds it certainly is a useful tool, and once your voicings are in there, they will stay in until something is recorded over the top - a battery back-up to the memory system will hold the programs for over five years.

The Model 700 Programmer is distributed by Rod Argent's Keyboards, 20, Denmark Street, London WC2, Tel: 240 0084. Sequential Circuits Inc are to be found at 3051 North First Street, San Jose, CA 95134, USA, Tel: (408) 946-5240.

The EML Poly-Box \$475.00

W hat on earth is it?' I hear you chorus, 'the latest minimalist's organ?' Well, in simple terms it's a pitch-following, variable-chord generator that is controlled both by your synthesiser and by its own

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keyboard with built-in memory. OK? The Poly-Box samples the pitch emanating from the oscillators of your synth and locks on to it. It then creates two banks of pitch sources, each bank containing 13 simultaneously available pitch sources at precise semitone intervals, thus covering an entire chromatic octave. The two pitch banks may be in the same or different octaves, and can cover the range from one-above to three-below the synth's original frequency.

So, with the Poly-Box hooked up to your synth you can play a chord on the one-octave keyboard - this will be remembered by the unit's memory. By playing the synthesiser's keyboard, this chord will be paralleled up with the synth's own output giving a really fat and complex sound. The nice thing about this system is that the signals produced by the Poly-Box follow the synth's frequency exactly, even when pitchbend, vibrato, and portamento effect are employed, and the sound that it produces is very strong - the unit has a built-in chorus generator, and also the two banks can be fine-tuned against one another producing a yet fuller sound. In case you are wondering how the envelope of the Poly-Box's output is determined, it is simply fed back into the synthesiser's external input socket, then filtered and

The Poly-Box can also be played polyphonically, providing its own gate pulse into the synth, so you can produce such effects as arpeggios transposed from the synth's keyboard. Always one to impress the crowds, I was mildly amused by the EML sales leaflet that described the Poly-Box as 'the most music-per-buck module that you can buy.'

VCAd along with the oscillator signals. As

with so many ideas, it's the simplest ones

that are the best.

The Poly-Box is available direct from the factory for the sum of \$475 (that's around £210 – however you will have to pay duty and shipping charges to get one into the UK, probably another £50). Alternatively, you can contact Chase Musicians or Rod Argent's Keyboards, both of whom can arrange for the supply of these units. EML can be contacted at PO. Box H, Vernon, Connecticut 06066, USA, Tel: (203) 875-071.

The Octave Catstick £299 (incVAT)

In case you are already confused, Octave is the manufacturer's name, and Catstick is the name of the product. Octave are responsible for the very competitively priced Cat monophonic synthesiser, as well as several other excellent synths. The Catstick is an interesting little device that is designed to expand a synthesiser's performance controls. For those of you who missed our article on these important features (SIOct '79) they are the controls that are used to modulate. bend and generally twist the note produced by a synthesiser while it is being played. (A prime example of a performance control is the pitchbend wheel of the Minimoog.) The performance controls allow musicians to feed expression into their synths in much the same way that guitarists bend the strings of their guitars while pulling a funny face. It is true to say that without the performance control facility, synthesisers wouldn't enjoy nearly so great a popularity.

The *Catstick* can be used with most types of synthesiser: the only requirement is that there is a control voltage input for the oscillators, and preferably also for the filter. If you look at fig 1, you can see the facilities that the *Catstick* offers. The unit centres around a spring-loaded joystick. This means that it will move up and down, and left/right, but when released it will automatically return to the centre position. You will notice that there are four identical control groups corresponding to the various directions that the joystick can move. X1 = left, X2 = right, Y1 = Up (or forward) Y2 = down (or backwards).

Each of the joystick directions has its own control voltage output with selectable inversion and sensitivity. Each has a separate jack output, and could be used to sweep any voltage controllable function (VCO, VCF, VCA). Each direction also has its own VCA that is closed down when the stick is in its normal central position, and opens up as the stick is moved in the corresponding position. The input of each VCA has a switch that selects either one of the Catstick's two low frequency oscillators or a noise modulation source. The signals are bypassed if an external signal is patched into the unit so that the VCA can be used to control the amplitude of any external signal. This feature is more useful than is at first apparent, as it enables a stereo or even 'quad' panning system to be set up to process not only the audio. output of your synth, but any audio

The low frequency oscillator section consists of two wide range oscillators

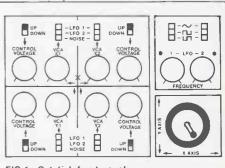


FIG 1a Catstick front panel



FIG 1b Rear panel socket arrangement

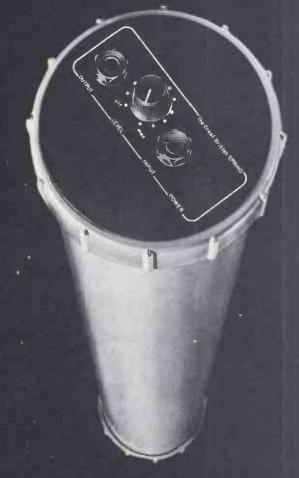
(0.2-50Hz) generating sine and positiveand negatively-phased (when one is high the other is low) square waves. Moving on to the rear panel we have a cool 16 jack sockets (see photo). The VCAs have separate ins and outs for each channel. CVX and CVY provide zero volts when in the normal central position, and have a full swing of +10 volts for the positive axis positions (Y2 and X2) and -10 volts for the negative axis positions (Y1 and X1). The X and Y outputs are provided as mixed signals from the X1 VCA, X2 VCA, CVX and Y1 VCA, Y2 VCA and CVY outputs respectively. Got that? It's simpler than it sounds. The two paralleled X+Y outputs provide a mixed X and Y output signal, what else? So, if the Catstick were (for example) hooked up to the VCO of a synth via this output, each of the four directions could be used to provide a different modulation voltage.

The Catstick could be a useful aid to certain types of synth players. It would be particularly useful to owners of the ARP 2600 where the performance controls are somewhat primitive and there is a good scope for inventive patching. It is nice to be able to control several parameters from one control, however I personally found that there was a lack of 'feel' to the joystick inasmuch as it didn't seem such a natural control medium as, say, the Minimoog's wheels or the ARP PPC pads. The Catstick does seem rather expensive at just on £300, and unless you have a modular synth with poor performance controls, or are really dissatisfied with those on your synth, then I wouldn't really advise this sort of investment. Bear in mind also that a device such as the Catstick is very hard to sell secondhand, so if you do decide that you need one you may find it difficult to get rid of if you ever decide to buy a new synth.

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The Catstick is distributed in the UK by Chase Musicians, 22, Chalton St, London NW1, or 58, Oldham Street, Manchester 4. Octave Electronics can be contacted at 928, Broadway, 7th Floor, New York, NY 10010, USA, Tel: (212) 673-4205.

Roland Dimension D (SDD-320)

£283 (inc VAT)

N ow this is a goodie, and one that not many people are aware of. The Dimension D is a module out of the Roland Rack: however it will perform just as well on its own - the Roland Rack is merely a system of housing an array of effects, amplifiers etc, in a dapper 19in rack which in turn is fitted into a flightcase. All good pro stuff. But getting back to the Dimension D, this is a stereo chorus device that doesn't cause the apparent movement of sound that these units normally produce. The DD can also turn monaural signals into a sound that fills the entire stereo picture – and it does it really well. The Dimension D isn't designed specifically for keyboard instruments, but it does work particularly well when used on them.

So how does it work? Well, I'm really not too sure, and Roland aren't giving away any secrets. However, the block diagram in fig 2 does go some way in explaining the mysteries of the unit. The system revolves around two delay lines that are driven by a low frequency oscillator, but with one control signal the inverse of the other. The unit has a very simple front panel with four push buttons to select the mode of effect. '1' produces the softest effect, '4' the strongest. In addition there is a bypass switch that does exactly that - the inputs are physically connected to the outputs, so the signal will pass even with the power off. A LED bar meter is used to monitor the level of the incoming signal. On the rear of the unit there are both jack and cannon inputs and outputs.

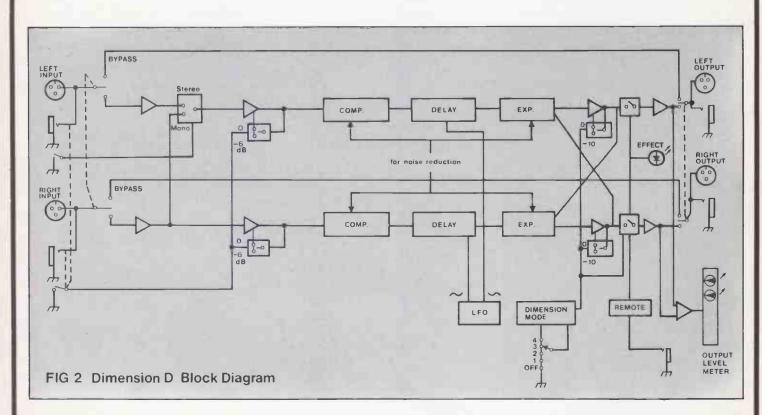
The effect produced by the *DD* is quite subtle, but very useful. To start with, it seems to knit together the signals fed into it, so that if you were using a multi-keyboard set-up, the overall sound picture would be 'unified'. The *DD* also seems to smooth over any tuning problems, *ie* if two instruments were slightly out of tune, introducing the unit seems to pull them back in with one another. But probably the most important use of this device is its effect on mono signals, and their transformation into a stereo image: it

really is quite remarkable. It worked very well on keyboards, especially polyphonic synthesiser and electronic piano, but it also can be patched into a conventional hi-fi system, where I had some excellent results 'stereolising' some old mono recordings. The unit can also be used on stereo signals giving an increased spatial response to the signal.

The unit does have a remote switching facility, which enables you to hook up a footpedal that can be used for selecting either Off or a Dimension mode. The owner's manual suggests trying the DD on an organ while playing a progression of block chords and simultaneously, with the aid of the footswitch, playing some 'straight' and others Dimension D'd. I tried this and it was a really neat effect, a bit like a Leslie insomuch as the sound appeared to have no point of source, but without vibrato and movement of the Leslie.

OK, so it isn't going for a song, but it is an item that has been seriously overlooked in recent months, not only by the music press (that's us), but also by retailers and subsequently by you. If you do decide to invest in a *DD*, watch out, you'll have everyone else in the band wanting to borrow it.

Distributor: Brødr Jørgensen, 983 Great West Road, Brentford, Middx.



Well, I hope I've given you a few ideas to be getting on with. I'll be looking at more accessories in a later issue as I think that they are an important part of synthesiser technology. It seems that almost every synthesiser manufactured will in some way be out of date within a couple of years, such is the rate of advancement in this field, and accessories like those mentioned are one way of keeping up with recent developments without having to shell out a small fortune every year. June's NAMM show in Chicago was the showpiece of the latest developments, and I will be bringing you reports on many of the keyboard developments next month.

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Gary Cooper writes...



A fter my somewhat acerbic comments in the July 80SI about instrument and equipment reviewers, I now find myself in the dubious position of having to translate my ideas into practice. Yes, folks, I've swallowed the bait and accepted vast piles of money to take on an amp review a month for SI/BI. Well, perhaps the 'vast' is a slight overstatement. As for piles . . .? Hmmm. Anyway, I've now gone on record as saying both that one should never take reviewers at face value and now setting myself up as some sort of authority on amplifiers. How do I reconcile those two statements? Easy (of course!)

Firstly, as I've said before it's all a matter of knowing the reviewer's own tastes, test parameters and ideas. So to try and not mislead you please bear with me while I ramble on for a bit about what I'm going to be doing on this

subject in coming issues.

I love amplifiers. I don't claim to be an electronics engineer or a designer but I do try to follow the techniques of amp construction from a musician's point of view. Further, I believe that the amplifier is the unsung hero of rock music. Yes, yes, I know all about the enduring virtues of a '62 Strat as opposed to a '59 Rosetti Lucky Seven. but I still maintain that at least 50% of a guitarist or bass player's sound comes from the amp. I don't care how good your guitar is – plug it into a Hong Kong tranny and it will sound like a plank of wood with some very dead strings screwed on to it. Good guitarists play their amps every bit as much as they play their guitars – often without realising it.

Accordingly, much of the drooling over fine guitars is irrelevant unless that guitar is matched with the right amplifier. With these reviews I shall be

merely trying to point you in the direction of some amplifiers which appeal to me and which, if I'm anything to go by, you may be able to get something out of too. On the other hand I expect to find some items which I hate. If the faults are technical and serious I shall say so. If it's a matter of taste I'll try and do the same. That should tell you that the amp in question should, perhaps, be viewed with caution. I shan't equivocate (I hope) and yet shan't expect you to be dense enough to take my word as law. It isn't ('yet' writes our military correspondent A Hitler).

So, how do I review? Basically I look at whatever catches my eye. It may be new, it may be something which is ignored and old. I get hold of it and play it. No oscilloscopes, no graphs, no figures. As the old saying runs, Bullshit Baffles Brains – and there's far too much of that in amp reviewing these days. You, presumably, are a player. So am I. I don't give a damn if my amp gives more THD than anything since the original British fuzzbox, Gary Hurst's Tone Bender. as long as it sounds all right to me. Most of the amps which guitar players love and know would be a real joke for hi-fi. That's not the point. Figures don't lie but they often obscure the truth. All I'll do is tell you how it sounds to my ears. I honestly can't do more than that.

My test equipment varies. My basic stock guitar is an old Fender Jaguar and various other six-stringed guitars ranging from whatever I have in on test (usually anywhere between two and a dozen guitars ranging from Korean copies to Les Pauls) to whatever I'm borrowing this week. Basses, currently, will be a WAL active or, again, anything I happen to be using and know at the time. A reasonable cross-section with some set parameters can

be relied upon.

So, enough of the waffle. This month I've got the daunting job of starting off this series with what is possibly the most interesting amplifier I've seen in years — the Burman Pro-50150-watt combo.

Burman amps are made in Newcastle-Upon-Tyne by Greg Burman and a merry band of Geordies who seem to have cornered the advanced guitarists market at the moment. Burman make their unreservedly expensive amps by hand, using valves throughout. They are aimed at professional guitarists who will pay for hand-wired, expensively designed equipment, and so terms such as 'bargain' and 'value for money' are less important than absolute performance in this case.

The 501 runs from five ECC83 valves. one ECC81 and two of those lovely GEC KT77s in place of the normal bog-standard (but still very nice) Mullard EL34s. The KT77 is more expensive than the EL34 but has been 'ruggedised' by its makers in recent years and, I would suggest. is generally to be preferred.

Burman's 501 delivers its load into a single 12in speaker designated the Burman XP5012. It isn't made by Burman but was designed by Greg some years ago, and is of what might be called a fairly advanced design. The enclosure in which it lives is open-backed. I have no objections to that because, despite the arguments of those who insist that sealed backed enclosures are nearer to acoustical perfection. I personally find that many of my favourite combos have open backs. Again, practice defeats theory, I would propose.

Constructionally, the Burman is pretty standard. The wood is of good quality and is covered in black vinyl. The speaker grille is a plasticised woven cloth-type material which is probably very acoustically transparent although not as strong, I suspect, as some other types which may, admittedly, be less acoustically satisfactory. My sample came just in its own foam-lined flightcase which is well made and provides good protection for the unit. The flightcase design is carried over, in fact, to the use of flightcase-type handles on the amp itself. As the combo weighs a bit this is a strong plus-point and a distinct advantage over flimsy plastic handles.

Burman Pro-501



Electrically, the Burman is OK. I personally find open-backed enclosures rather worrying from a safety point of view in most cases. They seem to allow too much access to electronic components for prying fingers and stray guitar strings. Two exceptions to this are the (now sadly defunct) Orange combos and the (available) Park *Vintage*. There are others, of course, but these two spring to mind as being particularly well sealed up. The Burman is only 'OK' on this score. Loose guitar string ends could poke inside, but it is highly unlikely.

Staying with the back end, the panel facilities are fine. You have a plug-in mains inlet, 3-amp fuse, variable voltage selector (one of the good type with a plug which has to be removed and re-positioned to alter the voltage), a similar variable output impedance plug system, and then four jack sockets. These are labelled 'loudspeakers, ext. and alt.' and 'direct inject and reverb remote'. Not over-the-top but just what you need for professional applications: no more, no less.

The front panel is slightly less prosaic. It

does, admittedly, only feature one input which is fair enough as I can't see many professional players sharing amps (although it might have been handy to have had another guitar already set up and plugged in). Next come the mysterious three-section gain controls. These are red-tipped pots with yellow pointers (to show up under stage lighting) and comprise three forms of gain. The first sets the basic preamp, the third sets the output and the second ... ah, the second. This is the odd one as it is a sort of triggering gain. As far as I can understand (which isn't very far at all) you set this to trigger an overload when your axe is up full and your picking is hard ('and the livin' is eeeezy'), then you slacken off the guitar's volume pot so that you're playing rhythm at clean levels. When you want to solo you just turn the guitar up a notch and you're there. The effect is superb, and I'll come to that a little later.

Next along the front panel you have pretty standard looking controls (but still with yellow pointers) for bass, treble and presence. Finally you have a rotary control for the on-board spring line reverb (Accutronics). Then there's just a simple (but very nice) pushbutton on/off switch which is illuminated (red) from within. There's no standby but I'm not sure that they're really necessary anyway.

So, on to sound. Here it's hard to comment without going over the top. Thus far in my playing career my favourite combos for general purpose guitar playing have been the Ampeg VT22 and a Marshall Club And Country. I'm afraid that they are now going to have to

shuffle over to accommodate the Burman.

Although rated at a miserly 50 watts the loudness of the Burman is almost dangerous. I suspect that Greg Burman's speaker must be highly efficient as this diminutive amp packs a punch which wouldn't disgrace many a 100 watt (rated) tranny amp. I do realise that valve units tend to sound louder watt-for-watt than transistorised amps, but this is just plain ridiculous!

The triple gain control system works a treat. Even my low-powered Fender was easy to run into screaming overload, and that's saying something! But terms like 'screaming overload' and 'meggabollocks' don't really tell the story of this Burman. It's a subtle amp, a warm amp, a responsive amp. Gradually I'm beginning to realise that valve amps do not only distort (generally speaking) better than tranny ones they are also more responsive to picking strength. This natural advantage is heightened here by the middle gain control which enables your picking to control overload as only you can dictate. That makes this an amp for an advanced player. That makes this amp virtually

Some amps sound alive, some sound semiglive and some sound how Proust reads. This one is alive - nearly human. The tone controls provide excellent cut and boost where you need it, the Accutronics reverb works a treat. But the real story is the basic warmth and sweetness of tone which the Burman will deliver. True, the three gain controls need some playing around with before you can

really squeeze the best sounds from them - it's a matter of balance, you see. But the sounds I got from this amp defy any challengers; even my Fender Jag delivered of its best and it only seems to be capable of sounding truly wonderful when it's run through a very capable amplifier indeed.

So far in my playing and writing life I have never heard an amp which betters the Burman Pro-501, I may never hear anything better. For professional guitarists I would suggest that it is the one amp which they dare not overlook. For me it is possibly the Best Amp In The World. ('Ere, steady on! - Ed.)

Now all this poses some problems. I don't want you to think that I'm going to rave away over every amp that comes under my gaze. Please just take my word for it that this Burman is something very special. It is not an amp for someone with unsubtle tastes (although it can be driven into distortion levels which are quite painfully unpleasant if you really insist). It is an amp for experienced guitarists to get what they pay for.

Price? Well, at £416 it isn't exactly cheap. On the other hand it deserves comparing with Ampegs, Mesa Boogies, Music Mans (Men?) and others of that ilk. In my opinion it beats them all. As I say, I've never heard such a responsive amp in my life. Somehow, up in Newcastle, great things are happening, things which you should hear for yourselves. Me? I'm off to see my bank manager for a loan!

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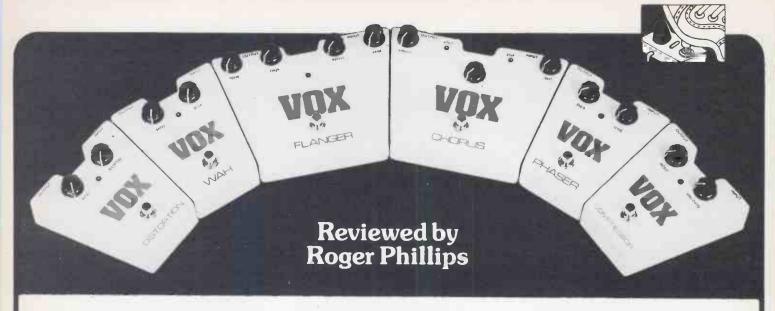
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There are one or two more pleasant things to hear, first thing on a Monday morning, than the sound of a telephone ringing, like Jane Fonda asking what you want for breakfast, or when you're going to join her in the shower. When the Monday morning in question follows two weeks away from it all in Cornwall, dodging raindrops in a frenzied quest for a better tan than the one you went with, it's even less welcome. But telephones are insistent things, and like tax demands and nagging spouses they have to be answered eventually.

'Ello, Roger back yet?' the voice intoned. 'Yes, this is Roger Backyet,' I replied wittily, 'Whozat?' Quick as a flash came the ingenious and highly amusing retort, the product of years of journalistic experience, 'Bacon Backhere, chortle, chortle.' Yawn, yawn. The voice droned on. 'First the good news. Got some goodies on my desk for you to review. Complete set of the new Vox FX pedals, including Phaser, Flanger, Chorus, Wah, Compressor and Distortion, all in a delicate shade of grey with the Vox name picked out in lilac. Yeah, lilac! and guess what? Each pedal is a sort of wedge shape and they're designed to fit together in a semi-circle around your feet, and they've all got LED sound status lights and silent non-click footswitches and. Eh? What? The bad news? Oh yeah, we need the copy by Thursday. Is that OK with . . . ? Cluck, Bzzzzzzz

Later that day. He's right, they are pretty neat looking and the super lightweight diecast aluminium cases come in two different sizes. The Compressor, Distortion, Phaser and Wah measure 2½ in deep (inc controls) x 5½ in long x 4½ in wide, tapering to 2¾ in at the bottom end. The Chorus and Flanger units share a larger casing with similar depth and length to the smaller pedals but with a width that tapers from 7in to 5in. There are, however, one or two inconsistencies in the cosmetics department. The VOX logos on the Flanger and Chorus units are larger

than on the rest, whereas the smaller size would have looked OK on all the pedals. The function names on the Compressor and Distortion pedals are smaller than on the others, presumably to fit them into the 2\(\frac{1}{2}\)in width, whereas the words Comp and Valve could have been used in the larger size. Lastly, on the set I received, the Chorus and Phaser had different control knobs to the rest, though I would expect Vox to standardise that in future.

The four smaller units are all 9V and may be powered by a single PP3 battery or appropriate mains adaptor, while the Flanger and Chorus pedals require 18V from a mains adaptor, or two PP3s. All batteries are supplied, but if you'll take my advice, you'll chuck away the Japanese batteries and put some good of Ever Readies in there as soon as possible. These boxes are made in Japan, but according to the little label on the base plate, they're made to Vox specifications. And talking of the base plates, Vox supply a made-to-measure non-slip rubber pad for each of the pedals to stop them sliding about the stage.

This set looks very much like a halfhearted attempt at a modular system, as each unit requires an independent power supply (a little impractical if you want to use mains adaptors with all six units), and jack leads are needed to connect the units to each other as well as to instrument and amp. All the input and output sockets for power and signal are at the top end of the boxes away from your size nine boot, and the semi-circular configuration of the units brings the silent-operating foot switches into easy reach. Sound status LEDs are a definite plus, but as battery indicators they're not so good; I found that the sound began to deteriorate long before the light went dead. Oh well, holidays don't last for ever, so I guess I'd better plug in my leads and start annoying the neighbours with a bit of serious testing.

Compressor and Distortion pedals first, and both have output controls that regulate the effect volume in relation to the

direct signal. Both outputs can be used either to equalise the effect volume with the direct signal level, or as a volume boost when the effect is kicked in. The Compressor is intended to be used to even out peaks and troughs in the signal caused by uneven guitar picking etc and may also be used to reduce the prominence of any over-loud notes on your instrument. Turning the Sensitivity control in a clockwise direction increases the amount of compression produced. Similarly, with the Distortion control, a clockwise motion increases distortion though I found the effect a little more like a fuzz box than valve sound if turned up too high. Recommended Retail Prices inc VAT are £29 for the Compressor, and £27 for the Distor-

£27 is also the price tag on the Wah unit, which is of the automatic variety rather than the foot-controlled type. Two controls here: Decay, which regulates the amount of effect, and Drive, which preselects the sensitivity of the unit to the instrument signal. I found this unit to be pretty effective and generally easy to use on lead lines; doesn't sound so good on chords but then Vox don't recommend that you use it for chord work. This is the only unit in the set that pops when the footswitch is operated, but this is a biproduct of the effect rather than an electrical fault.

Next the Phaser, and at first glance there's nothing unusual about the Depth and Speed controls, but on turning the Depth control in a clockwise direction I found that it switched on like an old-fashioned radio volume control. Apart from that rather curious and unnecessary function, the control goes on to increase the depth of the Phasing effect in the normal way.

On the Speed side, I reckon the slow sweep to be around 6 seconds while at the opposite end of the scale there's a pleasant vibrato effect, but the mid-range sweep speeds, between 9 o'clock and 2 on the dial, are extremely jerky and un-





pleasant. There are definitely better Phasers to be found at, or around, the £35 that Vox are asking for this item.

The Chorus pedal also has a slightly jerky sweep, but generally it makes a much more agreeable sound that the Phaser on all but the most extreme Intensity settings. I found that the higher the sweep speed the lower the Intensity needed to be. The third control on this unit regulates the Input and, used in conjunction with the peak level light, it helps to prevent distortion. Taking the Speed control up to its maximum setting produces a pleasant chorus/vibrato effect, while on lower speeds the straight forward chorus sounds are pretty good for a pedal

costing only £58 inc VAT.

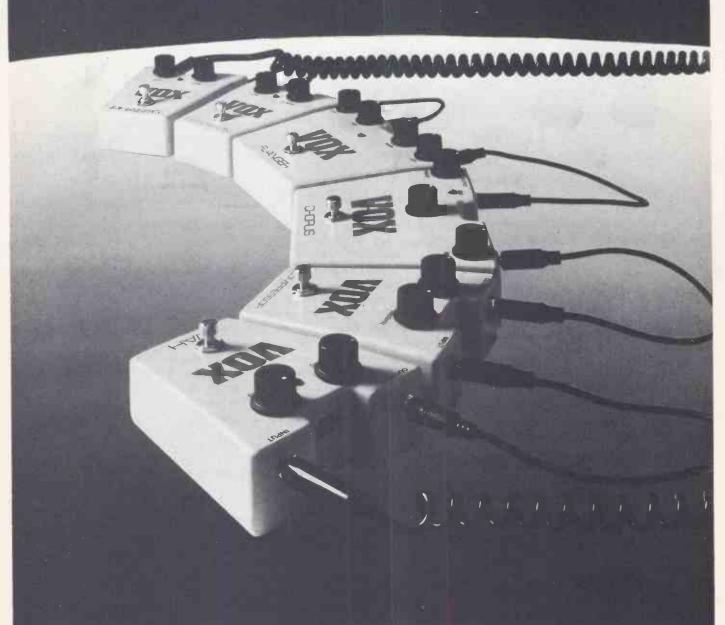
The Flanger also has a RRP of £58 and though not as versatile as the Electro-Harmonix Deluxe Electric Mistress, which sells at a similar price, it still offers a reasonably interesting selection of sounds for the money. It has four controls, Speed, from 10 secs to very rapid vibrato, Range which regulates the depth of sweep, Manual for manual flanging, and Color which adds harmonic coloration to the sound. The strongest flanging sounds on this pedal are not too obtrusive, in fact all the effects are reasonably subtle. There are some interesting vibrato and midrange sounds as well as the slow sweep, and I also found a weird bath-tub type

reverb effect.

These pedals are reasonably priced and I think the Chorus, Flanger and Wah units offer good value for money as well as good effects. The Distortion and Compressor pedals are OK too, but the Phaser definitely leaves a lot to be desired. Pity that Vox haven't gone the whole hog and made this a self-powered modular system with some form of linkage to carry power and signal. Still, for £234 the set. The Vox range of six pedals compares quite favourably in price with Hohner's self powered, four unit modular system which we reviewed recently. □

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Tsk, Tusk

Fleetwood Mac London, Wembley Arena

hen you were good, you were very, very good' – Stevie Nicks, Angel.

quiet darkness of the auditorium is shattered by a few casual drum crashes, a bit of last minute tuning up, and a guitar riff that gradually builds to a crescendo. Red spots on the overhead gantry pick out the two Californians and the three British emigrés as Christine McVie wraps her tonsils around Sav You Love Me from the Fleetwood Mac album. The pattern is set for the rest of the evening. There follows a two hour programme of familiar songs all, bar one, from the group's last three albums, the greater number predictably coming from Rumours. The rest of that pattern, however, consists of a sometimes tentative performance that looks in need of more rehearsal, a general lack of communication with the audience, and an unimaginative light show which, combined with the harsh PA sound, produces a stage act that hardly befits one of the world's top touring bands. Especially one whose last three albums have combined sales approaching the 30 million mark.

Everything sounds heavy through this system, but that does no harm at all to the first two of three consecutive numbers from Rumours. The Chain, attributed to all five members of the band, is the first of a smattering of high points in this set and allows John McVie the chance to give his best performance of the night with the bass riff made famous by the TV Grand Prix series. The Chain is followed adequately, but not closely enough, by Christine McVie's Don't Stop and Stevie Nicks' Dreams, the latter losing its soft, sensual quality through this system, and the composer giving none of the subtlety and charm of her recorded vocal efforts.

The stage blacks out again and in yet another pause Christine asks What's happening? and I'm not sure that anyone, apart from Lindsey Buckingham either knows or cares. Eventually Christine dedicates the next number to Peter Green, in case he's crept in somewhere, and Buckingham gives a lively performance of Green's Oh Well, though Mac devotees from way back probably don't approve. Darkness decends yet again in what is becoming a boring visual cliché, and out of it comes a hand-clapping rhythm on which the enthusiastic 10,000 - odd crowd are only too pleased to do their bit. When they recognise it as the intro to Rhiannon they're even more delighted, but again it's a Stephanie Nicks number that suffers most from this sound system. The mixing of the vocals leaves a lot to be desired too, especially for a band that relies heavily on three part harmonies. Stevie tells us: 'Dreams unwind, love's a state of mind,' then glides to stage left to collapse in a heap as if from exhaustion while Bucklingham takes a lead break. Later re-

as if from exhaustion while Buckingham takes a lead break. Later returning to centre stage she dances in front of her co-manager for the heavy ending.

Harmonics and echo on Buck-

ingham's quitar, and chimes from Fleetwood provide Christine McVie's Oh Daddy with one of the more imaginative intros of the evening. More chimes and gongs follow and Christine backs her vocal with some heavy organ chords and I begin to realise just how much she contributes to the band's overall sound and its performance in general. The produce of the band's three singer/song-writers is treated very democratically in this set with six from Buckingham five from both Christine and Stevie, one joint effort from Buckingham and McVie, and one group effort, but the stage performance really belongs to Christine and Lindsey Buckingham. Apart from her vocals, Stevie Nicks' main contribution is decoration and that becomes a little twee after a while. Fleetwood drums impressively and more fluidly than one would guess, listening to the curiously recorded percussion on the Tusk album, but otherwise keeps his head down and seems to take little interest in the proceedings. John McVie just looks plain bored, sounds pretty boring too, and shows scant regard for those who have helped to provide his Southern California life-style. I thought at first that he was playing rather sloppy fretless bass until I realised that his instrument was just out of tune. Christine tells us how glad they are to be in London, 'after all, John comes from London', but judging from this performance his heart's still in Beverly

Three numbers from *Tusk* follow, and it's significant that only five numbers are selected from this double album, the same number as from the single Fleetwood Mac album, and three less than from *Rumours*. Lindsey introduces *That's Enough For Me* with the excuse that they haven't played it much before, but it sounds no less rehearsed than the rest of the programme. Christine switches to

stage right for a bash on the Helpinstill upright as Ms Nicks provides us with the popular single Sara, but again the overall sound is somewhat coarse. Stevie glides off stage right and Christine sticks with the Helpinstill as the quartet rock into Buckingham's raunchy It's Not That Funny. This is the highest point of the evening since The Chain and provides a much better performance than the recorded version, until McVie ruins the proceedings with the most appalling bass solo I have ever heard. Buckingham steps in with some tasty guitar licks in a valiant attempt to save the day but the resulting duet drones on for too long and becomes very tedious.

McVie and Nicks receive less-

than ecstatic review despite top hat. Pic from Samuel Graham's Authorized History of Fleetwood

Buckingham switches to amplified acoustic for a solo rendering of his Rumours number Never Going Back Again. There are many changes of pace, crescendos and pianos and despite silly audience yells and howls (why do they do it? A chance to hear their moronic voices on a live recording I suppose) he receives tumultuous applause. Stevie joins her exboyfriend's acoustic sound for her Fleetwood Mac number Landslide and Christine McVie provides a delicate electric piano solo to the most successful Stevie Nicks number of the evening. An unfortunate arrangement, however, allows the audience applause to interrupt a few bars before the end.

In the darkness that follows, someone on the mixing desk switches on a tape-loop of noises and voices that serves to introduce the first of two more numbers from Tusk. This is Lindsey Buckingham's title track and Fleetwood's stomping rhythm gets hands clapping again while Christine plays some very effective amplified accordion and Stevie beats hell out of a wood-block (probably out of frustration at being out-voted on the title for the album). Christine and Lindsey have fun sharing the vocals towards the end, while Stephanie wanders sedately off to change, leaving the rest to plummet inevitably into one of those corny, big-rock, we-couldn'tthink-of-anything-else-to-do endings. Stevie returns in a new outfit to sing Angel and that's closely followed by Christine's You Make Loving Fun from the Rumours album.

The stage darkens once more and the drums crash loudly and impressively as Buckingham prods at his guitar. Fleetwood yells orgasmically and Christine leans heavily on the organ for Buckingham's I'm So Afraid, the third real high point of the evening. This is more like it. Very together, very heavy, and a much stronger version than the rather insipid recording on Fleetwood Mac. Strange how Buckingham's numbers come over so much better live. Lindsey finishes off with an old fashioned guitar-hero solo that I know I'm not supposed to find exciting anymore, but it is. World Turning, McVie and Buckingham's joint effort from the same album follows with the two composers again enjoying the shared vocals. Christine playfully attacks Buckingham and is in turn attacked by her ex-husband. 'Please excuse our bass player,' she asks and by golly he needs it. Mick Fleetwood comes to front of stage for a short and uninspired interlude on an African drum before diving back to his kit for a long, boring ending in which the vocals are disorganised, the PA feeds back, and Nicks sings very flat.

000000000000000

Buckingham yells goodnight as a nameless person joins on rhythm guitar to back Lindsey's lead on his Rumours number Go Your Own Way.

Backstage, Mr Fleetwood is left to contemplate the evils of this life while John McVie's thoughts are, no doubt, more along the lines of having to go through the whole boring fiasco again tomorrow night. Judging by the exchange of hugs and kisses at the end. Christine, Stevie, and Lindsey Buckingham are left feeling that perhaps the whole thing has been worthwhile. Me? I'm not so sure. Think I'll go home and play the albums through one more time; after all, 30 million people can't be wrong. Can they?

Squeezing Out Of Stiff Escalators

Graham Parker and the Rumour The Up Escalator Stiff SEEZ 23

ntical adulation is all very well, but it doesn't pay the bills. Graham Parker knows that better than most, having been a joy to the ladies and gentlemen of the press and a mystery to the record-buying public (whatever happened to them?) for rather longer than he would care to remember.

Last year saw the beginning of a break in this depressing pattern. Not only was Squeezing Out Sparks widely (and wisely) acclaimed as the man's best-ever album, there was also a hint of more general interest both here and abroad. The Up Escalator, then, should have been a killer follow-up, elevating Mr Parker and his band into lasting artistic and commercial celebrity. It may yet do so.

This is a disappointing album in a number of respects, none of them directly connected with Parker's own performance as singer and writer: all the songs in the collection are as good as ever, some better than anything he has issued in the past. The problems stem from a number of changes that have taken place around Parker since the last album. Firstly there has been a

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change of label, though here the change seems to have been wholly beneficial. Parker is no longer 'the best kept secret in the West': Stiff are pushing his face and his product with their usual vigour.

Less happy is the change of producer. Squeezing Out Sparksfeatured uncrowded arrangements, compared with Parker's earlier albums, the celebrated horn section having been sent packing, and this gave plenty of space and prominence to his vocals. Parker rose to the challenge, and the result was a hard-edged, clean sounding album of unexpected emotional intensity. But now Jack Nitzsche has been replaced in the producer's chair by the currently trendy Jimmy Iovine, assisted by engineer Shelly Yakus. These two are best known for their work with such luminaries as Patti Smith, Tom Petty and Bruce Springs-(who pops up here on strangulated backing vocals, halfway through a song called Endless Night). The sound they give Parker is anonymous, rich, professional and aimed at radio play: like record com-panies used to be. Not that the album is old-fashioned FM fodder, Parker's voice is just too demanding for that. But as far as the Rumour's performance goes, any 'irritant factors' seem well-hidden beneath the gloss of this de-luxe 'rock and roll', this 'new-

To be fair to the Rumour, they are not entirely to blame. Between the last album and this they have lost the keyboard skills and direction of Bob Andrews. On The Up Escalator his marvellously self-effacing and integrated playing is absent, replaced by some of the most tedious and inappropriate piano and organ ramblings I have heard for a long time. The worst culprit is celebrated session pianist Nicky Hopkins, who opts to fill in every available space with heartless acoustic tinklings: a case of 'let your fingers do the talking'. E Street organist Danny Federici is no better, but at least he doesn't make quite so much noise. Between the two of them they almost succeed in making songs like No Holding Back and Stupefaction unlistenable.

wave' AOR

All this is the sadder because we know how good the Rumour can be (take their last 'solo' album as an example): they are right up there with the Blockheads and the Attractions. But here competence is all. Consider guitarist Brinsley Schwarz: on Sparks his witty inventive lead lines are vital. Several times he drags a song through from 'good' to 'outstanding, memorable' and provides the allimportant hook, single-handedly. But here he seems content to churn out the expected rock and roll riffs in timehonoured fashion in company with the Americans, or to etch out melody lines of Chinnichap triteness.

Meanwhile the rest of the band keep their heads down and boogie, not exactly mindlessly, more in a spirit of 'only doing my job, guv'. This is the sound of professionalism. There are few occasions where the Rumour assert themselves enough to make a song stand out: the best is probably the chilling Empty Lives, where all keyboards except a single misplaced synth are temporarily banished and replaced by a web of whining and rattling guitars. Elsewhere the band create a sound that is unlikely to make many converts. I know people who thought Squeezing Out Sparks was boring: I don't think I'll even bother to play them The Up Escalator.

The real tragedy in all this is that Graham Parker has produced another set of superb songs for this album. some of them absolute classics. Can anybody seriously doubt that he is our greatest songwriter? I use the word in the sense of someone who writes material that has an existence of its own, independent of the vinyl setting in which it first makes its public appearance, and independent even of the composer's own performance. 'The song's the thing' is something you will hear from anybody with any pretensions to knowledge or experience of 'the music business', from the local publican turning down your avantgarde disco dub combo to the latest MOR superstar discussing his or her triumph on the scampi circuit. What these savants often fail to recognise is that the song, apart from being a necessity for instant audience approval across age and class barriers, is also the essential form at the heart of our tradition of music, or rather one part of that tradition. Without wishing to cross over into Tony Palmer territory, it is (I think) true to say that the song is the one area in which the pop/folk/blues/rock tradition not only equals but trounces the 'serious' music tradition, intellectually as well as emotionally, even in the aesthetic terms of the European art culture. The song is the crucial, central vehicle for expression. And that is as true of Anarchy In The UK as it is of Mystery Train or When A Man Loves A Woman and probably of your favourite song too (professional songwriters of the Cole Porter type are a slightly different case, outside the scope of the present argument).

In their purest form (if you'll excuse the generalisations) songs are not words set to pre-composed music. Nor are they poems for which musical settings are written. They do not fall into two separable channels of communication. Words and music are integrated, and worthless if separated. To make the process of integration easier (some would say natural or instinctive) songs often adhere to more or less rigid orally transmitted structures. When the expectations of audience and performer are similar the process of communication is simplified: a common language exists. Immense subtleties become possible by minute deviations from those structures.

Of course there are those who would reject the tyranny of the 'well-made song', for whatever reasons. There are the pseudo-intellectuals of the lyric-sheet school with their layers

of meaning and their ambiguities (or just plain bad articulation): writers and performers who use lyric-sheets tend to be disproprotionately illiterate, devoted to expressing simple ideas in complicated terms (important exceptions: N Young, J Mitchell, and lately P Gabriel). Then there are the real intellectuals who opt to follow the post-classical tradition down the lonely road to irrelevance and self-absormtion. Then there are those who consider it freedom to create a language of their own or to speak in non language at all, and who end up talking to themselves. And finally there are those who just can't write songs.

Graham Parker writes great songs, and The Up Escalator is an impressive collection, but not at first hearing, for the reasons already explored. It is safer, less wide-ranging and ambitious than last year's album: there is nothing here so risky or so disturbing as You Can't Be Too Strong. Given a few plays and some close attention, however, the quality of the thought and its expression comes through. The subject matter is familiar and universal: me, you, they; the individual, personal relationships, society. But instead of wrapping up these ideas into convenient parcels and dropping them into separate songs, an I song, a you song, a they song, Parker's great strength is the way he combines all three areas of interest in a single lyric, and brings out the essential continuity between them. He is in that sense a moral writer. Take Jolie Jolie, a passionate (qv) love song without the degree of close-mindedness that the genre often implies. Halfway through the song the narrator's attention turns: 'In the Mexican quarter now/ The women so hungry that they eat their own kids/ I feel out of place here making takeover bids/ But when you get back home we rock steady.' How strange the reference sounds in an otherwise conventional love ballad. And how that 'takeover bids' stands out, a kind of ghastly pun about sexual and economic power. And Parker's tone of voice for that last line is so emotionally complex as to defy analysis: a kind of morbid passion, or despairing eroticism.

A relentless curiosity about human motives and relationships drives Parker on: he seeks to understand, not to observe without involvement. In Stupefaction he watches the advanced passivity of those around him in some far-off sunny city, but not without detecting the same inclinations in himself: 'Drive out in Sunset, but nothing's moving/ The lights are green or is that my imagination?/ The people sit there, cameras without action/ I can't see the point but I see the attraction.' How neatly that last line drops into place, unexpected but somehow inevitable.

Those people who see music as a highly technical 'mystery' for an appropriation by a few scholars and high priests will not find much interest in any of the songs on this album. Parker's musical strategies are decidedly well-worn: some of the sequences and progressions in these songs have already gone round a couple of times in his own oeuvre and they were common property for a long time before that. But as a vehicle for

expression they do what is required of them. They give a shape and a form, a recognisable horizontal sequence of musical events upon which verbal events can be superimposed.

What is more, if they are to work, the words must be superimposed on to the music. The words need the music and vice versa. Words for reading or for speaking need a music of their own, in-built with all those EngLit devices so beloved of lesser songwriters. A good songwriter keeps his words bare, simple and uncluttered by artifice. The task is to express serious thoughts and beliefs in the simplest possible terms, in words designed to strike home on the first as well as on the hundredth time of listening. Where technical devices are used they must be justified on the strictest grounds of utility, to reinforce a point, to bring to light some humour or sadness. In these terms Parker is a master: 'I can't swear we'll never get caught/ I got scars all over my passport.' (Don't Hold Back.) 'I get nothing/ I'm expecting oblivion/ The past ain't even worth the living in/ It's just a nail that keeps being driven in. (Empty Lives.) 'I'll wait for mistakes to happen/So I can't put them right/ I'll wait for someone to latch on/ But noone's that bright.' (Paralysed.)

Only rarely does his gift for restraint fail him, letting ingenuity thumph over rightness. In Jolie Jolie for instance, 'I don't use teardrops as a weapon by choice/ They just fall out of my eyes' changes to 'They're the fallout from my eyes'. Or, in Don't Hold Back we get a dubious simile: 'When I tell the truth/ It's like growing a tooth' though the next line almost saves it 'I don't know what let myself in for'.

The most obvious thing about Parker's words is the fact that they sound like they came into the world as part of a song: created not at the end of a pencil but somewhere between the adam's apple and the front teeth And there they belong, not on the printed page. Personally I tend to feel that Parker is not the best interpreter his material could have. Certainly his phrasing could hardly be bettered: he attacks these songs and drags out every last nuance of meaning. But at the same time he oversells them. The nagging insistence of his tone is too inflexible. Whereas the range of a Costello's writing is less, the tonal range of his voice is wider, especially on his most recent material. Parker has a range, but it is all concentrated at the hard end of the scale. The listener is wearied by it all. Squeezing Out Sparks was a definite step in the right direction, but The Up Escalator sees him hiding behind his voice in the wav he used to. The trouble with it is that the tone of voice cries wolf rather too often: not all his songs are so aggressive as his voice wants to be. An unfortunate mismatch, and one that goes some way towards explaining why it is that Graham Parker never quite hits home, while his rivals make a habit of it.

If you already like Graham Parker and the Rumour, or if you're the kind of person who listens to lyrics, then you will enjoy *The Up Escalator*. But if you don't come into either category, this is not the album to persuade you.

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