

Hicks

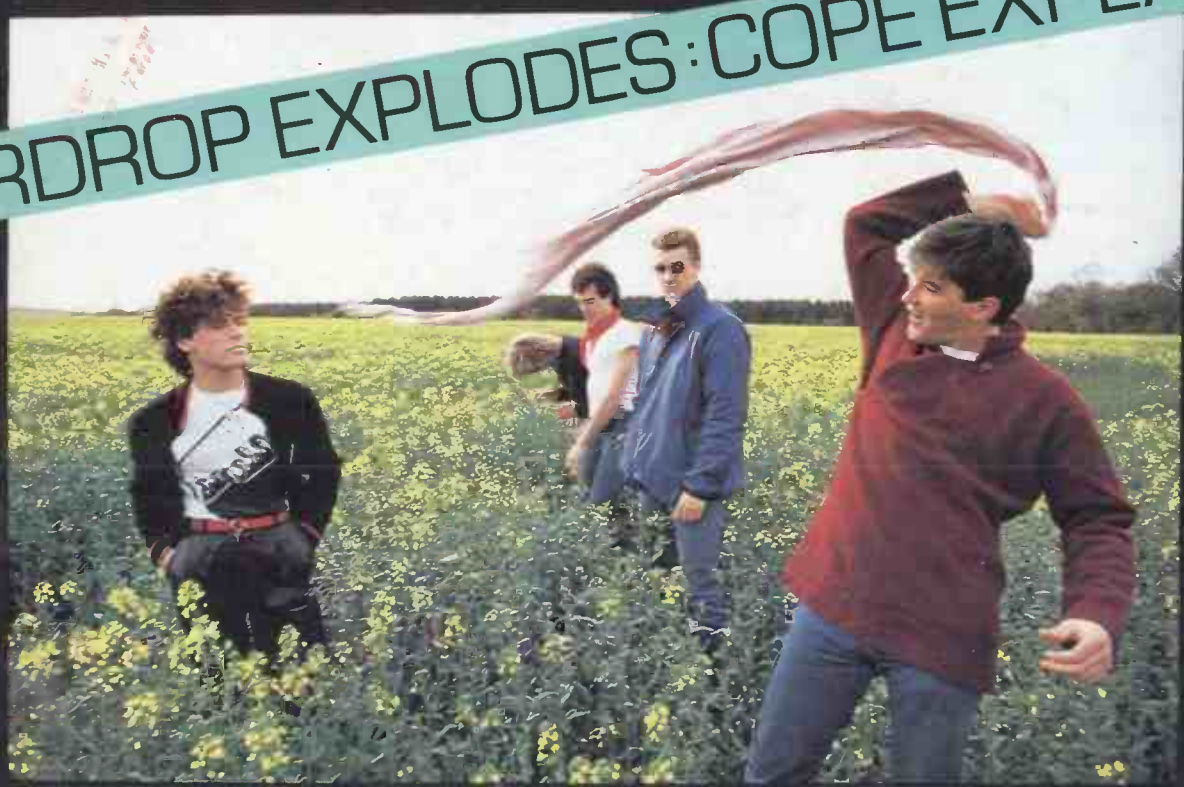
XXXXXX

# Sound International

*incorporating* **BEAT**  
*Instrumental*

June 1981 70p \$2

XXXXXX TEARDROP EXPLODES: COPE EXPLAINS XXXXX



A LINK HOUSE PUBLICATION



XXXXXXXXXX SYNTH SOUNDS MADE EASY XXXXX

XXXXXXXXXX LEICESTER EXPOSED XXXXX

# EXPRESSION



Atlantex Music, Ltd., 34 Bancroft Hitchin, Herts., SG5 1LA, Phone 0462 31511, Tlx 826967



### 16 Today's Teardrops . . .

The freedom of the press is put under fire as fearless Adam Sweeting looks down the cold, grey muzzle of Julian Cope's gun, considers whether the typewriter is greater than the Colt 45 and lives to tell the tale of the Teardrop Explodes.

### 20 Leicester

Roving reportage team Henderson'n'Pyke alights in Leicestershire's most famous city and uncovers four of the best: The Sinatras, New Age, Il y a Volkswagens and the Swinging Laurels. Part One of *SI's* Guide To The World North Of The Thames.

### 24 Mo Foster: Wide-Ranging and Fretless

From Sheena Easton to Gerry Rafferty and from the Shads to Jeff Beck's band, Mo Foster has (as we say in the trade) bin there, seen it'n'dunnit. Ralph Denyer follows the yellow brick road that leads from Duane Eddy and Carol Kaye and examines the technique of a modern bassman.

### 28 The Duncan Age

UK guitar maker Peter Cook indulges in a transatlantic cross-cultural dialogue with US pickup maker Seymour Duncan and discovers such modern phenomena as the Duncan ageing process utilising the sound of vintage pickups.

### 32 Tony Zemaitis

The A to Z of Anthony Zemaitis, guitar-maker by appointment. You don't get an appointment, you don't get a guitar. Max Kay of EFR guitars discovers, among other things, the job that got away - the guitar you could play from the inside.

### 34 A Look At Sound

Are you sitting comfortably in front of your synthesiser? Then we'll begin. Last month that nice Dave Crombie explained his theory of sound and this month he helps you apply it to your instrument while simultaneously broadening the mind and foreshortening the legs.



Tony Zemaitis (top centre), a Swinging Laurel, A Volkswagen and Bob Black.

### Regulars

<b>News:</b> Summer shows, Newsnotes	5
<b>News:</b> US and Japanese guitars, Teac Tascam 20	7,9
<b>Sound Advice:</b> Guitar necks, 50s Les Pauls	10
<b>Guitars:</b> Paul Day on Burns	11
<b>Etcetera:</b> Rhine River Three at Pathway	13
<b>The Daily Slog:</b> Bob Black, Modettes manager	15

### Reviews

<b>Bass:</b> Arco Upright - Steve York	38
<b>Amps:</b> H/H Performer Guitar Combo - Gary Cooper	39
<b>Keyboards:</b> Sequential Circuits Pro-One - Dave Crombie	42
<b>PA:</b> Speakers - Ben Duncan	46
<b>Sound Reviews:</b> Independence Day, Beat '66	48

#### JUNE 1981 NUMBER 38/175 SUBSCRIPTIONS

The magazine is available to UK readers at an annual rate of £12.50, to overseas readers at £13.00 per year and to US readers at \$32 surface mail, \$52 airmail. All enquiries to our Subscription Department, Link House Publications, Link House, Dingwall Avenue, Croydon CR9 2TA, England. Tel: (01) 686 2599.



MEMBER OF THE AUDIO BUREAU OF CIRCULATIONS

**THE LINK HOUSE GROUP**  
Editorial and Advertising Offices: LINK HOUSE, DINGWALL AVENUE, CROYDON CR9 2TA, ENGLAND.  
Telephone: 01-686 2599 Telex: 947709  
Telegrams: Aviculture Croydon,  
© Link House Publications Ltd, 1981  
All rights reserved. ISSN 0144-6037.

A couple of readers have asked why we devoted four pages to the Index published in last month's issue, arguing that it wasn't worth the space allotted. This is, of course, balanced by the fact that many readers have responded in the past by ordering back copies or photocopies of articles. But just to explain the case for those who objected - the Index is published by us every year (previous examples occurring in the May '80 and July '79 issues), and we print it with at least a couple of potential uses in mind. More immediately, it gives the new or new-ish reader (hi there) an overview (pardon the jargon) of just what we get up to on *Sound International* in one year, and shows quite clearly how we give a broader and yet more detailed coverage of modern music making than any other monthly mag you care to name. We think so, anyway. The primary use, though, is the one already mentioned - it can often provide a clue to a subject which you're looking into some months (even years?) after the original feature, review or news item has been published. Our photocopier works most days, and we'd be pleased to run off hundreds of copies of Dave Crombie's drum machine review or Ralph Denyer's Kate Bush interview, should the demand become apparent. We aim to give information, and the annual Index is a way of providing more of that so often rare commodity.

Tony Bacon

# Man in Jam says ‘Vox got me into it’

We're in a caff (spelt cafe) somewhere in the West End of London. The tape recorder's on, sausages are off and the tea is verging on the drinkable. We're talking to Paul Weller and Dave. Paul Weller is the man in the Jam. Dave is the chap who looks after his equipment and stuff. We're the italics and ask the questions.

... So when did you first get hold of an AC30?

Soon as we got signed up. This geezer Chris Parry from Polydor came down the Marquee. Polydor were looking for a token punk band. So they signed us. Soon as we got some money, I went out and bought a few AC30's...

*How do you find them on the road?*

Ahh... well for what we're doing now they aren't loud enough... but for your small halls and middling venues they're great... we used them a lot at the beginning... and of course we always use them for recording... all the new album has been done on AC30's... most of the previous stuff too... (AT THIS POINT DAVE INTERJECTS) They need to be broken in as well... you get a new one and the sound isn't quite there... you need to burn the valves a bit... get the thing hot for a while...

*Do you find much difference between what you're doing now and what you were doing a while back...?*

... well last year we went back and played the Marquee... that was a bit of fun... it's stupid trying to hang onto that kind of thing though... five hundred people is the same as five thousand... it's the same feeling... you're not losing contact...

*How about touring now?*

Knacker and boring apart from those two hours you're on stage...

*What do you think of record companies?*

Well, the deal we've got with Polydor has got better as we've got more successful, but the thing I'd say to young bands is keep your eye on them. Even when you get successful and it's all smiles and handshakes, it's a fickle business... you see young kids getting really screwed up... when we first signed we'd take anything we could get our hands on... we were skint. It's good to see all the independent labels coming up now...

*Any final words on the business in general and Vox in particular?*

Vox I'd recommend to anyone... can't say the same for the business.



Vox Limited, 32-34 Gordon House Road, London NW5 1NE. Tel: 01-485 4553.

Dear Vox, my name is \_\_\_\_\_

and I live at \_\_\_\_\_

SI 6 81

and I'd like a bit more info please.

**VOX**

## Summer in the City: prepare to rush to Russell Square, London WC2

Following the demise of the projected British Music Fair (to have been held in Birmingham this August), the Russell Square area of London now looks like hosting many of the manufacturers' and distributors' displays of hardware. This means a return to the hotel-trekking of pre-1979 when the trade used to spread their wares in a similar variety of hotels in London WC1. Most shows in the areas will take place from 16th to 20th August, 1981.

So that's good news, you say, we'll all be able to see the new products after all. Well, not really - because most of these hotel-room shows will be for the trade only. And that's that. Just who will be where in August wasn't totally clear as we went to press, but we'll give more precise details later - just in case you have ideas of posing as shop owners and sneaking into the shows (not that *SI* would condone such evil and contemptible acts). There will be various companies in the Russell Hotel, for example, including Gigsville (importers of Aria products, among others) and Rosetti (Mighty Mite, Morley, Echoplex etc), along with Hornby Skeeves and Hohner nearby.

About the only geographical alternative to this is offered by Trade Promotion Services Ltd who are organising Music Shows '81 at Olympia in West London from 13th to 16th August (and later in the year at Blackpool). These will be open to the public - TPS have organised most previous large music fairs, including the last two years' Olympia shebangs. At press time the TPS literature had only been about for a few weeks, and response from prospective stand-holders had been minimal. Fuller info on all this next month.

## Newsnotes

Some winners: back in April the TSB Rock School - 'the first

national rock and pop contest' - held its finals in Manchester, and top of the pile were **Mother Hen**, a nine-piece band from St Paul's School, Barnes in London. They cop two grands' worth of travel and over three-and-a-half-G's worth of musical equipment for the school. Not all descent recorders, we hope... And **Peavey's** Glider strings competition, announced at the end of last year, was won by Wilf Hartley of Northallerton, North Yorkshire - he gets the Kawasaki motorbike. Runners-up were RA Bowery of Somerset, who gets a Peavey T60 guitar, and P G Shaw of Manchester who gets a Peavey *Decade* amp... **Patrick Moraz** picked up one of **Fender Rhodes'** new *MkIII EK10* keyboards from UK distributors



MXR's latest

CBS/Arbiter. The instrument combines the traditional Rhodes sound with electronic tone generation (first mentioned in our NAMM report, *SI* Sept '80). Perhaps Patrick'll review it for *Fender Musician*?... The **MXR Micro Chorus**, pictured here, is the latest pedal from the NY company, distributed in the UK by Atlantex (phone 0462 31511). It'll cost £71.40 inc VAT and will be included in an upcoming FX review... A new association to encourage the performance and furtherance of folk music and related forms has been set up, called **Perform**. If this is your sort of thing, write to secretary Susie Stockton at 7 Greenside Drive, Hale, Cheshire WA14 3HX and enclose an SAE... German amplifiers of the **Solton** brand are now available in the UK: more info on the range can be obtained from Solton (UK) Ltd, 14 Barnet Road, Potters Bar, Herts EN6 2QU, Tel: 0707 43587.



Who are these men and what are their games, you ask? None other than the English Gamelan Orchestra, using a collection of percussion instruments built in Java and first seen in Europe in the late 19th century. They're performing at the Lyons Concert Hall at York University on June 17th. Info, and appeals to bolster the Orchestra's depleted funds, from Jan Steele in Sutton Coldfield, Tel: (021) 350 2320.

## Picking up the Pieces

Rose-Morris, exclusive distributors of DiMarzio products in the UK and Eire, have asked us to point out that in the review of the Hamer *Standard* by Roger Adams in the Dec '80 issue we stated that the pickups fitted to the guitar are regular DiMarzio PAFs. This is incorrect. The pickups are specially made for Hamer only, to their specifications. Rose-Morris have also pointed out that they feel our comments in the review concerning DiMarzio's status in Britain were badly stated. ('Unfortunately, following ruthless price-cutting in this country, the DiMarzio is now one of the cheapest and commonest pickups available, and has consequently undergone a lessening of status,' is what was said). While *SI* still stands by these comments, perhaps they could do with some expansion. It was our intention to show that the competitive prices of DiMarzio pickups in the shops reflect a popular demand for a product made and sold in considerable volume. We were trying to point out that the sheer popularity of DiMarzio pickups has lessened some of their esoteric and exclusive character compared with the early days when they were rare and expensive. There was never any intention to imply that DiMarzio pickups have undergone any lessening of quality.

Allan Holdsworth has asked us to

clarify a few points arising from the interview by Ralph Denyer published in the Feb '81 issue. On the subject of endorsement of DiMarzio products, Allan now says that he is in fact a full endorsement of DiMarzio products, no 'loose arrangement' as suggested in the interview. Ralph Denyer was given the impression of a 'loose arrangement' by what Allan told him at the interview in December 1980 and by what he saw from Allan's guitars and their various pickups. Allan says that he works closely with the DiMarzio research team in developing new ideas.

## Update

Allan says that since the interview, he has been using DiMarzio PAF pickups exclusively in the pursuit of his particular sound, preferring them because of their reduced string pull. In the interview, Allan mentioned his need for a PAF pickup with polepieces spaced for a *Strat*. Since the interview took place, he has received the new DiMarzio *Strat* tremolo tailpiece/block which has Gibson string spacing. Allan says he now finds this an excellent alternative to wider spacing on pickup polepieces and is currently playing a guitar using almost all DiMarzio components including neck, body, hardware and, of course, pickups.



### EDITORIAL

TONY BACON editor  
ROB MACKIE asst editor  
DAVE HENDERSON art  
WENDY MARSHALL secretary

### ADVERTISING

Rep Mike Kirk  
Production Karen Cutler  
Secretary Audrey Slafford

### PUBLISHER

Douglas G Shuard

Sound International incorporating Beat Instrumental is published on the last Friday of the month preceding the cover date.

*SI/BI* is a sustaining member of the Audio Engineering Society.

### REGULAR CONTRIBUTORS

Roger Adams	Dave Hastilow
Josh Benn	Didy Lake
Steve Brennan	Mel Lambert
Richard Burgess	Robin Millar
Gary Cooper	John Mornish
Dave Crombie	Roger Phillips
Paul Day	David Sinclair
Fred Dellar	Sue Stewart
Ralph Denyer	Dave Stewart
Ben Duncan	Adam Sweeting
Robert Fripp	Steve York



MEET THE STAFF NO. 4.  
WENDY MARSHALL: SECRETARY

SOUND INTERNATIONAL incorporating Beat Instrumental is what you are holding. It welcomes comments, opinions on its merits and demerits, and contributions on the experiences of music-making. Like most people in the last 2000 years or so, we get things wrong now and then. Please let us know about mistakes; we'll correct them as soon as possible. We prefer being right. Replies, corrections and counter-attacks will always find a place in the mag. We can't be held responsible for errors, loss or damage to items contributed. The magazine's contents are copyright, but we'll generally give permission to reprint if we're asked in writing. That's about it, really, and don't worry.

# MOBILE ONE

29-30 Windmill Street,  
Tottenham Court Road, London W1.  
Tel: 01-580 3744. Telex: 298531.

# The Bigger



The biggest Mobile  
in operation  
in Europe.

**NOW WITH  
VIDEO  
FACILITIES**

Well suited to any recording  
situation anywhere in the world.

From concerts to films and  
long term album work.  
Completely self-contained  
needing only a power  
supply for it to become  
a fully operational  
46 track studio,  
on the spot - instantly.

# The Better

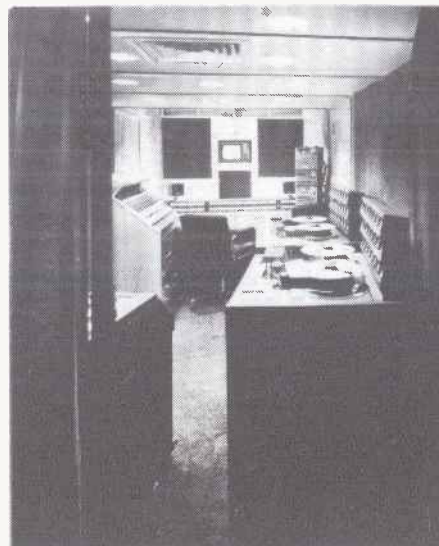
#### Special features include

- 46 Track recording
- Eastlake acoustic construction
- 52 Audio input channels
- Overdub booth (space for full drum kit)
- Full air conditioning
- Custom built chassis and body
- Radio telephone

#### Equipment includes

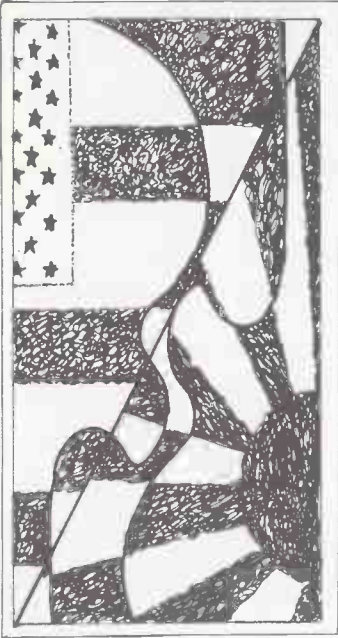
- Two MCI 24 track tape recorders  
(each with full remote control)
- MCI 36 in 36 out mixing console
- Triad 16 by 4 auxillary console
- EMT Digital Echo
- Eventide Harmoniser
- Eastlake monitoring with JBL,  
Amcron, and Whites' equalisers

**Bigger, Better,  
But No More  
Expensive**



Ferber Studios,  
56, Rue Capitaine Ferber,  
Paris 75020.  
Tel: 361-3101. Telex: 670379

Studio Hamburg,  
Atelier GmbH.  
Tonndorfer Hauptstrasse 90  
2000 Hamburg 70  
Tel: Hamburg 66882246



## Axe Hack Alienates Two Continents

I don't suppose that I'm alone in having noticed something stirring across the Atlantic pond during the last year or so. am I? From this end it looks a bit like a major renaissance in quality control and designing ability on the part of some of their major manufacturers. It set me thinking as to what effects (if any) this might have on the recent invasion of their traditional markets by the Japanese. Does this matter to us as guitar players? Well, yes, I think it does.

I see a lot of guitars each year in my capacity as a reviewer/writer for a number of papers. Up until a year or so ago the arrival of a legendary brand name in a cardboard box was something to be treated with apprehension. You know that bit about finding one's idols with feet of clay? Well, that's the sort of feeling I had when a top brand US guitar was in the offing — and offing was sometimes the only appropriate word, believe me!

Speaking purely personally it all came to a head with me when I had a few harsh words to say about Gibson in my capacity as fearless editor of *Beat Instrumental* back in the mid-1970s. I'd had a few lulus through my hands and, worse still, had sat squirming with embarrassment (and delight) when a bolshy retailer raised the matter of duff acoustics in front of an audience of other retailers at a Norlin reception.

The up-shot of this was a summons to lunch with Bill Andrews, ex-boss of Norlin Europe and, until then, merely a name on headed notepaper as far as I was concerned. I expected a grilling to match my steak, followed by the usual 'we don't have to advertise and keep your rotten paper going, sonny Jim' approach. But no, Bill was (is, as far as I know) an honest gentleman

and proceeded to admit that all was not as it might have been in the good old US of A and, notwithstanding the ability to get a man on the moon, win the Second World War singlehanded and control the world's economy, they did, just occasionally, make a duff axe. This was enough in itself and I went away convinced that, even if Norlin couldn't get things back on the right lines again, at least their European representatives knew that they had a dangerous problem on their hands — one which wouldn't help their long-term attempts to hold the top market against the influx of Japanese guitars which were, at that time, beginning to get close to American quality, if not American prestige.

And readers whose loyalties belong with CBS needn't snigger, either. A few Fenders I saw were a bit — well, you know what I mean. Gretsch, Rickenbacker, yes, them too.

Now, before you get the legal eagles issuing writs, please hear me out. I'm not saying that all or even most American-made guitars of the mid-1970s were bad. This isn't true. I'm not even saying that a higher percentage of faults were occurring then than have ever gone on (am I covered, your honour?). All that I am saying is that quite a few retailers were moaning to me about some manufacturers' quality control and I was seeing a few nasty pieces of work which didn't come through the door on two legs. The result of this was, I suspect, a lack of confidence on the part of the public in some sectors, a lack of belief in inherent virtues which assisted the Japanese to get in with cheaper made guitars which seemed as good as American ones.

During the late 1970s certain Oriental axes made the grade in a big way. Yamaha along with Ibanez, followed by Aria and then Washburn, soon became names which no-one need have felt ashamed of going on stage with. Prior to that *anything* but a top-name American axe was the cause of a mumbled apology when you turned up for an audition.

But the sub-conscious of the average American guitar maker, worker or manager, seems to have been shattered into action by this threatened erosion of the company's traditional place at the head of the guitar maker's league table. Gibsons and Fenders that I've seen over the past two years or so have been, with no exceptions, superlative instruments in every respect. Moreover, not only has the quality been up but so have their new ideas and adaptations of old ones. Have you tried a Fender *Precision Special* (the active one) yet? You should! Have you looked at a Gibson *335S Pro*? Believe me, both these axes are as good as anything that either company has turned out in years if my samples were anything to draw conclusions from.

Not all of this, of course, has been due to Oriental-applied pressure. DiMarzio, Hamer, Schecter, Mighty Mite, Bad Ass and others have all done their bits to wake up the slumbering giants. From my information, wake up

is just what they have done.

The question is, does this make the current (still rather expensive) American guitar as good as, or better than, a Japanese axe? Obviously a generalisation at this stage would be absurd. From a constructional point of view I would say that a top-flight Japanese guitar is every bit as good as a top-flight American one, and I do believe that the Americans now acknowledge this as a fact. But some players that I have talked with have raised a question in my mind about the Japanese makers' ability to produce guitars with a 'feel' about them. Now I realise that I am treading on very thin ice here. So far I have probably upset the American guitar makers and now, if I go on like this, I am probably going to alienate my friends (if I have any) in Japan. Still, what I am trying to do here is raise a valid point or two and I hope that it's worth it. I know I'm going out on a limb, but what other monthly magazine for musicians would dare to let me open my mouth and try to air such a dangerous subject? Bear with me.

The Japanese (as any electronics manufacturer will tell you) are wonderful at low-cost production line engineering. Most of the fields in which they have triumphed (hi-fi, photography, motorbikes, cars) they started out by pioneering nothing. In the cases of photography and guitars (two that I know something about) they began by making ludicrous copies of the real things and selling them at silly low prices. The joke, however, was soon on the scoffers who saw the copies get better and better, eventually overtaking those static manufacturers who had refused to change their products in line with the new challenge.

However, it is still largely true that the very best products in these fields are not Japanese. Aiming at the more profitable mass market they gear themselves to middle range tastes and prices. Datsuns are all well and good, but wouldn't you rather have a Ferrari or Aston Martin? Aiwa and Sony are lovely, but what price a Linn Sondek and a Crown?

The point that I am trying to make is that the Japanese approach to manufacturing many things is to aim for the middle of the market, leaving the pros to buy from older, traditional suppliers. And before anyone says Nikon to me, what about Hasselblad and Linhof?

Now the guitar is a funny instrument. Its player enjoys (I use the word loosely) a physical and often painful relationship with it. It is in the nature of things that this should become more apparent as one progresses up the professional scale. I miss things on my guitars which would infuriate professionals. The guitar is a personal instrument, one which needs to possess highly personal qualities to appeal to the professional player. This is further borne out by the tendency of better players to have their guitars modified to some very odd specifications by professional guitar builders and repairers.

The point that I'm trying to lead up to is one which may appear obvious to some players and people in the business — that any moves to write-off the major American guitar producers at this stage of the game is either ludicrous, full stop, or ludicrously early. There is, in some quarters, a murmur going on that the Yanks have had it, that the Japanese guitar is inevitably going to take over all of the market, except for the very bottom end which will come from countries like Korea and Taiwan.

I honestly cannot see this happening as yet. True, there are Japanese guitars which are every bit as good as American ones (and some which, for my money are a damned sight better). But, *en masse* (and I admit that this may be a hideous generalisation) many of the Japanese guitars that I have tried have been in the 'machine made, machine played' class, instruments designed by people who either do not play the guitar well or who seek dubious advice. Where Japanese makers seek endorsements and advice from top Western players (as have Yamaha, Aria, Ibanez, Washburn and others), the resulting guitars are better than those which have just been knocked-up on the drawing board, which is what one might expect. To claim, however, that ALL Japanese instruments are better is a nonsense, but I have heard it said, believe me.

What would help (and it would help us, as much as it would help them) would be if the Japanese themselves would communicate better with Western players, writers, retailers, or whoever. Some importers do a grand job in this respect, but even so they don't actually *make* the guitars. If I have a Gibson or a Fender question I can pick up the phone and call the person who designed it or at least helped in the design of that guitar. With the Japanese (and their tendency to make many different brands in the same factory), who do you contact? What this leads to is a sense of depersonalisation which, in some cases, is expressed in the instruments themselves, a feeling that some of them are made by faceless people.

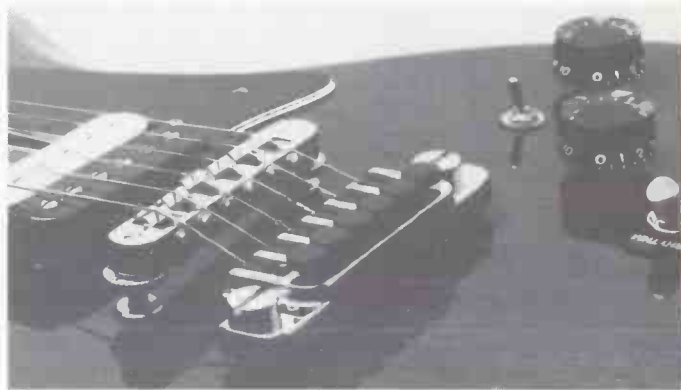
I suppose that what I am pleading for is a little balance in our attitudes to guitars. To assume that any American made guitar is essentially better than any Oriental one is ridiculous. To assume the contrary is preposterous. The Americans still have it, for me, at the top end of the line when one bears in mind their improved (I think) quality control and re-awakening of design skills. If the Japanese wish to take them on at this end of the market (and they may not, of course) then they will have to do so by getting their sleeves rolled up and by coming over here and to the States and getting on the streets with their customers. When they have done this their guitars are as good as American ones. When they don't some of their products tend to be lifeless and lacking in personality. Having managed now to upset everyone I shall sit back and wait for the midnight callers with unshaven faces and shoulder holsters!



## "The Gibson 335S just sounds damn near perfect from the moment you plug it in..."

Gary Cooper – Music World – Feb. 1981

The new Gibson 335S Deluxe. Not so much a modification of the much loved 335, but a completely new guitar.



With its solid mahogany body, traditional headstock and .040" fingerboard binding, the 335S Deluxe is a classic blend of Gibson features, old and new. It boasts the TP6 fine tuning tailpiece, two exposed coil Dirty Fingers humbucking pickups with coil tap, all lovingly crafted into a double cutaway body that feels and sounds as good as it looks.



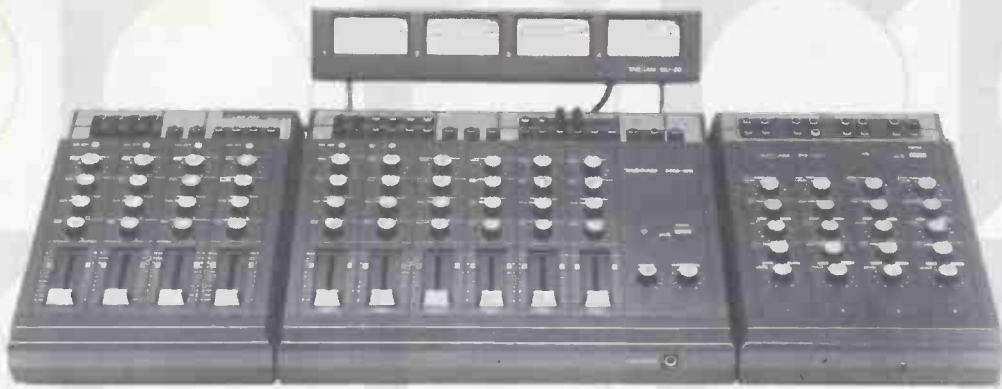
# Solid craftsmanship.

**Gibson**

George Yard,  
Braintree, Essex.  
Tel: 0376 44045/42407.  
A division of Norlin Music (U.K.) Ltd.

Whether you choose the Deluxe or its Firebrand Series counterpart, the 335S Custom, you'll find the results damn near perfect. Experience Gibson quality, innovation and prestige. Plug one in soon.





Hi there, I'm the Teac System 20 modular mixer ...

After last month's brief sojourn into the possibly heady realm of high-technology with the Sony PCM-1600 digital recording system, I intend this month to consider something rather more down to earth. And take a close look at a new mixing system from Teac which, on an initial appraisal at least, gives every appearance of being just what the semi-professional and home recording enthusiast has been waiting for. For the new Teac Tascam System 20 modular mixing system enables just about any format of mixing console to be constructed - including concert-sound desks as well as the more conventional stereo and 4-track boards.

Unveiled at last February's NAMM Show in Los Angeles, the System 20 comprises four basic units, or building blocks, that can be coupled together to build a mixer as small or as large as you need. The basic unit in the System is the Model MM-20 Master Module, equipped with six inputs (a pair of transformer-isolated mic- and four line-level inputs), four main outputs, a stereo auxiliary send output, plus separate monitor and headphone feeds. An input expander module, Model EX-20, features four transformer-isolated microphone inputs and stereo auxiliary send. The companion PE-20 unit consists of four identical channels of parametric equalisation, designed to be inserted between 'send' and 'receive' sockets fitted to each input channel on the MM-20 and EX-20 modules. Three bands of equalisation are available on the PE-20, with up to 12dB of cut or boost at each centre frequency. The low-end section can be continuously adjusted between 60Hz and 1.5kHz, and the mid-range between 1.5 and 8kHz; the high-frequency section, however, is fixed at 10kHz. Completing the System 20 is an add-on Model MU-20 meter unit, which houses four VU meters fitted with peak-overload LEDs.

The four units should be available in this country in July at the following recommended prices: £195 for the MM-20, £125 for the EX-20, £119 for the PE-20, and £85 for the MU-20. Design rationale of the System 20, according to Teac, is that it should operate much like an electronic patch-bay. Which means, in

essence, that that user has access to various signal outputs at all the relevant points along the mixer's signal path. Or, to put it another way, instead of switching signals around the mixer, or necessarily routing them to dedicated multitrack, monitor, foldback and echo send outputs, Teac intend that you treat the sections as building blocks, and connect them up yourself in the format you need.

I would even quote from a Teac news release on the new System 20, in which Dave Oren, Tascam's US marketing manager, offers that 'the uniqueness of the system is in its absence of switches and, as a result, remarkable flexibility.' He continues thus: 'Originally, our intention was to design a mixing system for the artist/engineer who works alone. But in the development process we soon realised that the System 20 is applicable to many multichannel uses, because of its patching flexibility.'

Cosmetically, the System 20 modules bear a possibly unsurprising similarity to the well-know Model 144 Portastudio. Overall dimensions and weight are pretty much the same, and similar style switches (of which there are very few), knobs and faders. However, whereas the Portastudio can be treated as a easy-to-operate, self-contained unit for making simple cassette demo tapes in the comfort of your own front room, or while out on the road - with the assistance of a couple of mics and a set of headphones, of course - the System 20 is rather different. With such in-built flexibility, the first thing you need to decide is what particular format of mixer you're after.

Consider, as an example, the perhaps standard requirement for a four-buss mixer to be operated with a 4-track machine. One thing you soon notice on looking closely at the MM-20's front panel is that the mic inputs pan between outputs 1 and 2, whereas the four line inputs are connected between 3 and 4. You need to remember, though, that these designations do not necessarily refer to track outputs. In other words, they can be used for anything - I feel that it would be less confusing if Teac had labelled them as W, X, Y and Z, but you can't have everything I suppose.

So, to return to our 4-track

example, a pair of microphones - or to be more realistic, up to six when the add-on EX-20 is hooked up - can be connected to the MM-20, passed to a PE-20 unit for equalisation, and panned between outputs 1 and 2. A row of phono sockets to the rear of the MM-20 enables these outputs to be connected to the relevant inputs on your multitrack. Foldback outputs can be set up in much the same way, via the stereo auxiliary send busses A and B. The aux section on each input module comprises a combined level and pre-/post-fader selection control, plus pan knob. Connecting the same outputs to the MU-20 meter bridge allows foldback and recording levels passing to tape to be accurately monitored at the mixing position.

A combined master/monitor output buss, complete with parallel foldback outputs, can be used in a variety of ways. They could be connected directly to your mixdown machine, PA system, or control-room monitor amps and loudspeakers, or routed through another section of the MM-20's signal path, which functions as a stereo headphone output.

For overdubs, the same pair of recording outputs would be used, inputs from previously-recorded tracks being connected to the monitor and foldback circuits via the line inputs. Here it may begin to dawn on the more astute observer that, despite initial appearances, Teac has purposely designed the System 20 to be left connected to as many outboard items of recording hardware as possible.

Obviously, at the beginning of a session you do not know in which order the tracks will be laid down. Here Teac has left open all the possible options, by providing just two recording outputs that need to be patched to the multitrack. (While it's possible to parallel the four main mixer outputs via a set of 'buss in' sockets, I'll not needlessly complicate matters at this stage.)

During mixdown, however, it's odds on that unless you have a somewhat bizarre mixing technique, the four multitrack inputs will need to be connected to the MM-20's four line inputs. So why not, Teac must have reasoned, leave them permanently connected, and available at all time for foldback and

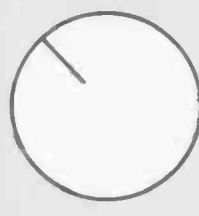
monitoring during overdubs - and instantly ready for a trial mixdown attempt. Now outputs 2 and 4 become the recording outputs, and would be connected to your cassette or reel-to-reel mastering machine and meter bridge.

As a concert-sound mixer, the System 20 enables a pair of microphone inputs (more, of course with additional EX-20 modules) and four line level sources to be panned between four separate or combined main outputs, and sent to auxiliary effects outputs (either pre- or post-fader, and which could also be used to provide a pair of on-stage monitor outputs). It goes without saying that there are numerous other possibilities with such a flexible system, such as using outputs 1 and 2 from the mic channels as subgroups, which can be combined with the final stereo house mix via a couple of line inputs.

Once the intricacies of the rear patching panel have been mastered - possibly starting with a very simple hook up, and then progressing to more sophisticated formats - it shouldn't take too long to become used to interconnecting various inputs, outputs and send/receive points to achieve the desired mixer configuration. All relevant inputs and outputs are suitably isolated via buffer amplifiers, making it virtually impossible to overload them, or cause any untoward fannies. Teac has also kept to its 'standard' operating level of -10dBV at most of the phono and line sockets, which greatly simplifies establishing a meaningful rapport between the various units and outboard gear.

All in all the new range of System 20 modular mixing units from Teac represents a very flexible system for the budget-conscious home recording enthusiast, who possibly isn't quite sure what recording format he or she may require now or in the near future, or who is on the look out for a system that would be equally suited to life on the road as a concert-sound mixer, as well as a stereo or 4-track board. There aren't many mixers around that would readily satisfy both requirements. By allowing the user to patch outputs and inputs around to suit the particular application at hand, the Teac System 20 should prove to be a mixing system with a long future.

# Sound ADVICE



## Packleader 'Necking with Rose Wood'

Could you help me with the following problems, as I am about to build myself an electric guitar, this being the second one I have made.

Firstly, does the type of wood used for the fretboard affect the tone of the guitar in any way, or is it just the body materials which are important? I own a Packleader guitar with an ebony fretboard and this sounds much brighter than my homemade guitar which has a rosewood fretboard, the body being a solid piece of mahogany. Will a maple neck as used on a Strat sound brighter or no different? Is it a case of the right combination for body, neck and fretboard?

Also, in an interview with Eddie Van Halen he said that he has a clamp arrangement on the bridge and nut to stop his vibrato tremolo unit throwing the guitar out of tune whenever it should have returned to concert pitch. Is there any way I could do the same? Also, he mentioned that this only works if the strings have been pre-stretched. How does one pre-stretch strings? Nobody I know seems to have any idea.

From: Kevin O'Shea, Grays, Essex, England.

This business of woods altering the tone of guitars is a matter of much debate. Generally speaking, I would be inclined to say that yes, a maple neck will sound brighter than a rosewood fingerboard on a mahogany (or whatever) neck. However, I rather suspect that the differences will be fairly subtle and that the reasons for the difference in sound between your Packleader and your own home-made guitar are due to a combination of circumstances: wood type, neck joint, bridge design,

even the smallest electrical components (in fact especially these) can all be held accountable for tonal differences plus, of course, the pickups. The major reason for using maple necks and fingerboards is really one of feel. Some people like maple fingerboards, some don't and I would have thought that any loss of brightness you would get by using another wood could have been compensated for in your choice of pickups and circuitry. Use whichever you like the feel of, the lock of and can work best with.

Eddie Van Halen has an extravagant tremolo style and I'm not surprised that he has tuning problems without a clamp arrangement. I haven't seen his guitar and neither has anyone else with whom I've spoken so I can't help here. I wouldn't have thought that it would have been at all necessary for you to go this far, though, providing you use a good tremolo arm device. My favourite is that on the Fender Strat and you could do a lot worse than trying to copy that or cannibalise one if you can.

Pre-stretching strings is, I personally believe, essential when changing light gauge strings before gigs, whether you have a tremolo arm or not. All you do is bring them up to concert pitch and then bend them up like mad to take the stretch out of them. Do this a few times and you won't have that awful de-tuning in your first solo which usually happens. One guitarist I used to work with would always stretch his strings by pulling them right out from the neck-like bloody Robin Hood with a bow and arrow - and I saw John McLaughlin do that a few years ago too. I'm always scared of breaking strings (physical coward, you see) and don't go that far. Do, however, stretch your strings up when you change them and that will help a lot. Good luck with the new guitar!

## Foggy Sound On The Tyne

I have recently experimented with a new amp set-up comprising a Marshall 100 watt Master Volume head going through a 4x12 cab and a Roland 60 watt Bolt combo through a 2x12 cab. Using an Electro-Harmonix Switchblade it is possible to switch between a powerful raunchy sound on the Marshall and a nice clean sound on the Roland.

My only problem is that when the amps are turned up loud on stage, there is a loud hum caused by the Switchblade. Could you please tell me if there are any other makes of channel switches on the market with better noise reduction or if it is possible to improve my present unit.

From: Steve Richardson, Newcastle, Tyne and Wear, England.

Assuming that the cause of your problems really is the Switchblade you might try a very inexpensive MXR device known as the Loop Selector. This should be totally silent and will enable you to connect your amps any which way you choose. In fact it's so versatile that you can even use it at the back of the amp to switch through different speaker cabs! The mp inc VAT is £19.51 and further details can be obtained from Atlantex Music Ltd, 34 Bancroft, Hitchin, Herts.

## Axess Card Required

Please can you tell me where to obtain a 1956, '57, '58 or '59 Gibson Les Paul. I live in Birmingham and my local dealer said I would probably have to try a select shop in London.

From: A. Halsall, Warley, West Midlands, England.

Your only hope is to come down to London personally and scour the Charing Cross Road area, perhaps having phoned some of the shops which advertise in a well-known weekly first. On the other hand, you will get a cheaper guitar if you look in something like Exchange and Mart and try to buy privately. The only difficulty there is that you will have to know what you are doing in case someone tries to sell you a pup. Possibly the best people to write to for ancient guitars are EFR Guitars (write to Max); they are at 58C, Ferme Park Road, London N4. For a '52-'56 you're in for £700-800; a '57 £2000 upwards; a '58-'60 £3000 plus. Bring a loaded wallet.

## Amateur Flasher Writes

Following your article about replacement valves and the apparent non-production of EL34s now, should I grab a stock of EL34s now or fit KT77s to my Roost SR20 and Carlsbro 100 PA? Some time ago Beat said KT77s were more powerful valves, or are they direct replacements? If they are more powerful, what if any effect will this extra power have on my Roost and Carlsbro?

Also, on a slightly different note, is there a permit which will allow me to take photographs for personal record at live concerts, as invariably notices say no cameras or recording equipment? Thanks for a great mag: more reviews, more on PA, more wit, keep the punks out and ban the mods! From: Adrian J. Humphreys, Stockport, Cheshire, England.

Firstly, thanks for your comments on the mag. All contributions taken seriously (I hope). The answer to your valve question is a bit tricky. Although Mullard are now no longer making EL34s they claim that supplies are still good and should remain so for some time. Personally, as they don't seem to be busting a gut to keep the instrument amp valve alive, I can see no reason for patronising them - apart of course, from the major fact that EL34s are good valves and, just to help a little, they cost less than KT77s. Power-wise I really don't think you'd notice any difference. Soundwise I'm not sure at all. You could try it and see what you think. The only problem is that you'd pay more for KT77s and the only benefit is that they may be a tougher valve, although I've never had an EL34 die prematurely on me.

Photography under concert circumstances is governed by the policy of the promoter of the gig or the manager. Some will let you, some won't. There are no permits for photography as no statutory rules apply. Anyone who stands up on a stage is, from a photographic point of view, fair game and it's up to you to try and photograph them if you can. May I suggest that an approach to the promoter before the gig (maybe a couple of weeks before it) would be better than trying to hassle a bouncer on the night in question. He may agree in writing and that should help. Sorry to be so vague but the rules here are flexible and it's down to the promoter and/or the band to choose.



Clamp-assisted Eddie Van Halen

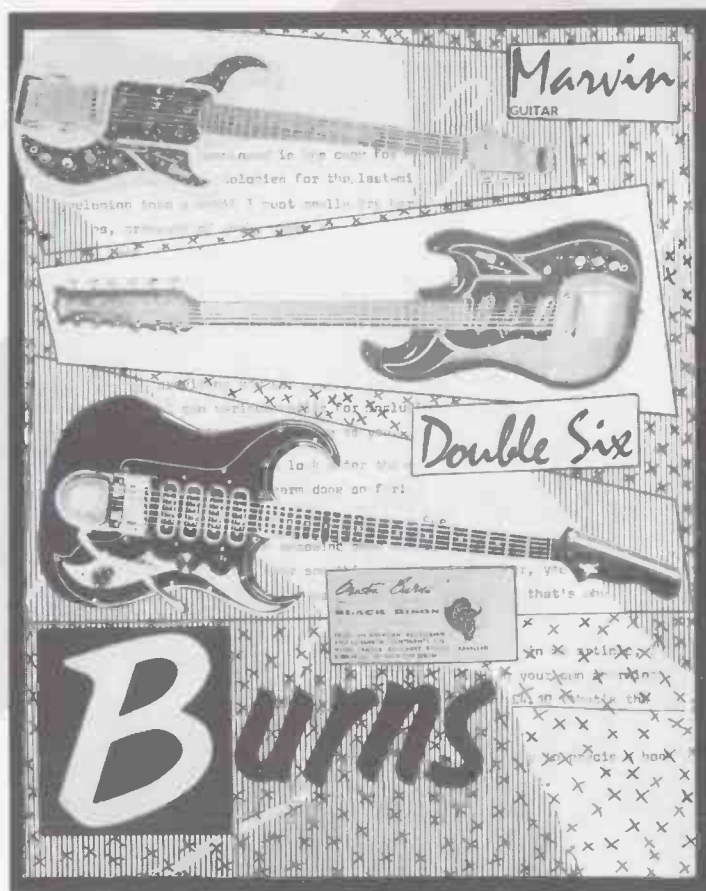
## PAUL DAY on... BURNS

Arguably the most popular and best known of all British guitar manufacturers, the Burns company achieved considerable success on both home and world markets during the 60s. The Burns story is somewhat convoluted, encompassing several partnerships, ownerships and name changes over the years, but the common link has always been the man himself, James Ormston Burns, whose character has revealed itself in many of his designs, providing an innate design flair and style which cannot be questioned, even if not always appreciated.

The earliest Burns electric appeared in 1958 under the 'Supersound' banner, designated the 'Ike Isaacs Short Scale' model, this was a 2 pickup solid similar in shape to the Gibson *Les Paul*. In 1959 a partnership with Henry Weill produced the Burns-Weill range of solids, which included the small-bodied *Fenton* model, plus matching bass version, and the angular *RP* series, whose somewhat futuristic lines soon earned them the nickname 'the Martian Cricket Bat!'. This liaison with Henry Weill was shortlived however, each deciding to go solo: Henry to form his own Fenton-Weill company, while Jim Burns embarked on what was to be the most prolific phase of his career, with the formation of Ormston Burns Ltd. Between 1960 and 1965 this concern produced many of the British guitar classics, still very much in demand today.

The first model from this new Burns company was the *Artist*, a small-bodied, three pickup solid, with a short-scale heel-less neck and two octave fingerboard. This model was soon superseded by the *Vibra Artist*, which as its name suggests featured a new Burns-design vibrato unit. A matching *Artist* bass was introduced, while later came the *Vibra Artist De Luxe*, with both guitar and bass versions featuring modified circuitry and gold-plated fittings. Next to appear was the *Sonic*, aimed at the 'budget' market; this very small-bodied model featured two Burns *Tri-Sonic* pickups, simplified circuitry and the Burns vibrato unit. The matching *Sonic* bass shared similar dimensions, making it a ridiculously small, short-scale bass guitar! Both *Artist* and *Sonic* ranges proved very popular, the multitude of embryonic beat groups appreciating the significant improvement in quality over the majority of instruments available on the home market at that time.

1961 saw the launch of the first up-market Burns model, the classic *Black Bison*. Originally it was produced in very limited quantities as a four pickup, luxury gold-plated version, still with the 'heel-less' neck design. Features included ebony fingerboard, new *Ultra-Sonic* pickups, low impedance circuitry with novel *Split-Sound* effect, a new smooth-action vibrato unit with 'floating' bridge-cradle, and a patented 'gear-box' truss rod adjustment system, later adopted



by Gretsch. However, economics soon dictated certain changes, and a revised, pruned-down version appeared in 1962, now with 'bolt-on' neck design, three pickups, modified circuitry and simplified vibrato unit. The *Black Bison* bass was also introduced at this time, and it too has since achieved classic status.

1962 brought other additions to the range, including the *Vista Sonic* guitar and bass; the *Split Sonic* version, featuring the patented *Split-Sound* circuitry; the *Split Sound* six-string bass; the short-scale two pickup *Jazz* model, plus the three pickup *Jazz Split Sound* version and later the bass equivalent.

In 1963 Burns ventured into the semi-solid field with the *TR2*, featuring an on-board, battery powered pre-amp, an idea well ahead of its time! This model was later superseded by the *Vibraslim* version, with matching basses being produced in both instances.

The next Burns classic design appeared in 1964, this being the *Marvin*, now the most sought-after of all vintage Burns instruments. Designed in conjunction with Hank Marvin, this model was virtually an improved Fender *Stratocaster* in concept and requirements, featuring similar shape, pickups and circuitry. However it possessed a definite sound of its own, with a deeper and richer sustain provided mainly by the new Burns *Rezo-tube* vibrato unit, a knife-edge bearing designed which provided a very smooth and positive action. Other features included the novel and dis-

tinctive 'scroll-head' and 'split' scratchplate styling. A matching *Shadows* bass was also introduced, again featured by that group and thus fulfilling the complete needs of such guitar-orientated line-ups, of which there were many at that time!

Also launched was the *Double Six* 12-string solid; this three pickup model produced a range of sounds akin to a 12-string *Stratocaster* and proved very popular, being used by the Searchers and Elvis Presley among many others. The *Bison* was subsequently re-vamped to follow the *Marvin* styling and it incorporated many of the same features, as did the revised bass version. At the budget end the *Sonic* was replaced by the *Nu-Sonic* guitar and bass, and in 1965 the range was increased still further with the addition of the *Virginian* aimed at the country market, plus the acoustic-electric *GB65*, *GB66*, *GB66 De Luxe* and *GB66* bass models. By this time Burns instruments were being exported worldwide, and this included America, these being in addition to certain models imported by the American Ampeg company under their own trade name.

In September 1965 the Baldwin Piano & Organ Company of America bought up the Burns concern, having been foiled by CBS in a bid to acquire Fender. Most of the existing range continued in production, now of course bearing the Baldwin name. However in mid-1966 several models were discontinued and certain design changes, some major, were instituted.

## GUITARS

New versions of the *Vibraslim* models were introduced, together with the *Baby Bison* guitar and bass, the Baldwin equivalent of an earlier export-only Burns design. This revised range continued until 1970 when Baldwin ceased all production, deciding to concentrate on the Gretsch brand.

It wasn't until 1973 that the Burns name reappeared on electric guitars, but in the interim period Jim Burns had been far from inactive, producing a number of collaborative designs under the Ormston banner, including a pedal steel and an upright electric bass (the successor to an earlier idea). In 1969 he joined the Dallas Arbiter organisation for a two-year stay, helping to develop the Hayman range of guitars, and the earlier models do reflect definite Burns design characteristics.

In 1973 the Burns UK company was formed and a number of distinctive instruments were produced during its four-year existence, best known being the *Flyte* guitar and bass models, endorsed by Slade and Marc Bolan. The *Artist*, *Mirage* and *LJ24* solids comprised the remainder of the range. Unfortunately, although very modern in concept and appearance, the electronics of most of these instruments left something to be desired, and success was therefore limited.

1979 saw the formation of the latest Jim Burns company and this has already produced some very distinctive models with several innovative features, well in keeping with established Burns tradition! Top-of-the-range is the *Scorpion* guitar, with matching bass, followed by the *Steer* and *Magpie* models. Very recent additions have been new versions of the *Marvin* and *Bison* designs, their instant success being indicative of the demand that now exists for these classic Burns instruments. Hank Marvin is once again endorsing the *Marvin*, another instance of the wheel turning full circle.

A few years ago Burns guitars languished virtually forgotten, their qualities unrecognised and unremembered, regarded as pure 'junk shop fodder'. Happily that position has since altered drastically, and nowadays many of those 60s vintage models are afforded the respect they so richly deserve.

Paul Day is the author of *The Burns Book*, £4.10 from *Sound Investments*, 19, Forde Rd, Newton Abbot, Devon, reviewed in *SI* Nov '79.

# Introducing The Set-Up Modular Drum Grouping and Support System.

Now, a new level of versatility has come to drumming. Because the unique modular design of The Set-Up™ from Ludwig allows drummers virtually unlimited flexibility in tom placement. From either bass drum or floor stands, drummers can build up to a three-level, six tom grouping — with each tom ideally positioned and angled for maximum playing speed. All positioned within a smaller total area, too. Because the Set-Up's design permits closer groupings with less stand clutter than any other system. And thanks to Ludwig's exclusive Quik-set™ feature, every component can be pre-set to an exact height and angle to make setting up faster than ever before. Perhaps best of all. The Set-Up's design permits an outfit to grow with a drummer's music and stage or studio needs. Its total capability is something you've got to see to believe.

Phone 01-267 5151 during business hours for your free Ludwig Modular brochure and dealer list or send in coupon

**Rose-Morris**  
**LUDWIG**

Now drumming  
reaches new heights . . .  
new depths . . .  
new angles.

Rose Morris & Co. Ltd. 32 Gordon House Road, London NW5 1NE, England  
Please send free Ludwig Modular Brochure and Dealer List.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

SI 6 81

# ETCETERA

Kevin inside Pathway (both pictures Steve Pykel)



RR3: John Wrathall, Kevin Murphy, John Jasper.

## The Pathway To The Rhine

Pathway studio is at 2a, Grosvenor Avenue, London, N5. The sleazy alley leads to a small door through which is a compact 8-track set-up not recommended for the claustrophobic. Started in the late 60s by Mike Finesilver and Pete Ker (who co-wrote Arthur Brown's *Fire*), a couple of Revox machines gradually changed into today's format. In the mid-1970s its reputation developed with Dire Straits, Dave Edmunds, Elvis Costello and various other Stiffs working there. The studio is now owned solely by Mike Finesilver who employs various engineers. On this occasion doing battle were The Rhine River Three (their first demo) and Nick Godwin (engineer). During a break in the proceedings, the tracks down ready to mix, I had a chance to talk to Nick and the group. Nick has worked there for a year and a half and spoke briefly about the problems first-time groups come up against.

Nick: 'Obviously you have to treat

new groups differently, playing in a studio is different from playing live. Groups aren't used to hearing themselves as they can do in the studio, it's important then first to put something down so that the group can hear how they sound. You have to explain the possibilities available from the studio equipment, and let them hear all of their ideas as long as they aren't too impossible.

'The groups' equipment can sometimes be a problem, little crackles and hums aren't noticeable live but become apparent in the studio. Backing tracks can usually be taken quite quickly but backing vocals can cause trouble and should be rehearsed before with just the lead vocal and one instrument. All of the material should be well rehearsed and there is no point in doing more than three songs for a demo; concentrating on fewer songs gives a better chance of good results when time and money have to be kept in mind.'

And so this was the day. The Rhine River Three, from London, consist of Kevin Murphy vocals and guitar, John Wrathall synth and drum-machine and John Jasper bass and guitar. The band cite their influences as everyone they've ever listened to, but agree on leaning towards Joy Division and

Cabaret Voltaire. The name came from the book *The Tin Drum* - it transpires that the Rhine River Three were a group of players whose progression was followed therein. The day in Pathway was spent recording two tracks: *An End Remains* and *Departures*. The initial intention was to do four tracks, but as it turned out the time allotted (eight hours) was just right for the two. Kevin and John (guitar) had been in the studio before but this was the first time with this line-up, and for them at least some of the mystique was gone.

Rhine River Three: 'The purpose of the demo is to send out, in cassette form, to get gigs and create record company interest, it's also handy for us to have to gauge progression. The kind of labels we're aiming at are the more established independents or subsidiaries of major companies like 4AD, Fetish and Pre. We'd like to play at places where people would listen; our music isn't easily accessible, and requires a little effort from the audience. With only three members it won't be easy to recreate the studio sound today live, but the plan to combat this is to have some of the instrumentation on tape. We want to stay as a three-piece as the communication is much easier within the

group, and we intend to branch out with other instruments making it a kind of self-sufficient unit.'

On this day Kevin's vocals were double-tracked and treated with echo, John Jasper used fuzz, wah-wah and echo on his guitar and John Wrathall used echo on the synth.

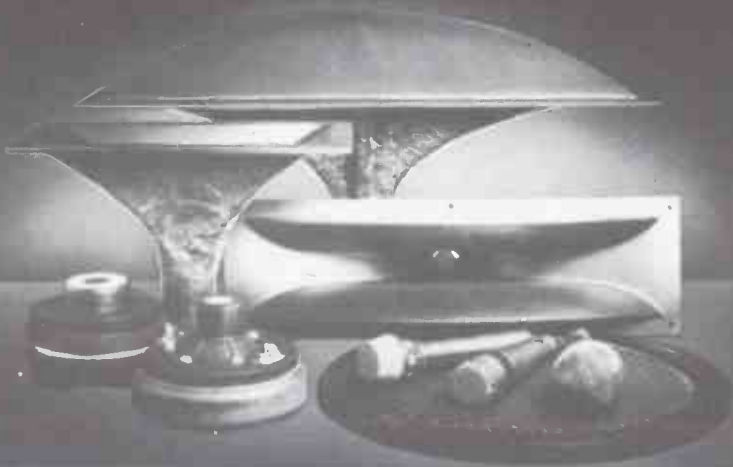
Rhine River Three: 'We'd like to try lots of effects as we don't want to get stuck with one sound. We knew the songs needed something else so we prepared the basics with bits to go over the top before going into the studio. We didn't decide on anything concrete as we knew the sound would be different in the studio. We put down the basic tracks and then built on what we had. It's a bit exhausting, though, recording everything then mixing, it would be better to leave it to another day.'

However, the mixing went well, and although at the time we spoke the group were a bit fatigued and unsure, the final product with its added grains of technology is inspiring and the group were satisfied with their day's work. The cassette, resplendent with neat inlay card (designed by the group), is on its way to the various labels and promoters. The waiting is the hard part.

Dave Henderson

# NOW HEAR THIS!

ADAM HALLS CABINET AND FLIGHT CASE FITTINGS ARE ONLY PART OF THE STORY - REMEMBER THAT WE ARE APPOINTED STOCKISTS OF A.S.S. DISPERSION FLARES, CELESTION LOUDSPEAKERS, EMILAR COMPRESSION DRIVERS, A.K.G. MICS AND P&N SPEAKER AND MIC STANDS PLUS OUR OWN GOODIES LIKE TOUGH STEEL SPEAKER GRILLES FOR 10", 12" AND 15" SPEAKERS. FOR TRADE/RETAIL DETAILS AND ILLUSTRATED CATALOGUES SEND A 30P CHEQUE OR P.O.



ADAM HALL (SI) SUPPLIES LTD. UNIT A, CARLTON COURT, GRAINGER ROAD, SOUTHEND-ON-SEA, ESSEX SS2 5BZ.

OPEN AN  
ABC Budget Account  
PAY AS YOU PLAY

EVERYONE  
loves a Bargain!

AMAZING REDUCTIONS—These are just a few examples—ring or write for full Stock List

GUITARS	AMPS	KEYBOARDS
GIBSON Sonex Deluxe..... £199	H/M Bass Machine Head S/S..... £275	YAMAHA CP10..... £325
GIBSON LP Pro Deluxe, as new... £350	W/H S130..... £125	YAMAHA CP20..... £599
GIBSON Les Paul Custom New... £449	H/M Pro 100..... £150	YAMAHA CP10..... £275
GIBSON Les Paul Standard New... £399	H/M Pro 150..... £175	YAMAHA SK30..... £1399
GIBSON Les Paul XL New Model £499	H/H DC 212..... £125	YAMAHA CP30..... £750
GIBSON Les Paul Standard S/H... £350	H/H 12 into 2 Mixer..... £399	YAMAHA CS 20M..... £650
GIBSON Les Paul Custom As New	H/H Pro 80..... £125	YAMAHA CS5..... £225
£375	H/H MA 100 Mark 2..... £250	YAMAHA CS10..... £295
GIBSON RO Artist As new..... £299	H/H MA 200..... £649	YAMAHA CS15..... £375
GIBSON Firebird Reverse, 1976... £345	H/H MA 400..... £789	YAMAHA SK20..... £745
GIBSON SG1, Used..... £150	ROLAND Soft 30..... £199	YAMAHA SK10..... £275
GIBSON SB Special Di-Marzio..... £245	ROLAND Soft 80..... £255	KORG Ohta..... £595
GIBSON Howard Roberts S/H... £695	H/H Performer Combo..... £350	KORG Sigma..... £495
GIBSON Super 400, Very old... £795	H/H Performer Head..... £244	KORG 770..... £275
LOADS OF NEW AND USED GIBSONS	H/H Micro 30..... £125	KORG 800 OV..... £375
AND FENDERS	PEAVEY TKO Bass Combo..... £135	KORG X911..... £250
FENDER Stratocasters, from..... £245	PEAVEY TNT Bass Combo..... £199	KORG MS10..... £225
FENDER Telecasters, from..... £250	PEAVEY Classic Combo..... £230	KORG MS20..... £345
FENDER Precisions, from..... £225	PEAVEY Deuce Combo..... £320	KORG Lambda..... £999
ARIA TSB 350..... £189	PEAVEY Bass Combo..... £297	KORG CX3..... £625
ARIA SB 1000 S/S..... £325	PEAVEY Bass Head..... £270	ROLAND RS09..... £395
ARIA SB 900 Fretless..... £340	PEAVEY Musician..... £289	ROLAND JP4..... £1095
ARIA TS 300 S/S..... £150	PEAVEY Centurian..... £200	ROLAND SH09..... £399
ARIA PE1000 Used..... £175	PEAVEY XR 500..... £255	ROLAND CR78 Rhythm Unit..... £349
ARIA ES500 S/S..... £175	PEAVEY XR 600B..... £275	ROLAND CR68..... £249
ARIA YS400..... £185	CARLSBRO Martin 150..... £245	ROLAND RE501 Echo..... £449
YAMAHA SF500 S/S..... £175	CARLSBRO Stingray Bass Combo	ROLAND NEW TR808 New Rhythm
YAMAHA SA 2000..... £345	..... £275	Programmable..... £699
WASHBURN Stage and Trem..... £250	CARLSBRO Cobra Lead..... £199	ROLAND Doctor Rhythm..... £75
WASHBURN White Eagle..... £299	MARSHALL 100 M/V Head..... £265	WASP NEW! Deluxe..... £299
WASHBURN Raven..... £199	MARSHALL 50 M/V Head As new	WASP Synthesiser..... £169
Ovation Breadwinner inc. case..... £129	..... £175	CASIOTONE MT30..... £99
FENDER Strat. Gold plated, used..... £250	MARSHALL 50 M/V Combo..... £299	CASIOTONE M10..... £69
IBANEZ ST300, new..... £245	MARSHALL 4x12 Cab..... £175	CRUMMAR DS2 As new..... £425
FENDER Precision, used..... £225	MARSHALL 100w Mixer PA Amp, used	H/M P73 Electronic Piano..... £999
	..... £195	
	PIGNOSE 150R 112 Crossmix..... £325	

Send SAE for our Amp, Guitar or Keyboard Fact Sheets

**ABC music**  
14/16 High Street  
Aldershot, Surrey  
Tel: (0932) 40139 or 54877

Instant  
Credit up to  
£1000—Ask  
for written  
quotation

## ROLL YER OWN

At last, a precision engineered, high spec. alternative ideal for budget home recording setups, demo. tapes and masters.

The AS6002 standard features include:

- ★ 3 $\frac{3}{4}$ , 7 $\frac{1}{2}$  + 15 i.p.s. std.
- ★ 4 chan. input mixer
- ★ Track bounce + echo
- ★ I.C. logic control
- ★ Digital tape length counter and many, many more
- ★ Excellent tape handling
- ★ Nab/Din replay eq.
- ★ Peak reading meters



Distribution:  
North - Audio Service Co. 06632 2442  
South - Movement Audio Visual 0278 42 4560  
or contact  
Audio Systems Components,  
19 The Green, Theale,  
Berks, RG7 5DR —  
(0734) 302108

FREE REEL  
AMPEX 406 WITH  
EACH MACHINE

# THE DAILY SLOG



## Didy Lake hears about life's bread and butter slices from Modettes manager Bob Black.

When there's a gig in London I get into the office extra early, about 9am, usually it's between 10.30 and 11, and check that the equipment is leaving where it is supposed to leave. The PA company don't care, it's only your £500 or whatever they've lost if you don't do the gig but if you don't do the gig you've got, like, 2000 punters who are really pissed off. I check with the backline crew and then hang there because somebody is going to phone to say, shit, we can't get the bass drum from the lock-up store we left it in at the rehearsal room because the guy with the key has gone on holiday, so I have to arrange a locksmith, or take responsibility for them knocking the door down!

If the band is on tour, or about to tour, I have to do contracts for the gigs, contact promoters, arrange all the equipment, check that the various members of the crew know where they've got to be at what time, let the band know what they are doing. When that isn't happening the first thing I do is check through the mail, take the messages off the Ansaphone, then start finding the people I want to talk to.

There are at least one or two of the Modettes in the office every day checking through the fan mail, working out what they're doing, planning out their week around interviews or gigs, studio work, rehearsals, whatever. On the road I tend to be with the band 50% of the time. I always go out at the beginning of a tour to check the crew and that various people are actually doing what they are supposed to be doing - I'm the big boss frightening everybody to pull their fingers out. I usually go back to the office once it is running and back at the end to catch the last couple of gigs, pay people off etc.

I go abroad about four or five times a year for tours, to Europe or the States. Last year was really crazy, I spent about a week in Spain, two weeks in Germany, a week in France, a few days in Holland and Belgium and six weeks in the States. It was the first time I'd been to the States so I stayed for the whole tour.

Although we all work out of the same office I don't have a great deal to do with the Gang Of Four's management. We share each other's day to day and clerical work, accounts, basic arranging, costings, things like that. Linda Nevill manages the Gang Of Four and John Botting was up until recently tour manager for both the Gang Of Four and the Modettes. We had all been doing co-operative 'just

being another member of the band' deals with the bands we were working with which was all very well up until the point where we would earn some money we weren't directly involved in, like publishing, so we rearranged it so management was a separate entity, took its earnings from its work on each band. It separates out management from band.

Management has various expenses, the band has various expenses, so you have to justify these things to each other. When you are talking about being in charge of spending something like between £20,000 and £150,000 a year of jointly owned money you have to have it all sorted out clerically. I don't know a tour manager who hasn't come back from three or four weeks on the road and had to sit down and sort his books out because he can't find £150 or remembers who had it because they didn't sign for it because he didn't have his book with him. Who is going to pay for it, where is that money going to come from? It makes life a lot easier if the management company functions separately from the band because you are the one who is handling these things.

I have the wonderful Eve Dadamo to help me now. Last year we got into a bit of a mess because the person I had working for me would say this was done and that was done and I'd take their word for it but when it came round to Christmas it was a real mess. You get a lot of people who want to be involved, seen around bands and stuff who don't really know about the clerical and bookkeeping and office side because it's just boring, it's just like any other bloody office job really. So now I've got Eve to keep all that stuff straight, all the nasty stuff I don't understand!

I've always thought of myself as a creative manager, involved with the art as opposed to being just a bookkeeper. But you learn really fast about that because unless you are really hard and fast with all the bookkeeping and timekeeping there's nothing left to be creative about - it's back on the dole!

I got interested in the Modettes because it wasn't art, like specifically musical competence and all that kind of crap. It was, like, a good night out, you could go out and get wasted, dance along to the songs, all that kind of thing. I produced their first single, just took them into the studio and produced it, formed a record label around it and put it out. I'll suggest changes in things, work with the band on a creative as well as on a practical level. In a way that's my enjoyment out of it, that creativity.

I feel a bit like an uncle with the Modettes. I feel this enormous responsibility for all four of them as opposed to each one individually.

About once a month we all sit down and have a good bitch, complain about each other. I tell them how lazy they are and they tell me how useless I

am, they say why and I say why and we try and sort it all out. The other regular meetings I have are with the record company. That's the biggest one - hustling the record company. I must be in there two or three times a week in one department or another, whichever isn't doing as much as they should be doing. For instance, if we are recording and want to release a single or album I'll be in touch with the A & R department to talk about which track to release. As far as releases are concerned it is a joint decision between the record company and the band. Records can only be released by mutual consent. The record company might not want to release a track because it is too poppy or too arty or too dubwise or something and the band might not want to release the track they suggest because it makes them look like a load of prannies, so by mutual refusal they come to the track they are going to release.

Before it is released I have to go round to the art department to make sure they're spelling all the things right, getting it in the right colour. They really are stupid. On this label (Decca, now part of Phonogram) we've had three singles out and they have printed every single sleeve the wrong colour. I mean, *Paint It Black* was released and the whole thing was - OK it's a black sleeve with Brian Jones's swimming pool and a black slick and they printed it blue! *Dark Park* was another one. There was a really interesting red and green that was really electric - you needed sunglasses to look at it and they printed the red on top of the green so it came out brown! At every stage you've got to be there because all that happens is that somebody spends their whole time printing sleeves, they don't care whether this fucking sleeve comes out brown or green or blue - it's all the same to them, you're only some fussy arty type trying to stick their oar in and all they want to do is knock off the sleeve, get it down the printer and go down the pub for lunch.

So, you have to chase the artwork people, you have to chase the layout people, you have to go to the printers, you have to go to the pressing plant to make sure they're pressing the thing right, you have to make sure they've spelt things right on the credits on the label, make sure they're pressing enough copies. You have to go to the promotions people to make sure the posters are printed in time for the release, you have to make sure the press ads are booked to coincide with the week of release, you have to go to the press department to make sure they've got enough press copies for reviews. You have to meet the guys who are going to take it out to the shops, find out how long it is going to take them to get from the pressing plant to the warehouse to the shops. None of them care, 90% of them are just jobsworths. They don't really mind if your record sells 100,000 or 150,000, it doesn't make any difference to them, they still get the same amount of money.

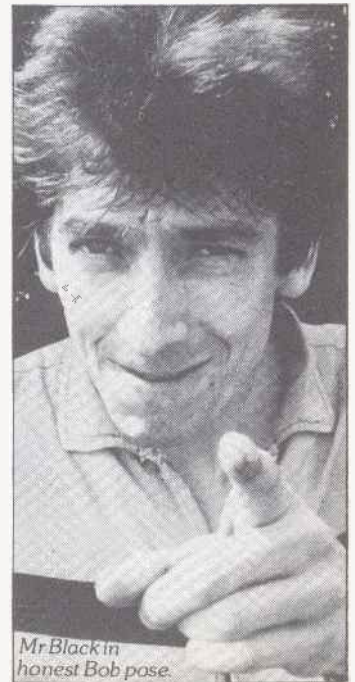
At various times I'll let the band know the whole story because they'll say, 'Look, the record has only done this, what's going on?' And I'll explain that there's this arsehole at the factory who backed a forklift truck into somebody else's department and they all went on strike for three days, so the records aren't getting out of the ware-

house and into the shops, right! That sort of thing goes on all the time, somebody moves the wrong box, drives the wrong van and they all stop work for 24 hours while they have a union meeting to discuss it. Meanwhile, here's your big chance to sell lots of records because you've just been seen on TV!

When I'm not out doing this, the amount of time I spend in the office varies a lot. No two days are the same. Sometimes we'll knock off at 6pm and other days we are still here at 10.30 calling the States or whatever. If there's really a lot of mail you've got to sit down and get through all that because if you leave it for a week you never catch up - you've got to do it every day. Then there are days when you've got to have meetings with various people who aren't gonna be around till 8 or 9 o'clock and you wait for them to turn up then they're late and someone else turns up and it just goes on and on.

It's impossible to maintain regular hours or even days of the week. A Sunday, generally, is just the same as a Wednesday. I go in for a couple of hours on Saturdays and Sundays at least to take the messages off the answering machine. You can have a Dutch promoter who has got to have your MU number by 2 o'clock that afternoon or you've lost the TV show, there's the van that's bringing the equipment from Glasgow that just broke down in Manchester ... you have to develop an attitude that if it's happening you just jump like an automaton and if it's not happening you relax, but you are always working.

You can go out for a few gigs and get really drunk and wasted but at 3 o'clock in the morning when you're ready to crawl home someone comes in from the publishing company to go over the finer points of the deal because they've got to get it in first thing in the morning. You're sitting there with your eyes dropping out of your head discussing the difference between 10 and 15 grand in a year! But now there are the three of us who know as much about the business as we do after the years of being dragged through it. I reckon we've probably got room for another two or three strong acts.



Mr Black in honest Bob pose.





... are often tomorrow's ex-Teardrops. Adam Sweeting talks to surviving singer, guitarist and ex-bass player Julian Cope and finds himself just a gun barrel away from an Explode.

THE Colt 45 automatic is pointing straight at my head and I don't like it. It's waving about a bit, but not enough to stop me being able to stare right down the cold grey muzzle. Unpleasant incidents from Alistair Maclean novels flash through my mind – the drowning man reviews his past.

Julian Cope laughs indifferently at my discomfiture and points the gun at the wall. He squeezes the trigger and has the decency to wince as the hammer falls with a dry click.

We're in a photographer's studio in London's not-very-fashionable Mount Pleasant. The gun, which seems to be real but obviously isn't loaded, was lying innocently on the table. Somehow it suits Julian Cope, who's dressed as usual in a heavy leather flying jacket with fur collar, leather breeches and leather flying boots.

Whatever his socks are made of, Julian is in the news. His band, The Teardrop Explodes, have just made a spectacular ascent of the singles charts with their *Reward* and *Treason*. When we met, Julian had been running around London doing photo sessions for teen magazines. His languid frame, appealingly open face and tousled blond hair could turn this boy into the biggest pop star since Adam Ant (they come and go pretty fast these days, after all).

It's a strange turn of events, since the Teardrops initially came to prominence as part of the new Liverpool front line and didn't seem likely to do anything as obvious as making a commercial hit single. Cope himself insists that gratifying as this success is, it doesn't matter to him and his overview of what he's shooting for with the Teardrops.

But I don't believe him. For a start he's candid about wanting to be 'massive' in the States. And since the Teardrops recorded their first and so far only album *Kilimanjaro*, two band members have left and three more have been recruited. Current line-up is Cope, who has abandoned his former bass-playing role on stage to concentrate on singing and twanging a little 12-string guitar, Troy Tate on guitar, Alfie Agius on bass, former (Polydor) employee and ex-Musicians Only scribe Jeff Hammer on keyboards, and original drummer Gary Dwyer.

Did the ex-Teardrops fall, or did they get the concrete elbow? Well, Cope reckons guitarist Alan Gill was all set to leave anyway when Julian asked keyboardman David Balfe to pack his flightcase, so it made a convenient point of departure. Gill was happy enough to pursue his own future with Dalek I Love You.

Julian is talkative to the point of



Jeff Hammer and Gary Dwyer look after Julian who's busy working out where all the poppies have gone (long time ago).

hyperactivity, but behind his endearingly boyish exterior there beats a heart of cold steel. I remember the gun and suppress a shiver.

It's very much your band, isn't it? 'I s'pose so, yeah. It must be weird for people seeing us who've been into us for a long while, suddenly seeing three new people... um... I'm totally aware of that, you know. That's why I don't wanna have too many band photos, cos if people are gonna come and go, which they may well do – I don't want them to but they may well do – there's nothing worse than having a lot of photos of a band and everybody's going "Who the hell's this?"'

So who's having his picture taken? Why Julian, of course. Every inch the trainee pop star, Cope decided to stop playing bass on stage to concentrate on his singing and frontmanship. 'I felt like we never had a real rhythm section,' he explains. 'Having a rhythm section that's linked to the lead vocals is bad, especially when the lead vocals in our case doesn't always make sense with the bass. I was always determined as a bass player that I'd write bass lines that stood up as bass lines. I got to the stage where I could sing and play bass quite easily, it's just that physically it was exhausting. Doing something like *Sleeping Gas* that has a definite sort of bass line, when the vocals go haywire at the end it's really difficult, but it's like a challenge and it's something that you just learn to do.'

'It was a real challenge to learn to sing when we first started, we were gonna get a proper singer in for ages cos I just couldn't sing at all. But I was determined to sing – I so much wanted to be a singer. All the people that I admired were just great singers, and it seemed so crazy that I would just have to give up. And in the end I just thought "right, I'm gonna fight, really learn". I knew what I wanted to sing about and I didn't want anybody else communicating what I was basically articulating in the songs.'

The Teardrops' material, inevitably, is essentially Cope's, with him writing the basic songs and then telling the other musicians what he wants. For instance, if Julian writes a song on guitar, he'll supply the chords while Troy Tate picks out the most important parts on lead guitar. 'I've got a very definite way of writing on keyboard as well,' he continues, 'cos I write all sorts of stuff on harmonium,' (the band recorded a John Peel session recently during which Julian sang a version of John Cale's *I'm Not The Loving Kind* accompanied only by said harmonium).

'Jeff's execution of my keyboard lines is

... better than mine would ever be. But it also gives him a different approach to music. Like I'll play a keyboard line and he'll say "what's this? what's this?" And he'll say things like "well you shouldn't really be able to do that".

'Then I'll say "yeah, well that's OK" - cos it isn't a big deal, y'know. He's a real good keyboard player, but it's good because he's got respect for what I'm doing, otherwise he wouldn't have wanted to be in the band.'

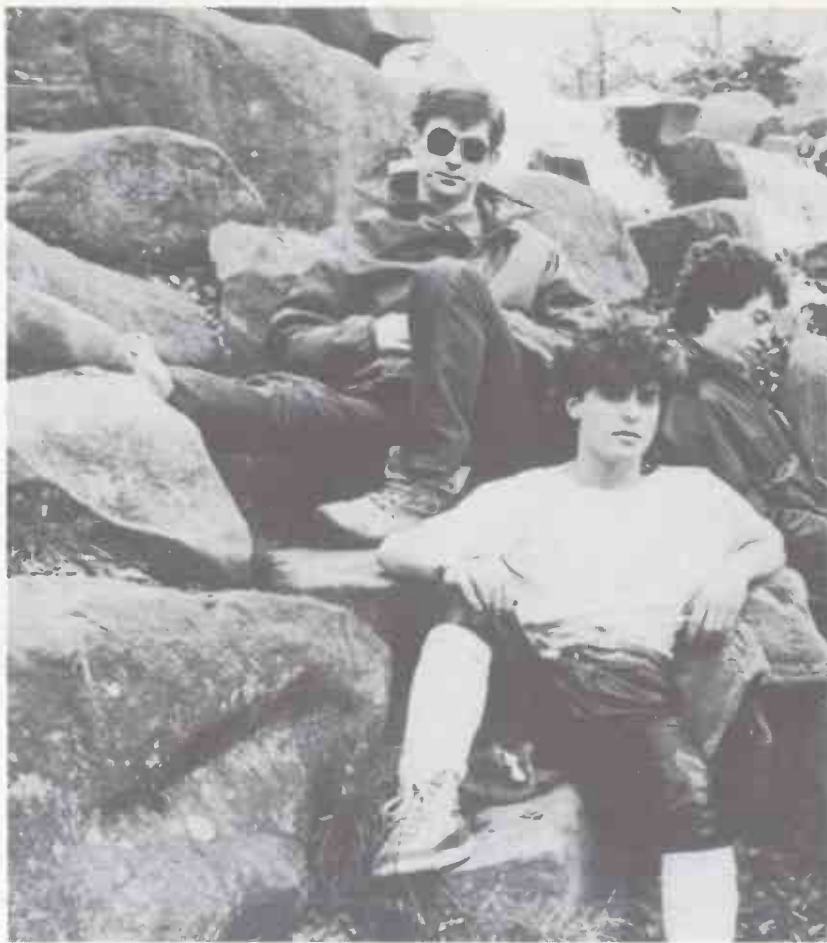
But the whole concept of 'a band' isn't altogether to Julian's liking, nor, he claims, to the taste of the other members. He feels it's a limiting framework. 'We've all got this real anti-band thing in us, like I don't wanna be in your average band. Everybody wants to be a band nowadays, and it's not a very high thing to aim for. I think the reason we've got a band is I like the concept of The Teardrop Explodes, really. I want it to be remembered as a successful thing.'

But if you don't really want a band, what exactly are you aiming towards? 'Just music, full stop,' answers Cope. 'I wanna use strings on the new album. A lot of the stuff that I write is just harmonium and vocals or guitar and vocals, and I don't want it to be a band where you've got a drummer so you have to use drums on every song. That's, like, stupid. I think it should just be whatever you write the song, whatever attitude you write that song with, that's how the final execution should be. It just makes it a lot more open.'

'Like say Echo and the Bunnymen have got a definite style, and they write songs within that style, and I write songs totally outside styles. If you're talented in any case, you've got that basic style in you,' he adds modestly. 'Anything I do I know is gonna sound like Julian Cope because it's such a definite way of singing. My lyric style, and my attitude to chords is very... I just sort of hit anything that fits around the melody. A lot of the time you could put like three or four different chord sequences underneath what I'm singing, which is like important, y'know.'

At the moment, anyway, the Teardrops line-up suits Julian pretty well, probably because the others don't try to tell the blond bombshell what to do. David Balfe, the previous keyboards player, evidently had a mind of his own to such an extent that Julian had to compromise! 'It's got more basic,' he says of his current crew. 'We got rid of a lot of stuff - like there were too many synthesisers before. Now we just use a Hammond and a grand piano on stage, and just a small ARP string synth.'

'It makes it a lot clearer. You can just go on and say "right, what sort of sound do we want?" Like a Hammond is just a very real sound, and you can't hide behind a lot of twiddly noises. It worried me that we could do before. I think you can use things like string synthesiser and they can sound



The new Teardrops left to right: Troy Tate (gtr); Alfie Agius (bs); Jeff Hammer (kb).

like there's emotion in it, but you've gotta be really careful all the time.

'With something like a piano, it leaves you just naked. The title song of the new album, *The Great Dominions*, it starts off the first two verses just piano and vocals, and that's the most naked you can be. It means your performance has gotta be good and your songs have gotta be good. If the content's good and then the arrangement's good on top, you've got bonuses then.'

'But I like the idea of doing songs that I can perform with just guitar and vocals if I want, and they still stand up as good songs. Cos I am into songs, I'm into writing good tunes.'

But if, as it appears, Julian is metamorphosing rapidly into a pop star, isn't this going to restrict him and lumber him with all sorts of other expectations from his audience? He laughs nervously. 'Um... yeah, but that's a long way off isn't it, really?' Well, you're definitely becoming the figurehead of the band. 'Yeah, I suppose so (pause). I'm just gonna have to see.'

'The plans for the new album are not particularly commercial. In actual fact I think everything we do is commercial

because I think everything we do is good. Have you heard the B-side of *Reward*, *Strange House In The Snow*?' Yes. 'We're doing a film for that. It's quite off the wall really. I play viola on that one instead of bass - I just wanted to consciously write something different. That was done from a poem I'd had for ages, and the first verse was like cut-ups and it was a conscious decision to write something that didn't sound very much like Julian Cope.'

'And the delivery is very different, sort of like atonal opera or something. The film for *Strange House In The Snow*, the script is really pretty strange. I just wanna be able to do those sort of things. The B-side of the new single is six minutes long and it's me doing a guitar and vocal thing. I need those anomalies in my work to make the front line stuff work. I wanna do a film for the new B-side as well.'

Cope maintains that this degree of flexibility which he is trying to build into his work is vital to him. In essence, it means that he can both work with the band while finding room to dabble with little solo ideas. 'I just wanna be able to do those things. I think it's more important to me than just being famous. I don't think it's particularly great to get to number six (as



The old Teardrops: drummer Gary Dwyer lounges in front of moody Mr Cope.

Reward did) – it's nice that we did, it shows that a lot of people really did want that record. But it's not the be-all and end-all. If the next single doesn't get to number six, I'll be sad but I won't be totally wrecked.'

Cope is currently unsure about what direction the Teardrops should take regarding chart success. He isn't keen on the idea of manufacturing hits deliberately, and would even prefer to release something like the low-key *The Great Dominions* as a single. It is of course early days to be thinking about the Teardrops in terms of market share growth curves and other marketing paraphernalia, a fact Julian is well aware of.

'Obviously I'm gonna have to take the next six months as they come and see whether what I'm saying now makes sense in the context of TV performances and things like that. But after watching all the Super 8 film we did in America, it just made me feel a lot stronger about what I was like on stage. I was really happy about the way the band came over on stage.'

The Teardrops' Yankee visit focused on the Eastern seaboard of the Land of the Free, encompassing such fab locations as Providence, Baltimore, Boston, Washington, Albany, Mount Vernon and

of course the Big Apple, where they packed out the Ritz and Privates – both 2,000 seater halls.

The band had a great time, but it took its toll (so soon! And so young!). 'I was totally exhausted by the end of it,' continues raconteur Cope, 'really totally wrecked. In those two weeks I had to go to the doctor twice, and he said you've gotta stay off all drugs and drink. So it was like pure adrenalin all the way through. It was great, we had a fantastic time.'

Julian and drugs generally seem to get on well together, but he keeps a rational perspective on the subject. 'People started saying "Oh, how important are all the drugs things?'. They're not important – the only thing I'm not denying is that we take them, cos it seems like a big thing to deny that you take drugs. Somebody once wrote: "It's about time Julian Cope started writing some *real acid lyrics*".'

Of course That Word gets mentioned. Inevitably, I suppose. 'The thing about *psychedelia* is that I hate the fact that it's such a revivalist term. I mean, we're influenced by a lot of those late-Sixties bands and I couldn't deny that. You know, Tim Buckley and Love and the Doors and the Velvets... The Velvets? Somebody go

and tell Lou he was just an old hippy, but don't get too close... To continue: 'I don't think they're like *really* psychedelic bands,' opines Julian. 'They existed within that scene but they were powerful on their own. They would have been powerful without drugs. They weren't like the Chocolate Watch Band and 13th Floor Elevators, whose whole reason for existing was the drug culture thing.'

But Julian, a self-confessed vinyl fetishist, has by no means restricted his aural researches to forgotten bands from the psychedelic era. Recent favourites include Pere Ubu, the Pop Group and (especially) the Fall. Aside from the Teardrops, he's currently pursuing a project to release a compilation album, culled from the archives of Philips records, containing his favourite songs by Scott Walker. It'll be released on the Zoo label which used to release Teardrops products, but which now serves as their management and general organising company.

In fact Cope's brain seems to be bursting with ideas in all directions at the moment. 'I wanna do cover version EPs and things like that,' he says unexpectedly. 'In fact we're gonna do a cover version EP. We're gonna do things like a John Cale song (he's a Teardrops fan too – check the brass on his new *Honi Soit* album), a Bacharach and David song, a Vic Godard song... I wanna do *Dream Away off Ol' Blue Eyes Is Back* – start gettin' things into context, cos everything's sorta separated and categorised, and all those, they're just good songs. There's no big deal about them, I like those songs.' Cole Porter, perhaps? 'That's it, yeah!' says Julian gleefully. 'They all fit. If it's a good song it's a good song, and Lennon and McCartney can go next to the Pistols, cos those Pistols songs are good songs.'

'And there's no point in denying and saying "yeah well it only works on this level"'. Like, *She's Beyond Good And Evil* by the Pop Group is always gonna be a classic song, I think. Same as *My Little Red Book*, or *I Say A Little Prayer*... Things should be very timeless – they shouldn't be written for this week or somethin'.

Something which isn't timeless is the Teardrops' brass section, which was effectively just loosely attached to the band anyway.

Julian comments: 'I don't like the idea of people thinking "Oh, this is the band that uses trumpets". We used trumpets on *Reward* cos trumpets fitted.' They were quite an unusual trademark, though. Julian agrees. 'Yeah, I like the idea of solo trumpets, it's a very uplifting sort of sound. Very much an "into battle" sort of sound, almost medieval.' Still, it's goodbye for the time being to Terry Bailey who tackled all the brass work in the Teardrops' live show, with a little help from mixing man Bob

**The tastefully stencilled computer read-out advert says  
'Leicester: Britain's Most Successful City'.  
Mr Henderson (words) and Mr Pyke (pictures) investigate.**

**S**t Pancras was engulfed with wolf-hungry Spurs fans on their way to Sheffield for a cup semi-final. Amidst the flurry of blue and white I tried to recall any notable music that Britain's most successful city might have produced in the past - Family and Showaddywaddy, that's about it really. For all its heart-of-England positioning, Leicester seems to have been less than productive, and hardly a pulsating core. There is, however, a broad spectrum of musical invention in progress. On the first warm day of the year I spoke to four of Leicester's hopefuls about their plans and how they're putting them into practise.



*The Sinatras Rob, Phil, Tommy and Nev*

### **The Sinatras**

Phil Birtles: Drums and backing vocals  
Rob Grant: Guitar and vocals  
Tommy Hamilton: Vocals and bass  
Nev Hunt: Guitar and vocals

The history of the Sinatras is quite confusing: as Room 101 (based in Chesterfield with Martin taking vocals instead of Rob) they recorded their first demo of four tracks at Woodbine studios in Leamington Spa. The intrepid four duly sent copies of the tape to some of the major companies, phoned for appointments and on the chosen day journeyed to London for guidance.

'A&M thought one of the tracks was quite good and the A&R man actually played it twice which is supposed to be quite good. Island weren't too keen and the EMI A&R man left a note saying he couldn't see us now but would like to see us play live. It was then that we realised that to get any further we would have to get some live gigs in London.'

On their return the group and Martin parted company, Nev moved to Leicester where Phil already was and the band continued as a three-piece with Tommy singing lead vocals. 'The name was changed to the Sinatras because it looks better visually and for some reason it has a familiar ring. After some time we realised we needed someone else as we weren't getting the best out of the new material we were writing. We saw Rob playing with another group, we could tolerate his silly humour so we asked him

to join.'

The group in this format worked on new material, recorded more demos and sent them to labels and gig promoters. More interest was created this time and the group played several London dates. 'We've had quite a good response playing in London, but we're not the kind of band who'll build up a fashionable following, the music's not revolutionary. We show influences of Talking Heads and Elvis Costello but we're developing our own sound. Audiences in the Midlands are more responsive, we have no stalwart fans - people just come along to enjoy themselves, I don't think audiences in London always do. The best gigs have been outside of Leicester, at Shifnal for instance people come from miles around on a Saturday night to see a band and have a good time. That obviously makes us enjoy ourselves and play better, it's always a good gig.

'We like to present an image of sorts on stage, it's important, the days of playing in jeans and T-shirts are over. We wear suits and feel it makes it a bit of an occasion for us and the audience. We couldn't get into anything like the new romantics as it wouldn't be us and there's no point in jumping on bandwagons.'

'We try to make gigs pay for themselves as only two of us work, but for recordings we have to raise the money equally so we're not in the position where we can do exactly what we want when we want. We'd probably be worse off if we lived in London, we thought about mov-

ing but there's no point unless we had some strong foundation to go to. It's not really a question that we're in the position to consider at the moment. We're pleased with the way things are going and we expect to keep playing and progressing. We've got a single out just now on a friend's independent label that should give use the opportunity to reach a wider audience. Ultimately we'd like to go on tour with someone, do an LP, all the usual things.'

The Sinatras' equipment varies in standard from member to member due to cash flow. Rob uses a Fender Stratocaster which he plays through a Peavey Classic combo with a chorus pedal on very slow throughout. He claims that this combination gives a sound more like a Strat, and reckons that the Peavey is a bit 'pingy'. Nev has a Les Paul which he plays through a Vox AC30 with an MXR Distortion pedal and a Cry-Baby wah-wah for one song. To make the guitar more personal he has put a DiMarzio Super Distortion on the neck and a Dual Sound on the bridge. Tommy plays a Guild single pickup bass through a Yamaha 100watt amp. 'I used to use a Precision but I found it too clumsy and heavy,' he says. 'The Guild has much better balance and is easier to play.' Believe it or not, Tommy claims to boil his bass strings which gives them a longer life. Phil plays a four-drum kit and ties them all together to stop them slipping around; he uses his battle-torn sticks upside down. 'I'd like a new kit.'



*New Age* Andy, Barry, Ian and Martin

#### **New Age**

Martin Bubidge: Synth

Andy Hendry: Drums

Barry Morris: Bass, sax and vocals

Ian Morris: Guitar

Gary Carter: Management and advice

New Age have been around for one year with the current line-up. In 1979 they were entered for a schools' rock competition organised by the Phoenix theatre in Leicester. The band won and got a BBC Radio Leicester session and a gig at local nightclub Baileys.

'We'd been messing around for a while and someone entered us for the competition. After that Gary (of the Swinging Laurels) got us a few gigs and as we got more confident we started looking for our own. We had one important gig in Coventry and the keyboard player opted to go ski-ing, so Martin stepped in and has been with us ever since.'

New Age are in fact from Groby just outside of Leicester and a track of theirs was featured on local label S&T's compilation LP *Where The Hell Is Leicester*. 'It took seven months to come out and it was very vague throughout. The recording was at Street Music in Leicester, a 4-track, but it was so slow it was farcical. The engineer really means well but he was so out of it. It's good to get something out but the LP doesn't really give a true picture of Leicester as there's lots of disco bands and heavy bands (who weren't on the LP). The LP comprises people who knew or were involved with the S&T set-up. Each band had to pay for their own recording and in turn

received 35 LPs free. The pressing of 1,000 has sold out now, and John Peel has played a few tracks on the air. We're not really interested in making money, we just want to get ourselves on the map.'

The conversation moved on to the band's live performances. I saw them last year in London at a Scala cinema All-Nighter - I really enjoyed their set but the band were a bit disappointed. 'We'd never played with monitors before, it really put us off hearing ourselves so loud. We played our more commercial material which in retrospect was a mistake as the other bands turned out to be very obscure. We're conscious of our presentation live, but we'd never let the visual side overshadow the music. We really look forward to gigs, we don't play as often as we'd like so we're preparing for it two or three weeks before. We rehearse two or three times a week which is really exhausting as we all work to finance the band for gigs and recordings.'

S&T intend to release an EP by New Age in July. I asked the band if they had thought of fixing their sights any higher. 'We haven't really tried, the demos that we've done we haven't been too pleased with and have been reluctant to send them round to many people. We did send a few off, A&M wanted to hear more but didn't feel it was altogether right for the company. When we go into the studio we try to do justice to ourselves rather than aiming to satisfy the whims of some A&R man. We're not sure about major labels anyway, we don't want to be hyped up by anyone. We're fully prepared to earn what we get.'

New Age claimed that they didn't plan ahead, but the overall feeling of the band is that they are very organised in what they do and what they are about to do. The band were in the process of preparing for the recording of their EP on which they are using a pianist to add another dimension to their music. From what I've heard, New Age have made significant steps with their music and the progression goes on and on. 'Within the band we all work to make one sound. As long as the song's good as a whole it doesn't matter what each individual is playing. We have one ego and that is the band.'

Although the group don't really see the necessity for very good equipment, and steer clear of effects that could possibly label the band, their array of hardware reads as follows: Martin plays a Yamaha synth and a Vox organ which he likes to use through a Peavey combo. Barry uses a Grant *Precision* copy bass which he really likes and plays through a Carlsbro *Stingray Super* bass amp. Barry also uses a pre-war saxophone for a couple of numbers; having heard his playing I think he should use it even more. Andy has a five-drum kit with Premier heads, and for that extra special sound he has a Multivox *MX57* electrosnare. Finally, Ian has a Yamaha *SG400* six-string which he uses through a Peavey *Classic* combo with occasional self-made pedals depending on how well he has made them.

## Il y a Volkswagens

David Allonby: Guitar  
Francis Brown: Guitar  
Craig Thornber: Drums  
Paul Tickle: Vocals, synth

Il y a Volkswagens were formed as an alternative. Paul and Dave were suffering record company and management problems in the Sincere Americans and got together with Francis, a bassist and a drum-machine to try some different approaches. The Sincere Americans finally folded and the band came into its own. Craig joined with a replacement bassist who had been ousted just before the interview, temporarily halting their progress.

'We did a 4-track demo and did the usual thing sending it round the labels. Rough Trade weren't that interested, Human said they'd like to see us play but were never heard of again, and 4AD suggested that it was all right but nothing to write home about. Through pure chance Mike Hinc, who was organising the ICA Rock Week, heard the tape and asked us to play. We supported Caribart Voltaire and got a really good response, the result of which was a lot of major

label interest (Island, Phonogram and Dindisc) and a London Capital Radio session. Geoff Travis of Rough Trade heard the session and asked us to do something with them, which has since developed into a manufacturing and marketing deal for two releases on our own label.'

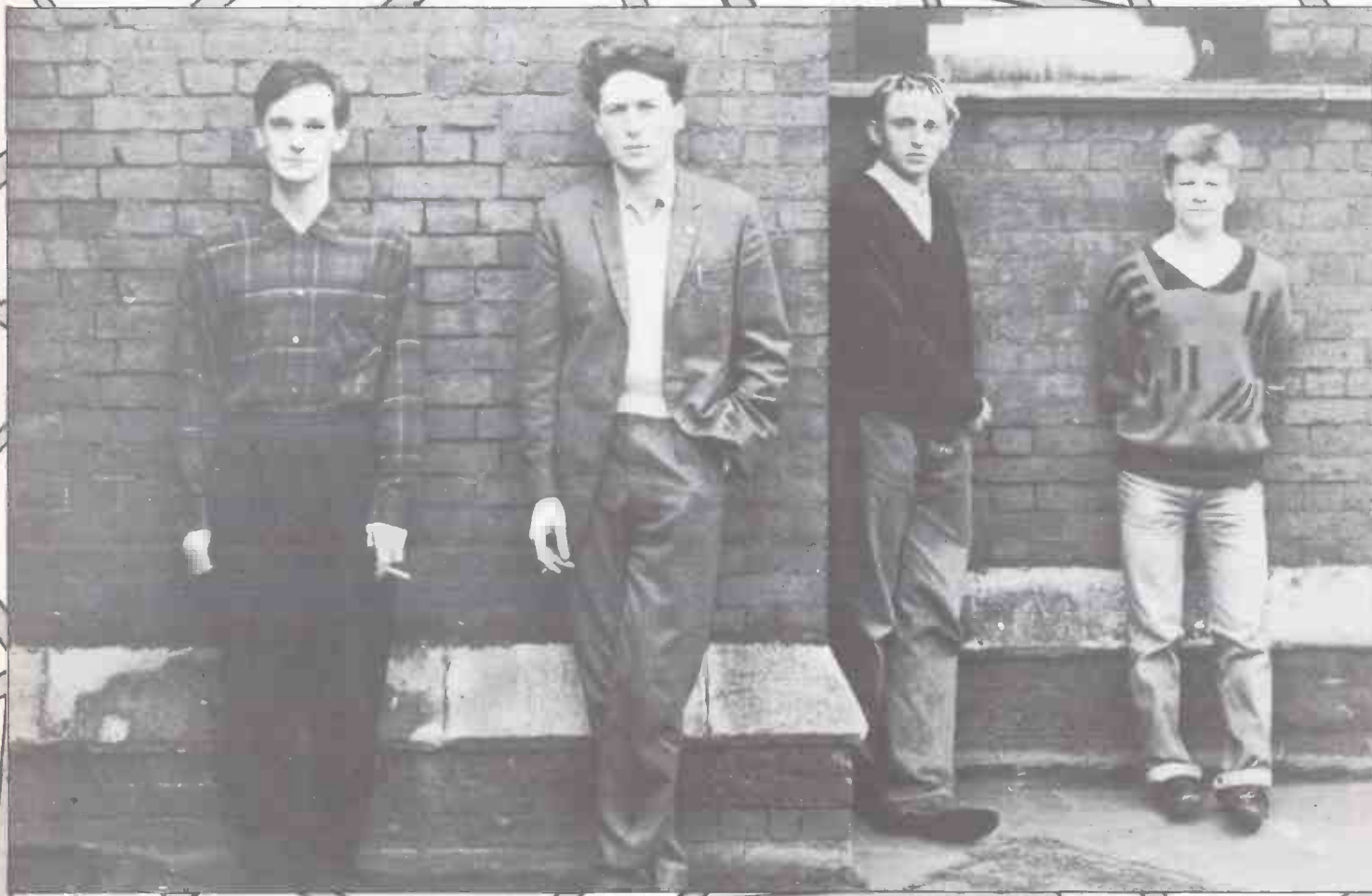
Il y a Volkswagens were in Blackwing studios in south-east London over Easter to record two singles for simultaneous release. The group have played a series of London dates at places like the Lyceum, the Moonlight and the Rock Garden. 'We had to beg for our first gig in Leicester but since then people have just offered us them. Mike Hinc, who is now involved with Rough Trade, has got us a few but since the disappearance of our bassist we have been unable to play. That's also awkward as we really don't know what material we'll be keeping.'

From what I've heard the songs are highly moving pieces: powerful percussion, hard guitars, versatile synth and vocals. 'Everyone has written lyrics, they're drawn from various emotional sources. The songs are structured but leave room for improvisation, which will give us more scope when we get over our nerves and become a bit more compe-

tent.'

I'm told the name arose from a book that Paul was reading which featured a group romantically dubbed Sick Dick And The Volkswagens. For some reason the 'Sick Dick' was dropped and replaced by 'Il y a' which the group felt was a bit different from the usual 'The'. I wondered if they had considered leaving Leicester as they were not born and bred there. 'We're very comfy here, it's very central. We don't particularly like Leicester but we don't really have anywhere else to go.'

The instrumentation in the group, and possibly the individual sound that has developed, came about through the availability of instruments. Paul uses a Wasp synth through a small custom-built PA system, which he manages to make sound like no other Wasp I've heard. Dave has a copy *Les Paul Special*, which he really likes - he uses it through a copy MXR fuzz-box into a Vox AC30 (which is not a copy). Francis has a semi-acoustic Guild, a Coloursound fuzz-box and a Carlsbro 40watt combo, and Craig uses a Premier Olympic drum kit. 'We'd like to use more instruments, percussion *etc* but apart from a bass player we don't want to increase the line-up.'



Il y a Volkswagens Paul, Francis, Craig and Dave

### The Swinging Laurels

John Barrow: Tenor sax, drum machine and vocals

Gary Birtles: Alto sax, synth and vocals

The Swinging Laurels are not an orthodox group: they have never played live, their approach to music is quite new and with the interest currently being shown in them they are obviously reaching the parts that other groups cannot reach. John and Gary used to work together, bought their saxophones together, learnt from *A Tune A Day* and went their separate ways always promising to play together one day. In April 1980 they finally did it.

'We had similar ideas but it was fitting it in with what we were doing. We started playing together just for ourselves and recorded a track for a Leicester compilation cassette *Crying Out Loud* on a cassette recorder. We liked the result and decided to record some tracks on an 8-

track. After two months we decided to send it off to a few labels just to see what their reaction would be. Rough Trade liked the idea but couldn't quite see the purpose of it, Cherry Red thought we were too diverse and Dead Good said they liked it and wanted to release it. Dead Good (see feature in *SI* July '80) wanted to package six tracks on a 10in single so we went in the studio with a drummer and did two more tracks.'

At this point, Dead Good had become involved with the Some Bizarre label and the subsequent LP - the Laurels project was temporarily shelved. 'Eventually Dead Good got Decca interested in some kind of record deal and Dinsong interested in publishing. Dindisc have since taken an interest in a record deal and at the moment we're negotiating between them and Decca.'

The actual music is like a professional, tinny, Tesco muzak, very commercial with soulful sax and vocal effects. 'The songs are based around the drum

machine, the lyrics mean nothing, it's just fun music. We'd like to hear it on the TV behind newscasters or programme presenters.'

But what of the future: would the duo be able to play live and what direction did they see themselves heading in? 'We want to play live and make it into a big event, we'd probably use taped backing tracks building the sound up in layers as we do in the studio. We want to aim at young kids, we've talked of having a Laurels fan club with fun packs, free badges, clap-traps and competitions like: "Be a Laurel for a day". We'd also like to get involved in films and videos.'

The sound is impressive and unique: Gary uses a Roland *SH* synth and a 'cheapo' Pennsylvania alto sax which he claims has a good tone. John uses a Yamaha tenor sax and an Elgam drum-machine. 'We'd like to try lots of effects on things, we use varispeed and echo, but we'd like to try chorus and ADT amongst other things.'



The Swinging Laurels Gary and John

The four groups had general opinions on facilities in Leicester. **Sound Pad** was voted the best musical stockist: a comprehensive selection of instruments and associated hardware, and good quick service. Local recording facilities leave much to be desired, the Sinatras and New Age opting to go out of town to Woodbine studios in Leamington Spa, and the Swinging Laurels and Il y a Volkswagens both using studios in London for their forthcoming singles. Two 8-tracks will be opening shortly, **Soundlab** and **Joe's Place**, so possibly these will give better service to the local hopefuls.

There was a mixed reaction for local record label **S&T** - New Age thought they had all the ideas but not the means to go about doing them. The Sinatras and Il y a Volkswagens were not too keen on their treatment of bands concerning the compilation LP. Neither of them were

included (the former not asked and the latter refusing to participate due to the project's vagueness). The bands discussed the weekly rock press and their treatment of provincial acts - the general feeling was that they had too much power and dictated to people in the provinces.

So that was Leicester for a day. There are obviously other bands there who deserve a mention, but the four bands featured are producing music which is already breaking out of the area. This could be the starting block that the area needs. It would be a tragedy if the wealth of music produced there and in similar environments around the country were not given a wider audience, but once a band has developed a following in its particular zone the transition to a wider audience can be impossible. Leicester can produce and supply but the road out is not as easily located as the M1. ■

### LEICESTER DISCOGRAPHY

#### Singles

The Amber Squad *I Can't Put My Finger On You/Tell You A Lie* (S&T 7in)

The Observers *This Age/Suicide* (S&T 7in)

The Sinatras *Happy Feeling/You May Be An Angel* (Dining Out 7in)

Explicit Corpse *That Day Before . . ./I Gotta Gistol* (an Explicit Corpse article)

#### LPs

Various Artists *Where The Hell Is Leicester* (S&T) (including tracks by Future Toys, Last Resort, Mental Notes, New Age, The Observers, The Amber Squad and others)

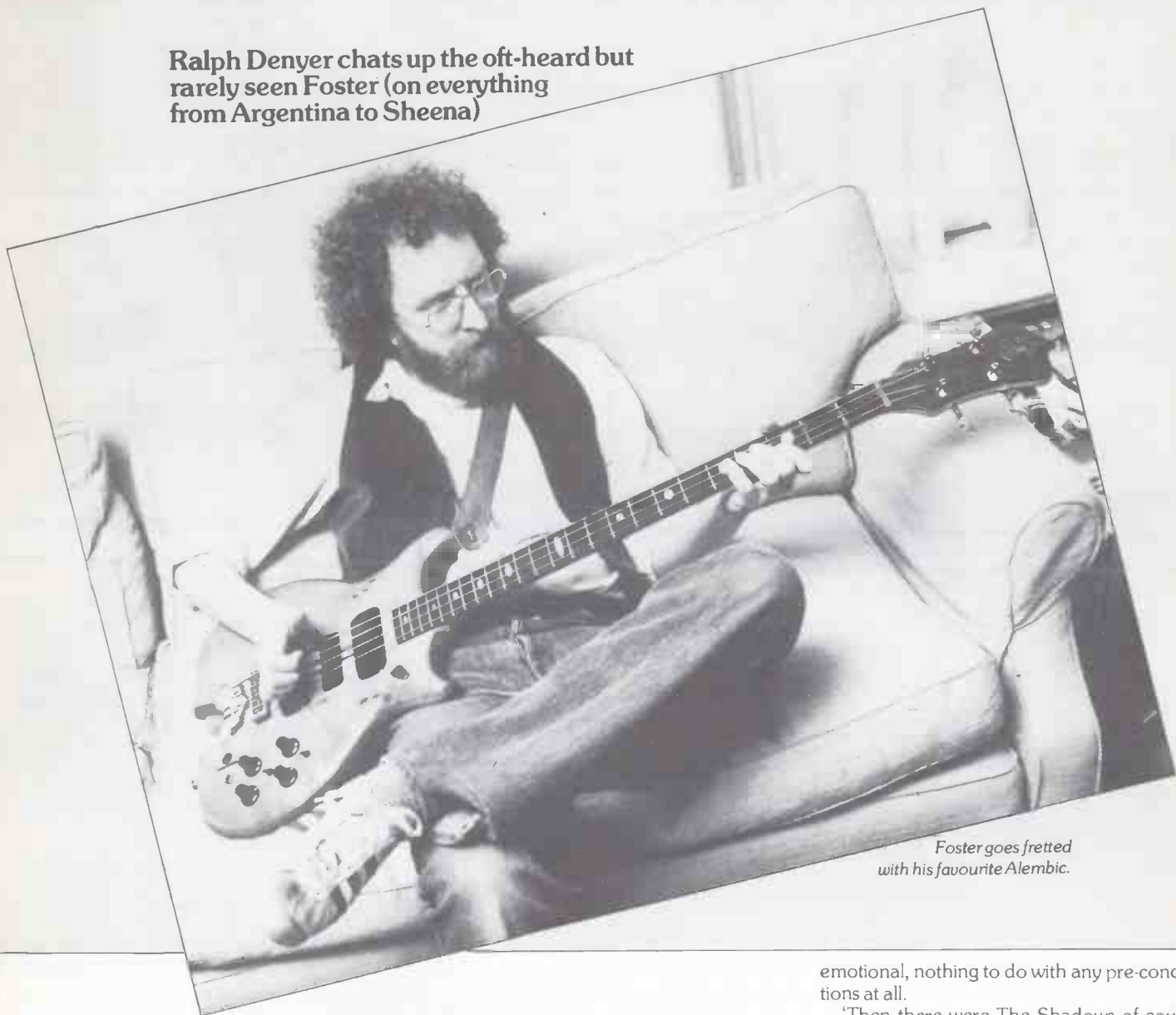
#### Cassettes

Various Artists *Crying Out Loud* (including tracks by the Swinging Laurels, Cold Tap, New Age, Wendy Tunes, Big Arthur and others)

All available from Rough Trade in London and the usual independent outlets, except the cassette which is available from Gary Birtles, 68 Howard Road, Leicester.

# Mo Foster: Wide-Ranging and Fretless

Ralph Denyer chats up the oft-heard but rarely seen Foster (on everything from Argentina to Sheena)



Foster goes fretted with his favourite Alembic.

Been to see the movie *Lost And Found* or maybe *Silver Dream Racer*? Recall a little ditty entitled *Don't Cry For Me Argentina*? Maybe you're a heavy metal fan and bought Michael Schenker's last album? Or perhaps you like to take a good toke and put on the headphones and drift away to Gerry Rafferty's *Night Owl* or *Snakes And Ladders* albums? See Cliff Richard and The Shadows' last gig at the London Palladium? Did you hear Sheena Easton's *Nine To Five* and *Modern Girl* singles? Or maybe you went to see Jeff Beck on his recent tour or bought his *There And Back* album? All the above mentioned have a human link, premier bass guitarist and session musician Mo Foster. He played bass on all of them as well as on countless other records, jingles and movies.

Mo has been a top session player for around 10 years or more and now is so highly regarded

that he is in a league whose numbers can be counted on one hand. When he finished touring with Beck recently, I took the opportunity to interview him expecting it to be a good one. It was better than that. Please read on.

I asked Mo to relate his development as a player and some of the key points in that development. 'There are always moments when you hear a sound for the first time - it might have been in your head for some time without you realising - but when you hear the sound you think: Ah, that's it. That has happened several times. When I was very young - I had been a violin player - while I was in my teens a friend played me a Duane Eddy record called *Rebel Rouser*. Immediately, I felt that sound was for me. I'd never actually seen an electric guitar before. That's what people can't really appreciate now, that it wasn't until I was 18 that I actually saw a bass guitar, up until then they just weren't around. So as far as my first interest in the bass guitar, it was totally

emotional, nothing to do with any pre-conceptions at all.

'Then there were The Shadows of course, who started off just about everyone I know: if they'll own up to it, they were influenced in some way by The Shadows which is why I quite enjoyed playing with them.' Looking through a list of Mo's credits you can see that he has in fact worked with Marvin and Farrar, The Shadows and has done a Cliff Richard plus Shads tour in recent times.

Mo became pretty infatuated by Duane Eddy's bass register guitar playing and pioneer British bass guitarists such as Jet Harris and Brian Locking. In those days you couldn't go into a shop and buy a bass guitar, they just were not available in Britain. Mo had to content himself with converting a standard guitar and making pickups out of old soap dishes! Around 1964 he started at university with the goal of becoming a physicist. While studying he became interested in playing drums and did in fact play the traps in small jazz groups for around three years. 'That was very important for me because the bass and drums are so close that to have a knowledge of the other



instrument is highly desirable. Then some people at university were getting a band together and lacked a bass guitarist. So by accident I went back to the bass guitar again and later that group became Affinity.'

The group rode on the crest of the Chicago/Blood Sweat & Tears jazz-rock wave and did quite well as a pro band, with an album released on Vertigo records. Next, Mo joined singer Mike D'Abo's band and continued to develop his playing. 'I started to listen to other bass players in the melodic sense. I listened to American bass players like Leland Sklar as well as McCartney. Melodic playing started to appeal to me. Before that I'd been very aggressive in my playing. I listened to a lot of string bass players and adapted what I heard from them, so it was lots of notes but it didn't mean a lot. My playing had just been a flurry of waffle (laughs).

'So I was listening around and the whole Tamla Motown thing was happening. I think the Tamla thing was dominant in pushing the bass guitar - as a rhythm instrument - to the front. Before that it was just a plodding thing in the background. Suddenly on Stevie Wonder and Supremes records you heard this bass right out at the front, this lovely fat punching sound.'

Like everyone else, Mo thought the bass player must be some ultra-hip black soul brother. He was as astounded as anyone to discover that very often on Motown records the bassist was in fact a rather incongruous looking middle-aged white woman, the legendary Carol Kaye.

Had Mo ever seen any of her books on bass playing? 'Yes, I used them. When I was over in the States for the first time I managed to hunt down about five of them. She'd written out her own bass lines which she had played on the records. It was *marvellous* to get hold of those books, of course, there was nothing like them in this country. That started me off reading music. I knew the records and saw these lines written out and I thought that it couldn't be too hard. It took me a couple of years progressing slowly. You teach yourself in the end, you can't be taught to read. You can be guided, but you teach yourself in the end. It took a lot of work, I was working my way through a Ray Brown (double bass) tutor as well which probably accounts for some of those eccentric fingerings I use which are half double bass and half bass guitar techniques.'

Mo is the first to admit that there was a transitional period during his metamorphosis from session player to sight reading session player. 'I'd been turning up at sessions and bluffing furiously. There'd be a part put in front of me and honestly, it meant nothing to me. But my ears were all-encompassing so I could bluff very convincingly, sometimes with a whole orchestra and nobody would know. I became too nervous. It became a nerve-racking experience listening to the drummer and the guitarist simultaneously to see what the chords were and what the time was. All good training though. I was doing sessions with all kinds of people by that time.'

In more recent times two American bass guitarists have had a profound effect on Mo and his playing. No prizes for guessing who they are. 'Apart from listening to the whole mainstream of what was happening, one important point was hearing Stanley Clarke's album (Atlantic Records K50101) around 1974. I couldn't believe the sound, which was, of course, an Alembic. The things that Stanley

did with it were marvellous as well. That led me into the walloping/thumb-picking way of playing which I hadn't really considered before, I'd heard it but I didn't really know much about it. There are lots of players I've listened to along the way - like Jack Bruce - but not copied, just listened to and acquired what is there.'

The other bass player who, in company with Clarke, has had a considerable effect on Mo more recently is, of course, Jaco Pastorius. On hearing his first solo album Mo said he was mesmerised. 'That was the start of my love of fretless playing. There was no reason why I shouldn't have done it years ago but I'd never even thought about it. I had an amusing meeting with Jaco. I was on the road with Cliff (laughs) and we kept crossing paths with Weather Report all over Europe. We were either ahead or behind them at the same venues and I thought: Wouldn't it be marvellous to meet him? It was a little embarrassing because as good as Cliff is, Weather Report are in a different league altogether. It turned out that eventually we stayed in the same hotel one night: I met him in the lobby - him and Joe Zawinul - and they were both a bit legless as a result of the touring-on-the-road lifestyle. I was introduced by the tour company and it would have been nice to talk to him because bass players don't often meet other bass players, that's just the way it is. Anyway, he just rambled on about having to do his laundry and about his socks!'

Mo hastened to add that he wasn't having a go at Jaco, he knows only too well that musicians can't be expected to be 'on duty' or receptive 24 hours a day, but merely related

the tale as an amusing anecdote. 'We met again a week or so later in Frankfurt. It was nice, just another little two minute chat but we didn't discuss laundry this time.'

At the time of the interview Mo had just completed his stint as a member of Jeff Beck's band, having played on four out of the eight tracks on the guitarist's *There And Back* album. Mo and drummer Simon Phillips are regarded as one of the hottest rhythm sections around and indeed have been so regarded for some time. Simon had been working with Beck for a while with the likes of Stanley Clarke, Jan Hammer and Tony Hymas. Mo, Simon and Tony have in fact worked together on many recording dates and so it was not surprising that the bass player's name came up when Beck was looking for a suitable new recruit. Mo was thrilled to be asked to try out for the band but the circumstances were a little unnerving for him.

'They did a tour of Japan and Europe with Stanley Clarke on bass. During that time they realised that as good as Stanley is, he doesn't really play *bass* a lot. He's brilliant but he doesn't play down the bottom much. So they started hunting for someone else and they tried out a few people. It's a bit embarrassing in a way because they're all good players but for various reasons that I can't understand ... They had John Paul Jones, Rick Laird from Mahavishnu Orchestra and they ended up with me. Presumably I got the job because I can play but I can also lay down the bottom end.'

'I am a bass player who can, when called upon, stretch out as well. You can imagine how I felt, I was very nervous. To their credit, Tony and Simon relieved the situation with silly pranks. For instance, I'd be overdubbing something in the control room and they'd just be sitting there staring coldly at me. I was sweating



'When I was in the States for the first time, I managed to hunt down about five of Carol Kaye's books on bass playing. It was *marvellous* to get hold of them.'

buckets and if I fumbled a take they'd hold up score cards and give me a score of 4.3 and 3.8 or something (laughs)!

Beck had plenty of reason to be happy about Mo joining the band. Up until the time he tried out for the group, they had spent some 18 months recording the *There And Back* album, eventually with Jan Hammer taking care of the bass end with synths. It took Mo just four days to sight read the parts for the remaining four titles and complete the rhythm tracks. Mo hopes to work with Beck in the future but at the moment there are no immediate plans.

Since some time last year, Foster has also been producing singer Kim Goody and is currently seeking a new record deal for her. Also he's writing and generally stretching out in other directions as well as playing bass. He's been through the thing of working 16 hours a day in the studio (on up to four different sessions a day) and ending up trying to remember what his name is. He is booked to play bass on his third Gerry Rafferty album later this year and hopes to do more of that kind of work rather than turning up at the studios at 8 am to play on a 45 second version of *Burp Liver Salts Totally Mindless Boogie*.

'My preference for session work now is for album projects. For instance, last year I did Michael Schenker's album produced by Roger Glover. That was great, it's a whole project and you actually get bothered by it. I did Judie Tzuke's album which was very enjoyable. I did the *Evita* album which was very strange in places because Tim Rice and Andrew Lloyd Webber were struggling, they didn't quite know how it was eventually going to come out. Sometimes I was only involved with a rhythm track and sometimes we recorded with a big orchestra as well. We had a few amusing moments. One time we were booked into this place called Henry Wood Hall in south London to do what became *Don't Cry For Me Argentina*. We had about a five-piece rhythm section: me, Simon, Ray Russell and a couple of other people and the Royal Philharmonic Orchestra. We had headphones on and the orchestra didn't. There was a conductor and apparently it sounded awful. We couldn't tell

because all we could hear was ourselves.

'And the orchestra couldn't hear us, they were watching the conductor. In the control room it sounded terrible. And that is common, the disparity between rhythm section feel which is right on the beat and string players who are always behind the beat. It's a natural thing. They lag behind the conductor's beat. It's a classical or symphonic view of where the beat is. I think it's also a slight fear on the part of the rank and file violinists. They're afraid to commit themselves so they lag behind and creep in. It did sound awful so we had to do a deal with them in the end whereby they came in a bit earlier and we played a bit later and we met halfway somewhere.'

I asked Mo how he felt about rock musicians reading music. 'Basically, there are three approaches which all overlap. One is just playing purely by ear. You can hear what the other musicians in the group are playing and you play what you can to complement them or

**'Reading has helped me to appreciate music more. I can pick up a line, read it, play it and that's it. And also, being able to read has got me work that I just would not have got otherwise.'**

you play things that will inspire other people to play around you. Then there is pure reading where every note is written out and you meticulously play every note the exact time value and dynamics as written. So you are then reproducing what somebody else has written down. But music notation is an imperfect thing, it never fully explains what the original person felt. In a sense you can interpret written music notation as well.

'Then there is chord chart reading which is my own personal favourite. Gerry Rafferty's stuff is all chord charts, there are no notes written out. You sometimes write the chords

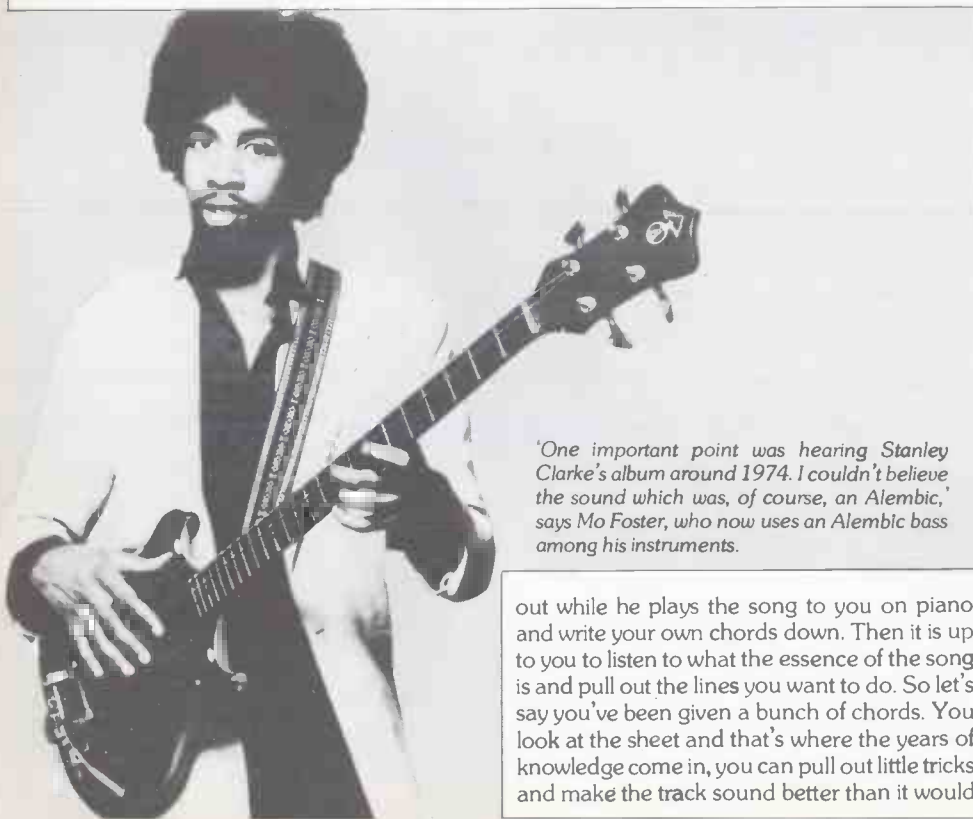
have done, with passing notes and unusual root notes. Let me think of a very basic example.

'Let's suppose that the chord sequence is D major, A major to B minor. In certain circumstances it might be nice to put in a third of the A chord so that the bass plays D, C $\sharp$ , B instead of D, A, B. That's a very trivial example, but shows the point. For knowledge of bass lines, the guv'nor of them all is good old JS (Bach) himself. My God, listen to his music and you'll learn just about all there is to know about passing notes. You can transform a piece of music by choice of root note. You can alter the whole mood of a chord. If you play a G minor 7th on a piano or something, keep the right hand the same and add E $\flat$ , the whole mood of the chord is different. It is then an E $\flat$  major 9th chord. It sounds so different and all you've done is move the bass line. So you have a tremendous power to alter the mood of a piece of music.

'What you bother to learn depends on what you want to do. If you're always going to be in a band and you think that in 10 years you'll still be in a band, then why read? Reading has helped me to appreciate music more. I can pick up a line, read it, play it and that's it. And also being able to read has got me work that I just would not have got otherwise. Now I can look at a part and disagree with it. I'll play it through once, probably dislike, I don't know, a quarter or 50% of it and change it to what sounds better to my ear. But I wouldn't have been able to do that if I hadn't been able to read in the first place.'

I asked Mo about the equipment he uses at the moment, mentioning in passing that on one of the nights when I saw him with Beck at the Hammersmith Odeon I could feel my clothes being moved by the sound of his bass and Simon Phillips' bass drums. With a bit of a chuckle, Mo told me about the equipment. 'The rig you saw evolved slowly. When we first got together in the States, I hadn't done a road gig of that intensity for some time. The last big amp I used on the road was an Ampeg SVT which is pretty loud anyway, so we hired some of them. And then I discovered I couldn't hear it at all, it was like a tiny transistor radio in the distance. This was because Simon - who is a loud player anyway - has his kit on a rostrum underneath which is a row of 15in monitors kicking out the bass drums and then behind him are his monitors which kick the kit out even more. All I could hear was the tremendous but very loud drum thing. So I realised that I was going to have to upgrade the equipment I was going through. We happened to be in a town called Eugene, Oregon and I met some guys there who helped us out by building a rack for me at short notice which has two BGW power amps (of around 750 watts output) which are normally used for PA work. Then I had three pre-amps built in as well for the three bass guitars I was using.

'The whole thing is to reproduce the bass so that it goes out front and so that you can hear it yourself with clarity. The tendency is that either the sound is clear for you (on stage) and nobody else hears it, or it's long-throw and everybody else hears it and you can't. So we had a compromise in the end. I've got a row of JBL 12in speakers at the top, then two 15in JBLs to handle the mids and then two folded horns at the bottom with Gauss or Altec, I can't remember which - all with crossovers. You are definitely aware of your clothing being moved as you go near it as you said: trouser flap. You



'One important point was hearing Stanley Clarke's album around 1974. I couldn't believe the sound which was, of course, an Alembic,' says Mo Foster, who now uses an Alembic bass among his instruments.

out while he plays the song to you on piano and write your own chords down. Then it is up to you to listen to what the essence of the song is and pull out the lines you want to do. So let's say you've been given a bunch of chords. You look at the sheet and that's where the years of knowledge come in, you can pull out little tricks and make the track sound better than it would

could feel the draught (laughs) but finally I could hear myself.'

In the studio, though, Foster's amplification is usually at the other end of the size scale. 'At the moment I've got a Roland *Cube 60* which is fine, it's all you need. I used to have an H/H combo which is my favourite for studio but it got stolen from the Roundhouse. That was a big drag, it was one of the first ones they made. I like a little amp because you can create the sound that is in your head, it comes out of the speakers. I have this endless battle with engineers to get them to mic it up. Over the last few years there's been this mania for direct injection and that just makes you sound like everybody else and you are at the mercy of other people for the sound and that is something I hate. I'd much rather that I made the sound and they mic it up to create the sound in the room.'

But a lot of engineers and producers favour DI because it simplifies the process of recording for them, particularly with troublesome bass guitars. 'Yes, it's a cop out. And they're terrified of leakage, a bit of bass might be picked up by a mic 20ft away or something, as if it matters. You might hear the room for a change. The clinical approach has definitely got out of hand in the past few years.'

Mo was quite thrilled when on a session at Air Montserrat he met engineer Geoff Emerick, who worked on many of the classic Beatle recordings at Abbey Road, because his approach to miking up instruments was similar to Foster's. 'I was knocked out that he not only put a mic in front of my amp without my having to ask for it but he also put two mics in front of a Fender electric piano and didn't plug it in direct! I thought: My God, this man is listening and hearing things. It was marvellous talking to him about the way he likes to record the sound of an instrument that is there, not what some artificial cable says it might be.'

Had Mo noticed a definite swing towards a more live and ambient miking? 'Yeah, the classic one is drums, they've gone through a revolution. A few years ago at a lot of the big studios - especially places like Trident in London - the drummer would be confined to a little toilet at the back called a drum booth which got very hot and oppressive. It sounded like they were in a toilet, very close and uninteresting. That's expanded to the point now where - one or two examples - Simon's kit on the Jeff Beck album, that was done mostly at Abbey Road in the big studios. Yes, it was close-miked but also there were am-

bience microphones all over the place so that you hear the room, this big room. And you get that on Phil Collins album, recorded at the Townhouse I think. They used the room a lot. They've compressed the ambience to produce a slightly peculiar sound but it is using the room which is great.

'I think one of the big reasons for the paranoia which makes people go for DI and separation and all that garbage was that if someone made a mistake they could go back and overdub their bit, and their actual live sound on the previous or earlier take wouldn't have leaked on to drum mics or whatever mics were around. In some circumstances that is fair enough. But that leads you to a kind of complacency, a knowledge of the fact that if you do make a mistake you can drop in later. I'm sure that affects you.

'You play differently compared with when you've really got to get it first time. The ultimate of that must be Direct-To-Disc when

**'Half the art of bass playing is stopping the note from playing when you don't want it to and I have to work harder at stopping the notes on the Alembic than I have with any other bass I've ever played.'**

you've got to do it. Or on film sessions, when you do those with a big orchestra you can't overdub. For technical and union reasons you can't overdub and you've damn well got to get it right. At least you sweat a bit and your pulse goes up. The ultimate limit of tension is, of course, the live gig where you are different, you think differently, you're playing to people, you're bound to feel different. That's why if you can capture it, a live album is so good you are capturing the adrenalin.'

Though various instruments - including a double bass - are to be seen around Mo's flat, he is down to three prime bass guitars which he uses currently. 'I use a Fender *Precision* modified quite a bit. I've got two DiMarzio pickups on it now and all the flash bits are Schecter on the original Fender body and neck. Then there is my *Jazz* bass which I've had for about 12 years now, I had it made fretless about five years ago, at which time nobody really knew much about fretless bass.

I got a double bass craftsman - a guy called Neville Whitehead - to strip it all down and then I got a 90-year-old ebony neck off a double bass which Neville planed down, going through about three plane blades in the process, and then stuck it on the wood of the neck. Then about half a year later I met Jaco and found out that all he did was to rip out his frets and put wood filler in! The other bass I use currently is an Alembic which I've had for about a couple of years now. It's a monster instrument, it kicks up a monster sound for certain tunes.'

How does he decide what to take along to a session? 'Generally I'll ask what they want and if it's a very basic session and not spectacular in the least, then I'll just take the *Precision* because that'll cover everything. It would be very nice to have an instrument that does everything but such a bass doesn't exist. Most guitar players go from a Fender to a Martin acoustic or keyboard players go from a *Minimoog* to a Fender *Rhodes*. It's the same thing with bass players. Certain bass sounds for certain tunes. The Alembic honks away on funky type things - pulling the strings - it's a marvellous sound. But with ballads - like Stevie Wonder's *Cos We've Ended As Lovers* which I did with Jeff - when we rehearsed it the fretless just fitted perfectly. Then I did a little solo and the other bass guitars would have sounded awful.

The Alembic is very much the Rolls Royce of instruments, it's made immaculately. It has it's faults. All Alembics are different, mine is neck-heavy and you have to keep pulling it up all the time. You have to learn new ways of playing to cope with it. It is so well made that the sustain on the strings is incredible. Half the art of bass playing is stopping the note from playing when you don't want it to and I have to work harder at stopping the notes on the Alembic than I have with any other bass I've ever played.

'For the Stanley Clarke type of thing - and of course he pioneered the Alembic and made it accessible to a lot of people - you can't beat it. You can play the same things on a Fender and it sounds good but it doesn't have that real honk that an Alembic gives out. And there again, for things that need a real punch and a real dirty sound, the Fender is the one, it's a classic instrument. On that kind of thing an Alembic would get in the way, I've tried it on some sessions and stuff and found that it sustains too long and gives you too many harmonics.' ■

# NOVATRON - New UK sales policy

Due to our new DIRECT-TO-CUSTOMER United Kingdom Sales Policy, the NOVATRON 400SM price is now slashed to £865. A tremendous saving of £330 (both figures ex. VAT).

One Tape Frame and a Protectamuff are included in the price. Extra Tape Frames now £98 instead of £128 (both ex VAT).

NOTE: The new price structure applies only in UK and Eire.

NOVATRON - For the sounds of REAL instruments and Choirs contact the original manufacturers:

**STREETLY ELECTRONICS LTD. (formerly Mellotronics Mfg Ltd)**  
338, Aldridge Road, Streetley, Sutton Coldfield  
West Midlands, B74 2DT. Tel: 021-353 3171.



Model 400SM

PLEASE NOTE: NOVATRON & MELLOTRON Tape Frames are interchangeable.

# The Duncan Age



Mr Duncan obscured by pickups

All photos Glen LaFerman

## Guitar maker and occasional reporter Peter Cook observes the Seymour Duncan pickup method first hand in Californiay.

'I praise Larry DiMarzio for starting the whole ball game.' Seymour Duncan.

America, home of the brave, land of the free and the last bastion of truly free enterprise, has a new hero in Seymour Duncan. Although widely proclaimed in the States as the 'master', Seymour is still something of an unknown quantity in the UK so while I was in California recently I drove up to Santa Barbara to get the low down on the 'King of pickups'.

Being nothing if not an opportunist, I arrived at the Duncan factory just in time to join in Seymour's birthday celebrations (pizza, cakes and soda pop), a nice start to what was to be an interesting day. While the remains of the party were cleared Seymour's sales manager, Geoff Richardson, explained that as demand for their pickups has grown to such proportions over the last year a move to larger premises was needed. So after a short drive down the road I had a look round at what is by now the new Duncan headquarters.

The beginning always being a good place to start, I asked Seymour how and why he arrived at his range of pickups. Through his custom pickup rewinding service, Seymour was able to see that the

trend was once again returning to the vintage sounds and that players were becoming more aware of the subtle tonal variations between pickups. The first problem: when the term 'vintage' is used does the player mean the sound of the old pickups when they were new or as they are now? Years of researching and dissecting old pickups has revealed to Seymour most of the secrets of the magic oldies, so he is able to duplicate the new and aged vintage sound.

Taking the Fender *Stratocaster* pickup as an example, Seymour explained that originally the bobbins were hand wound (it should be noted that the term 'hand wound' does not in fact mean that the wire is wrapped around the bobbin by hand, but that the traverse and pitch is guided and tensioned by hand). So, due to the uneven spacing of the winding, this would tend to produce a higher voltage output than a fully automatic-wound pickup of the same resistance/turns. It seems, then, that some of the magic is in fact down to sloppy coils – but not all of it.

The magnet's diameter, length, material and strength also affects the relationship between it and the coil – which of course will regulate the voltage output. Seymour insists that, contrary to rumour, Alnico Vs and not IIs were used

on the early *Strat* pickups. Probably the weakness of the magnets started that train of thought, and the old manufacturing process produced a rough cast magnet with more cavities than the methods employed today. Couple this potentially weaker magnet with the early battery-powered magnetiser of Leo Fender (which was inconsistent due to battery drain) and a picture of myriad magnetic permutations begins to unfold. The rate of magnetic loss, another factor that can vary significantly, also needs to be considered.

So, having demonstrated the elusiveness of the 'vintage' sound Seymour presents his master plan: the 'Vintage Staggered *Strat*': an exact replica of the '54 pickup wound with original formvar insulated 42 awg, complete with waxed leaders. But probably the most important ingredient is the staggered 'Duncan aged' Alnico Vs ('Duncan aged' is the process of degaussing Vs to IIs for reproducing the 'aged' vintage sound). It is, claims Seymour, the staggered lengths of the magnets that produces the mid-poppy *Strat* sound by creating inner phasing between the poles with the resultant internal coil polarities generating varying current from each string.

For those requiring new 'Vintage', hot or any other variant, Seymour says: 'If you



can't find it in my range, and there are over 50, I'll custom-wind you one.' He even makes a *Strat* pickup with the poles staggered in reverse for that Jimi Hendrix sound, and you can't get much more specialised than that!

In his search for information, Seymour became an avid letter writer to Fender and Gibson, developing a rapport with these companies. This still knocks him out to think that anybody bothered to reply, and now in return he himself is deluged with sackfuls of mail from kids and professionals alike requesting information and advice – he personally replies to them all.

Apart from his basic range of pickups, which include all of the obvious Fender and Gibson variants, Seymour's custom and rewinding service provides yet another opportunity for players to possess their 'ultimate', and as a testament to its popularity he showed me a barrel load of assorted pickups waiting for the magic touch.

Each pickup that is rewound is marked with ultra violet and all the relevant details of the instrument, owner and date of modification are logged. In this way Seymour has been able to identify many highly prized oldies as 'Seymourised' pickups, and he plans to publish a journal containing all the information. Although the rest of his operation is manned by his own trained staff, the rewinding is still very much Seymour's baby. Through years of experience he has learnt most, if not all, the tricks for achieving the desired sound and response. Bank winding is the technique that he favours most: the pitch is altered each traverse in a triangular pattern creating a bulbous coil, as in most cases it is desirable to follow the magnetic field which is at its weakest in the centre of the magnet and where in this instance the coil will be at its thickest. Because of the changing voltage generated within a bank

wound coil it can be expected to be more efficient, but of course it may not be suitable for every requirement so Seymour may decide to turn parallel or even hollow windings.

Choosing the correct gauge of wire for the right application and knowing the dc resistance given by a set number of turns is only part of his art, for too much hand tension will stretch the wire, giving it a higher resistance, and too little tension will result in looping. As a rough guide Seymour says you can expect a more bassy sound as the wire gets thinner although the resistance itself will inhibit treble frequencies as it is increased. The magnets themselves, as we have already learnt, will also influence the pickup so it may be necessary for him to 'Duncan age' them. This man doesn't miss a trick – being well aware that a mahogany body will tend to soak up the highs, and that maple will enhance them, he has studied the characteristics of numerous woods and considers the instrument's construction when winding a pickup for a specific task.

But what of the man himself? Seymour started on the pickup trail at the age of 16 when he was exchanging licks between sets with Robbie Robertson (this was before *The Band*). Duncan noticed that although they were both using *Teles*, Robbie's really cut it. Puzzled by this inconsistency they opened them up and had a look: the pickups were different! This marked the beginning of his letter writing era when he was able to collate all the information supplied by Fender and Gibson, and eventually he rewound his first pickup to cure a squealing *Tele*.

So Seymour became a touring musician/repair man and his playing and technical knowledge developed hand in hand. He was always ready to talk guitar and listen to others' views and experiences, constantly searching for

knowledge. His between-set sessions with names like Roy Buchanan, Jimmy Page and Jimi Hendrix helped him to understand the relationship between the player and the pickup.

In '73 Seymour came to England primarily to record, but he soon found himself installed at the Fender Soundhouse as a celebrity repair man, again giving him the chance to research into guitar electronics although he found the acquisition of suitable materials a problem. Don't we all! Officialdom raised its ugly head in the form of 'Visa bashing', and despite Seymour's game of cat and mouse with the authorities by travelling back and forth to France, a return to the States was inevitable, so when offered work on an album with Chris Rainbow he was off.

In '76 Seymour took the plunge and set up his own custom shop in Santa Barbara from whence his reputation grew and grew, but probably the real turning point for him was when he teamed up with Kathy Carter, now Kathy Duncan (obviously their magnetic interphase generates a fair ole amount of electricity). Her business zeal freed Seymour from the day-to-day running of his business enabling him to spend more time on R & D (he literally lived in his workshop which was even equipped with a bed). As the Seymour Duncan range of pickups became more successful, he was able to expand and began to surround himself with dedicated staff, like Englishman Geoff Richardson who is Seymour's sales manager. A craftsman in his own right, Geoff makes some of the most beautiful stained glass windows that I have seen, but he still insists that he derives as much satisfaction from being part of Seymour's team.

Meanwhile, back at the factory: Some



# GIVE YOUR VOICE A CHOICE WITH



- MC-70TD** This is the top quality model in the A&F microphone range. The flat frequency response combined with the fine tonal qualities of this microphone make it ideal for use in all vocal and instrumental applications. A built-in tone selector switch makes this a very versatile model! **£49.90**
- MC-50SD** A uniquely designed vocal microphone for professional use with superior transient properties. The sturdy construction provides higher resistance to mechanical shock and it is suitable for milking up drums and other on-stage applications where mechanically strong microphones are needed. **£37.80**
- MC45SE** Electret condenser microphone with flat frequency response and superior characteristics to prevent overloading and pop noise. Recommended for milking-up pianos, stringed instruments, drums etc. Built-in tone and impedance switches makes this a very good multi-purpose microphone. **£34.75**
- MC-38SD** This microphone is an up-market version of the MC-35SD. It has superior cut-through and tonal qualities. Its wide dynamic range make this microphone very suitable for recording purposes and for conditions where extra clarity is required. **£33.85**
- MC-35SD** A really good, all-round microphone producing a good natural vocal quality, recommended for all stage and studio work. **£31.25**
- MC-30SD** Another good, all-purpose microphone with very clear reproduction in the mid range area, with low pop noise and low handling noise characteristics. **£29.95**
- MC-20SD** Lightweight, high quality microphone with bright and clear tonal qualities. This model gives good clarity for vocalists and instrumentalists plus a very wide frequency range. **£22.70**

**ALL MIC'S SUPPLIED WITH CLIP, CASE, CABLE AND JACKPLUG**

South Drive, Phoenix Way,

Heston, Middx.

Tel: (01) 897 3792

**GIGSVILLE**

**CHECK OUT**

**A&F MIC'S**

**AT YOUR**

**DEALER**

TO GIGSVILLE. Please send A&F Brochure

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

DEPT. S.1.6



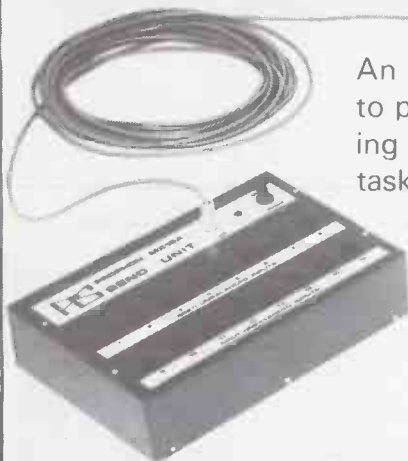
of the girls were engaged in the production of *Strat* pickups, the first stage of which is to press the unmagnetised Alnico rods into fibreboard formers and then, to prevent warpage, the assembly is varnished. Next the Alnico blanks are magnetised and 'Duncan aged' making them ready for winding. Once the winding and final soldering is completed the leaders are attached and the whole pickup is put into a hot wax dip in order to saturate the coil completely and eliminate microphonic feedback. For those wishing to wax-dip their own pickups, Seymour has a few tips. Firstly, particularly if the coil bobbin is plastic, great care should be taken that the bobbin does not get too hot, for he's seen many a prized pickup distorted beyond use. But at the same time there is no point in retrieving a coil from the dip before it has been fully saturated; obviously there is a delicate balance between success or failure, so if in doubt don't! Apart from the danger of destroying your priceless pickup there is a very real threat to life and limb, for hot wax has a nasty habit of exploding. So if you are considering dipping your pickup make sure you use a double boiler (like the old glue pots). Again, if in doubt don't!

Well, what of the future? Seymour feels that the market is not yet ready for anything too revolutionary, although he has certainly researched and developed the next generation of electronics. One of his really futuristic projects began when he

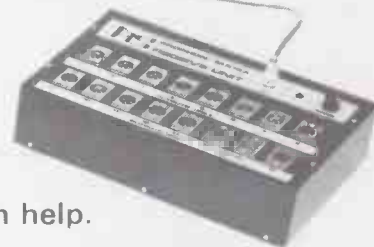
was approached by the makers of *Star Trek: The Movie*. As part of the musical soundtrack they required the special effect of a Cosmic Beam, and Seymour had the task of designing quadrophonic pickups that were to be mounted on a 20ft long iron beam strung with 15 unison strings, specifically to pick up the harmonics when an aluminium bar was slid up and down. Amongst other experimental designs that Seymour describes as 'kind of crazy' was a motorised revolving pickup that emulated the sound of a Leslie organ, and more probable perhaps, a row of six humbucking coils, in parallel, with moveable pole-pieces enabling the player to select the actual pickup point from each string giving a greater flexibility in the tonal response of the pickup. The possibilities, point out Seymour, are endless; he has even modified a standard humbucker by replacing one of the end poles with a right angle ferrous rod, so that the rod which lies beneath the strings can be swung from side to side enabling the magnetic field to be altered according to requirements.

So Seymour has the next stages of his development carefully mapped out and sees the next most likely additions to his range being piano, banjo, and acoustic guitar pickups. Through all my conversations with Seymour, one thing above all stands out, apart from the obvious knowledge that he has of his chosen subject: his pure dedication ■

## A 16 Channel Stagebox... ...Without Multicore Cable



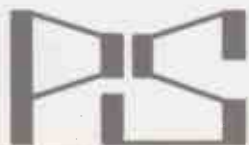
An off-stage mixer gives you the opportunity to produce the sound you want. But organising the extra equipment can be an unhappy task.



Here's how the Prophon MX16A can help.

Microphones hate long cables, so the Send Unit provides amplifier inputs at the stage, to keep them happy. Contact is made with the Receive Unit using up to 200 metres of single coaxial cable. This is much cheaper and far more manageable than multicore, so you're happy. The 16 original signals are presented, with excellent channel separation, where you can ensure that your audience hears you at your best. Everybody's happy.

Prices start at under £200 inc. V.A.T. You could spend £60 on a transmission cable if you need 200 metres (about 1/4 mile). Shorter ones are cheaper.



You probably want to know more, so see your dealer or drop us a line.

### PROPHON SOUND LTD

90 Wilsden Avenue, Luton, Bedfordshire, LU1 5HR

# Tony Zemaitis



All photos Ralph Denyer

## What do Ron Wood of the Rolling Stones and James Honeyman-Scott of the Pretenders have in common? Hand-built axes from Mr Z. Max Kay investigates.

Tony Zemaitis has never built a guitar for Elvis Presley but he has for almost every other major rock act. His clients one year included the Beatles, the Rolling Stones, Bob Dylan and Eric Clapton. You've never heard of the name? Read on as I wind my way through London out towards Kent, to a little town called Walderslade. There lives a man called Tony Zemaitis, a very genial man who has been making guitars for 21 years since giving up cabinet making. He rarely gives interviews: he could be building more guitars. Tony is the proverbial 'nice guy', so rare in this business, and a professional workaholic to boot. He does not advertise heavily for work which seems to come in constantly; he says he'll give up guitar building when the work stops coming in. One afternoon he took a few hours out with me to explain how it all began.

**Tony Zemaitis:** It really all started happening for me about 10 years ago. A television crew came down to the old place in Balham – you know, 'A day in the

life of a luthier' type of stuff. After the programme was shown I ceased to doubt the power of television. My phone didn't stop ringing for three days. It wasn't just guitar players who rang either, an industrialist rang enquiring whether I could build 100 guitars a month. I even had old ladies call, I forget what they wanted to know. Suddenly everybody wanted to know me. Ann (Tony's wife) and I sat by the phone eating sandwiches and taking orders for three days. At that time we had no guitars at all in stock which didn't help too much. The work started to pour in and has been coming ever since.

### How exclusive is Tony Zemaitis?

**TZ:** I never approach people for work, nor do I give away guitars, I don't have to. But I hardly think you could call me exclusive. My electric guitars start at £150, acoustic guitars at £250. The parts I use on these guitars are cheaper, but the basic instrument is still a handbuilt Tony Zemaitis guitar. The more expensive ones ranging

up to £1,000 utilise more expensive parts, ebony fingerboards, metal fronts, pearlfake finishes, outboard electronics, whatever...

### What type of pickups do you use?

**TZ:** The pickups I use on most electrics are Mighty Mite which I like, though I will fit whatever the customer requires. Ronnie Wood sends his own choice of pickups which in his case are usually Gibson humbuckers. It's a difficult subject: the tonal qualities of a pickup rely so heavily on the impurities of the wire used in the coils, the number of turns on the coils, the gauge of the wire used.

### In effect, how handbuilt are your guitars?

**TZ:** I build everything bar the machine heads and the pickups. A local gun engraver by the name of Danny O'Brien does the engraving on the metal fronts for me. They come in just about any design you care to dream up. We've done snakes,





dragons, hummingbirds, Mucha-style ladies with big . . . and long flowing hair. Contrary to rumour, Ann does not pose for these. No, getting back to spare parts though, the original reason for my building my own bridges and tailpieces was that when I started building guitars there were no spare parts on the market I could buy.

**How do you start a new guitar?**

**TZ:** Usually the customer comes to see me, sometimes I get frantic calls from LA in the middle of the night. When I've discussed the guitar or bass with my customer, I seek a sympathetic piece of timber in the workshop and set to work. The timber is very important, each piece sounds different to me. If the guitar is mainly for stage work it will need the ability to project well. For recording, the volume aspect is not so important though I do tend to use a D-shaped soundhole on my acoustics to aid sound projection. Generally I use a shallower body for the recording instrument with a preference for Honduras mahogany or maple. For stage I build a deeper body, usually in rosewood. The wood I use is getting more

difficult to buy and more expensive, that's for sure.

**Do you build more electrics or acoustics?**

**TZ:** It goes in phases, really. Sometimes one, sometimes the other. I don't mind though, I just flow with it. The acoustics are more difficult to build but mainly it's down to experience with timber, working with it.

**What are the hallmarks of a Zemaitis guitar?**

**TZ:** Well, I don't build straight-thro' the-body necks because the tension is all wrong. The same applies to one-piece necks, for the same reason. The truss rod nut on my guitars is much higher up the headstock as this adds strength to a natural weak spot on any guitar. The headstock on my guitars has a more definable shape than most, my necks are generally slimmer than other guitar necks and I don't bury the guitar's natural sound with 38 coats of lacquer. I never use plastic for inlays because it's a dead material. Pre-amps, which we started using 15 years ago, I no longer use unless asked to.

**What is the oddest request you've ever had so far?**

**TZ:** Many years ago I was asked by George Harrison to build a guitar for John Lennon. Nothing unusual about that except that he wanted one that he could climb into and play from the inside. I think he was inspired by those wonderful tones you hear when you put your ear right up against the guitar. No, I didn't actually build that guitar.

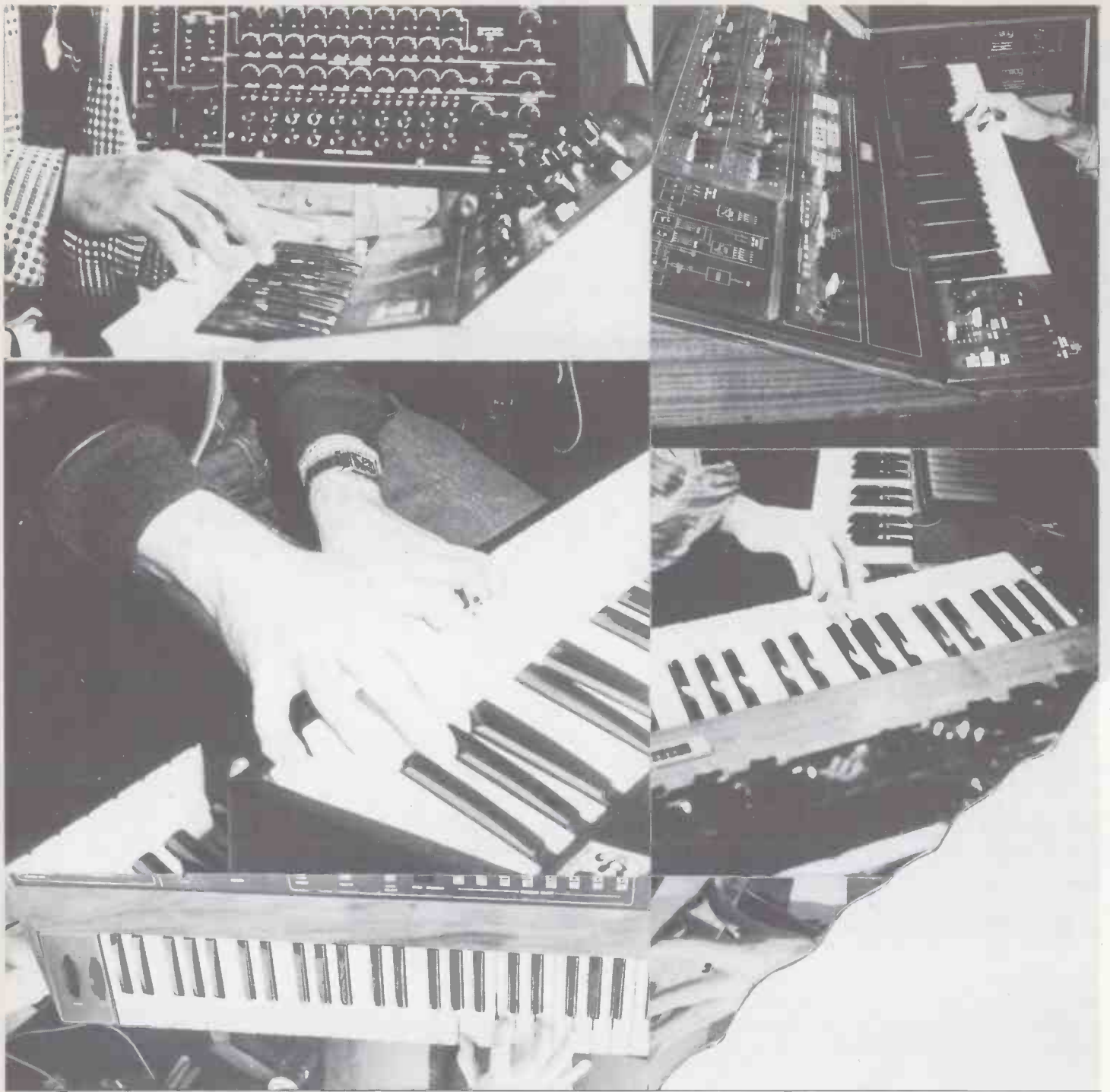
**Do you have any favourite customers?**

**TZ:** Yes, George Harrison. He is definitely one of nature's gentlemen . . . so polite, so normal . . .

At this point I realised I was keeping Tony away from his number one passion – building guitars. His career is indeed an unusual one for a man who used to think *Beat Instrumental* was a group.



If you want to contact Tony Zemaitis, telephone 0634 65086.



## A Look At Sound

**It's no good playing straight triads on a polyphonic synth claims Dave Crombie in the second part of this thrilling extravaganza. Voicing and playing made easy...**

**L**ast month we had the theory, now on to the practical stuff. First off you would benefit if you had a synthesiser (or drawbar organ) in front of you, but fear not, if you haven't got one you will still be at liberty to relax and enjoy this article whilst simultaneously broadening your mind, we hope! Practical synthesis can be best divided into two main parts – voicing and playing, so...

### Voicing

In effect, all synthesiser voicing can be considered imitative, whether you are trying to simulate an existing acoustic or electric musical instrument, a natural sound, or just creating a sound that exists in your imagination. In order to capture the qualities of the sound you have to be

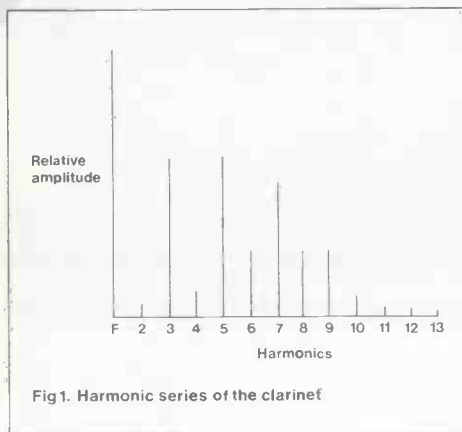


Fig 1. Harmonic series of the clarinet

on the ball, knowing what parameters are going to have what effect. It's a bit like trying to play a piece of music you've heard by ear; in order to get it sounding right, the chords and melody have to be correctly structured.

Obviously the better your synthesiser the more possibilities it will offer you, but even the most basic of instruments will give you the opportunity to make a good attempt at simulating existing instruments. Last month I showed you how the adding together of harmonics could be used to construct various periodic waveforms. Let's take this one stage further and look at the harmonic structure of a clarinet (fig 1) – okay, I realise it's a bit more theory, but it won't take a minute. You will notice that the clarinet has a harmonic spectrum that is dominated by the odd harmonics, and if you refer back to last month's diagrams you will notice the close similarity between this structure and that of the square wave. In fact the clarinet is one of the simplest instruments to simulate, because it does sound so similar to the square wave. Using a drawbar organ to simulate this sound is also simple – it is just a matter of setting the drawbars such that the relative intensities of the harmonics correspond to those shown in the harmonic series diagram. Figure 2 shows the structure of a bowed open violin string, and as you can see it is a fairly complex beast. The most obvious problem is that of

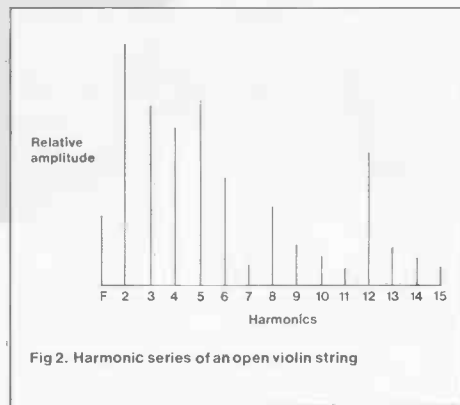


Fig 2. Harmonic series of an open violin string

the dominant 2nd harmonic, which is even stronger than the fundamental. If we again look back at the structures of the common waveforms found on most synthesisers (sine sawtooth, triangle, rectangular [square]), we see that there's not much that corresponds to the violin's series; so we would have to use the low pass filter and, if there is one, the high pass filter, and any other tricks we can to make an approximation to this waveshape. The sawtooth wave has a very vague similarity to the violin string's, that is with the exception of the fundamental's relative attenuation. So we could either use the high pass filter on the sawtooth wave to cut down the intensity of the fundamental (a high pass filter removes low frequencies), or if we have a dual oscillator synth with a sync facility, we could introduce a separate fundamental by setting oscillator 1 on to the second harmonic, whilst it is producing a sawtooth wave. This is fine, but there's still the nasty 12th harmonic to worry about – so we really need a third oscillator.

Hold on a minute though, all this is getting out of hand, and in fact we are getting nearer to the way in which manufacturers program preset synths. True the harmonic structure of the waveform is very important, but most of us aren't in the position to carry out harmonic surveys on existing sounds in order to produce accurate simulations, and especially so when we are considering subtractive synthesis rather than additive. The secret of imitative synthesis is to be able to 'pick out' the characteristic nuances of the sound – the rest isn't nearly as important as you might expect, as I shall attempt to demonstrate.

Consider a violin passage; what are the most important qualities relating to the sound? Believe it or not (a good name for a series of articles if ever I heard one – and I've heard a few. This bracket is attempting to instill an air of anticipation before I reveal all regarding the aforementioned violin poser, but I think the joke is wearing a little thin) the two qualities are the modulation and the attack time of the VCA envelope: so if you happen across a synthesiser try this little experiment. Set oscillator 1 to a sawtooth wave at about 8'

(pitched in the middle frequencies), open up the filter fully with no filter modulation, and set the VCA envelope such that it has a fairly slow attack time, sustain on full, and with a fairly fast release time. If your synthesiser has a delay modulation facility use that with a fairly fast sine (or triangle) modulation of the VCO(s); if you don't have such a feature, gently introduce the modulation after half a second or so using either the relevant control knob, or a performance control. Now play a few notes and you will notice that the characteristic of the solo string sound is resulting, primarily, from the modulation – your brain is doing most of the work, not the synthesiser. Now you might try changing the waveshape of the VCO(s) to pulse waves and the results, to all intents and purposes, would be equally convincing – though if you compare the sounds of the two waveshapes there is quite a tonal difference. With pulse waves, it is possible to use width, as opposed to frequency, modulation, and the final effect is similar, though maybe somewhat richer. But if you were to change a parameter such as the attack time of the VCA envelope generator, then the violin effect is destroyed.

Now obviously the other parameters are important – you aren't going to get a convincing string sound using just a sine wave. However, by picking out the prime factors you are half way there. I'm also trying to point out that even though a synthesiser might be very basic in terms of the features it offers, there is a considerable amount you can achieve if you just sit back and think before you act.

## Playing

It's not much use having a fabulous polyphonic synth that can give the ever desirable 'Mantovani' sound at the touch of a button if all you are going to do is to play straight triads on it. The secret is to voice (and I'm talking this time in a musical sense) the chords as if, in this case, a string ensemble were playing it; that is spread the chords over a wide range so that you will have the equivalent of cellos, violas and violins sounding in the different registers. If you play just basic block chords, don't start wondering why it's sounding like an electronic organ.

The synthesiser (normally) uses the keyboard purely as a controller. When imitating other instruments it is therefore necessary to consider how the musician would play that particular instrument. Take, for example, a flute voicing. For a start you aren't going to hear a flute, or flute section, playing block chords, so that's the first thing for the synthesist to watch out for. That being said, if you've ever listened to *Strawberry Fields Forever*,



Patrick Moraz: making the synth solo sound like a guitar solo...

you do hear block chords of flute voicings, and it sounds really weird – that's probably why they used it, as the song does relate to certain narcotics. Incidentally that passage was played on an early Mellotron, but similar effects can be achieved using a polyphonic synthesiser. I suppose that this goes to show that there are really no hard and fast rules in music. But to get a realistic flute voicing you have to capture the sprightliness of the acoustic instrument, and if playing more than one part, try and keep one following the melody, whilst the second (and possibly third) is playing a counterpoint. I know, getting tricky isn't it?

When imitating other instruments don't make obvious mistakes. A common error is to play in a manner that would be impossible for that instrument. Getting back to our flute example – introducing glide (also known as portamento) wouldn't help matters because a flute just can't glide between notes. However if your synth is equipped with a glissando facility, whereby the frequencies of the VCO(s) step in semi-tones between the two notes played (or you can play the glissando manually), then that's fine, because a flute is physically capable of doing such a manoeuvre. On the other hand a trombone will employ the slide facility not the glissando. Again a flute isn't going to have sine (or triangle) wave vibrato, so use a square wave to modulate the frequency thus providing a trill effect.

These little handy hints are fine if you want to fool someone that the instrument you are playing (ie a synth) isn't what it is, but you can also play cunning tricks to grab an audience's attention – particularly applicable to recordings. Start with the basic sound, and play your solo melody line or whatever, then as the passage progresses gradually increase a modulating parameter such that your listeners start to wonder how on earth it's possible

to do that with what they thought was a trumpet (say). A classic example of this features what appears to be a guitar solo on Patrick Moraz's album *The Story of I*, where the solo starts straightforwardly enough, but as it progresses, the notes seem to be being 'bent' rather a lot. You then start to expect the strings/neck of the guitar to break, until by the end the notes are being bent over an octave. It is by then obvious that the instrument is a synthesiser, but the solo really grabs your attention.

I'll now give a few ideas on ways of producing some imitative synthesiser voicings but don't take them as definitive settings by any means, it all depends on how exactly the controls are set and what the passage is that is being played. Remember to try and pick out the prime factors of the instrument in question. It's a difficult business writing for specific instruments, so don't be put off if you don't immediately sound like the Amadeus String Quartet.

**Solo Violin:** Use a single oscillator (or two if they are synched) with the filter almost fully open, and the envelopes set with an attack time of around  $\frac{1}{4}$  to  $\frac{1}{2}$  a second, full sustain, and very fast release time. You can either use a sawtooth wave and introduce frequency modulation, or a pulse wave with width modulation (see earlier). Modulation should be by low frequency sine or triangle waves. It is most important that the release time is quick if using a polyphonic synth, as otherwise the notes will run into one another destroying the solo effect. You could, if you have a release footswitch, introduce a longer release time just to the last note of a phrase.

**Solo Viola and Cello:** Use a similar technique as above but pitch the oscillators down into a lower register. The cello has a greater 'acoustic inertia' than the violin, such that it may be necessary to

make the attack time a little longer.

**String Ensemble:** Again either use sawtooth waves with frequency modulation, or pulse waves with width modulation; the release time of the VCA envelope should also be longer. If you have a dual oscillator machine have the oscillators set up identically, then slightly detune oscillator 2. This will fill out the sound naturally, and not sound like the mushy chorus generators that are to be found on a lot of the cheaper string synths. If you only have a single oscillator instrument, you'll probably be better off using a pulse width modulated waveform from the start.

**Brass:** The usual thing to do here is to use a sawtooth wave, and then have the filter sweep it with a fast-ish attack time, and with the decay characteristic following the amplitude of the note. The actual setting of the filter cut-off frequency is very important, so experiment. The VCA envelope needs to have a fast attack and release time with the sustain level near maximum. Brass lines are normally either very punchy, or mellow and sustained, so play the part accordingly. I find that if you have a dual oscillator machine, it can often be effective to use both oscillators, but set a fifth apart; this really does increase the harmonic content of the signal, and gives the filter something to really work on. Be careful though if you have a polyphonic, as setting the oscillators at fifths can create some rather discordant sounds if you play certain full chords – you may find it better just to play in fifths 'manually' as required.

**Flute:** You can use almost any waveform to produce a fair flute sound, as long as it is filtered heavily enough, with the filter tracking the keyboard. But it's best to use a sine, triangle, or square wave. It is difficult to get the chiff normally associated with this type of wind instrument. However by juggling around with the decay time and sustain levels of the VCA envelope, a hint of a chiff can be concocted. If you do play block chords with a flute voicing (see earlier) you get a sort of steam calliope sound.

**Human Voice/Choir:** This is always a really tricky one, but since you've all bothered to plough so far through this 'exhilarating' article, I will reveal all. The secret is... well, the pitch of the human voice tends to wander into a note, ie it starts slightly flat then slews into tune, so to get a good vocal sound it is necessary to use what is known as a 'Bender' (no comments please Mr Editor). This is a control that does exactly what we want, it slides the note into the desired pitch. Unfortunately very few instruments are equipped with such a feature (Kawai and Teisco synths have it, as do some Roland machines) so unless you've got one of these machines it's time to improvise. The amount of bend required is minimal, a quarter tone or less, so detune the oscillators by that amount and then use the filter envelope (or VCA envelope, if that's

all there is) to bring the instrument into tune as the note is played. If you use a sawtooth wave, modulate it (preferably delayed) by a sine (or triangle) wave, and juggle around with the filter, with the resonance quite advanced – you should be able to get quite a nice vocal sound, a bit like the voicing used by Tomita. You cannot have a long release time otherwise the envelope won't get a chance to reset before the next note is played, and you won't therefore get the 'bend'. Alternatively, this effect can be achieved by subtle use of the pitch bend control – though it takes a lot of practise, believe me.

**Electric & Electronic Organs:** It is possible with a dual oscillator synthesiser to get a good approximation of both a tone-wheel organ (*à la* Hammond) and something like a Vox Continental. For the Hammond sound you need to have a lot of resonance on the filter and use the beating between the two oscillators to give you the rotary cabinet effect. Additionally if you close down the filter, then modulate it with a short percussive filter envelope, you can simulate the key clicks that are associated with these instruments. The Vox is a different kettle of Birds Eye deep-fried... here the prime factors are the rich harmonic content (each drawbar producing a waveshape more akin to a sawtooth wave) and the vibrato. So if you use oscillator A and B both with sawtooth waves, and tuned two octaves apart, you will have yourself a pretty rich waveform. Simply set up the filter fully open, and the envelope to give you a straight on/off organ shape, then modulate the frequency of both oscillators with a sine (or triangle) low frequency waveform and the sound will (should), like magic, become like an old electronic organ, just right for your *House Of The Rising Sun* or Madness licks (depending on your generation).

Well, there's a few things to be getting on with, but obviously all synthesisers are different and will produce their own characteristic sounds, so take these suggestions merely as guidelines along which you should be going. With imitative synthesis, you've just got to think the sound through logically, that's what it's all about... (yeah!).

### Imaginative Synthesis

You might have gathered that I like to coin new phrases to describe particular areas, and 'imaginative synthesis' seems to me like a good title for this concluding section (they'll be using it in the *othermag* in a few months). Hardly anyone uses a synthesiser purely for creating simulations of existing instruments, they want to create their own sounds. When you first get a synthesiser you start by just fiddling with the controls knowing roughly what things do, but as you progress you envisage the sound before you start fiddling, and can usually get what you want pretty quickly. You also know the capabilities of your

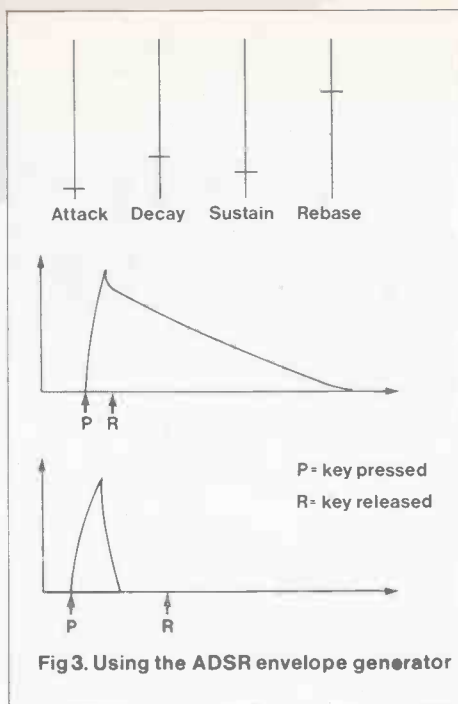


Fig3. Using the ADSR envelope generator

instrument. However, I find that most people, once they have settled down with their synth, stick to just a handful of their favourite stock sounds.

In order to correct this scandalous state of affairs, try some of the few following ideas, which perhaps you may not have thought of, and in turn they might prompt you into exploring some other less conventional patch configurations.



The man behind the 'Dave Stewart Patch'.

The first of these suggestions could be called the 'Dave Stewart Patch', 'cos he seems to use it a lot. The main feature of this set-up is the high frequency modulation of the filter, using a sine, or triangle, wave from one of the oscillators running at over 2kHz and tracking the keyboard. At the same time the filter should be modulated in the more normal fashion by the filter envelope with a fast attack and slowish decay; the result is a kind of voice box sound. It's different yet still very musical.

Try incorporating harmonic percussion effects – this is only possible if you have a dual oscillator instrument. Use oscillator 1, say, as the root, and set oscillator 2 either two octaves, or two octaves and a fifth, above that pitch. The filter can then be used to shape the envelope of oscillator 2 without much effect on the root note which in turn is shaped by the VCA envelope. If the filter has a fast attack and relatively fast decay

you get a nice percussion effect, but by giving a long attack time it is possible to create a building effect, with the sound growing in harmonic content as the filter envelope lets oscillator 2 sound through.

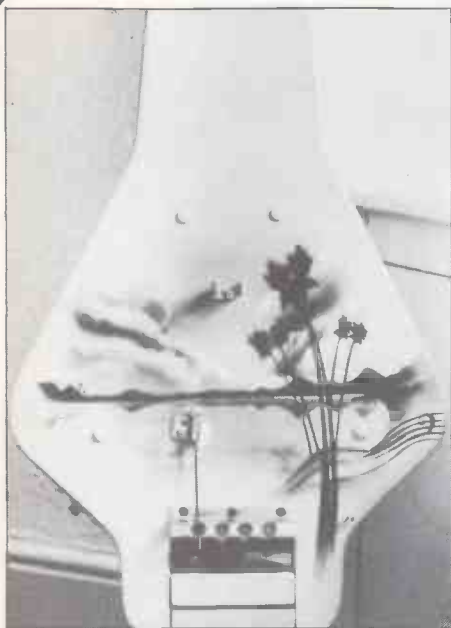
It can be a worthwhile experiment to set the oscillators at strange intervals apart, especially if your synthesiser is equipped with a sync button. This will give you a waveform with a much richer harmonic content, and thus allow you to use the filter to greater effect.

An ADSR (attack decay sustain release) envelope generator is a very useful tool, as not only will it shape the contour of a note, but enable you, in some cases, to provide a degree of control in the length of the note. This depends on the manner in which the note is played. For example, if the four controls are set as shown in figure 3, by playing a key in a pizzicato fashion (the key is quickly tapped and released) then the envelope will jump to the release phase, not taking into account the decay time control; and in this configuration the note will have a long release time. If however the note is played and held, then, as there is next to no sustain level and the decay time is very fast, the note will very quickly die away with the decay phase. So, in effect, the playing style associated with a more conventional keyboard instrument becomes reversed – by holding a note you will kill it, and by quickly releasing it, the note will sustain for a while. This is quite a useful little device which enables an extra degree of control to be achieved from the keyboard playing style.

Finally, don't be afraid to play around with the controls whilst holding a note, or notes. Manfred Mann's unique *Minimoog* playing style was partly due to the way he would bring the second oscillator manually into tune with the first in order to accentuate the note – it's an extension of the pitchbend technique, and now some manufacturers actually offer this facility as part of the performance control section. Experiment also by adjusting the filter resonance, the balance of the two oscillators, and the attack and decay parameters of the envelopes, while actually playing a passage. You will discover a whole new range of possible ways to inject expression into your playing.

Well I hope that I've given you some food for thought; synthesiser players can come up with some sounds fairly easily, but good synthesists can instantly construct exactly the right sound that they want, and make what is essentially a machine into a true musical instrument.

We'd like to run an occasional synthesiser letters page in the near future, so if you have any queries or comments on this and past articles, valid suggestions, signed company cheques, unsigned company cheques, or you just want to complain, then drop us a line as soon as possible so that we can do a super-doooper half column feature. ■



# Arco Upright

Steve York



The object in the photos is an Arco Resonet electric string bass. Rare and unusual today, solid body basses similar to this were made by manufacturers in the late 50s and early 60s, including Ampeg, Gretsch, Hofner and Framus. Because of their shape, they were generally known as 'pogo-stick' basses. Designed to allow string bassists to compete with the then emerging bass guitar, these instruments apparently combine the disadvantages of both basses, having neither the portability and playing ease of the bass guitar, nor the acoustic resonance of the double bass.

With the recent increased popularity there appears to be a mild revival of interest in the pogo-stick. Sting uses one both live and on record and Eberhard Weber, Jaco Pastorius' favourite bassist, uses an old Arco to obtain a tone remarkably similar to that of Pastorius.

The Arco pictured came into my hands

at the end of last year. The action was originally very high and stiff. The strings were probably original. Guitar repairer Neil Charlesworth took the bridge down by  $\frac{1}{4}$  in. This increased the sustain and playability considerably, even with the old strings. When new strings were fitted, the bass gave a full rich sound with a depth which could certainly not be produced by a bass guitar. Neil made a brass pickup cover to go over what looked like a miniature electric power station. He also fitted a new volume pot with a brass knob and surround, and replaced old wiring.

The bass was resprayed by Jeremie Frank, an American lady well-known for custom painting on cars, motorcycles and trucks. After some consultation with Neil as to whether and how automobile paints would take to wood, she sprayed it with a white iridescent pearl finish, going into a pink flip-flop sunburst effect on the edges.

She then added a highly detailed airbrushed Hawaiian sunset scene on the back of the instrument, with palm trees down the sides. This was then covered in a hard lacquer. The overall effect is very striking and has so far shown no sign of cracking or wear. Having found that fine automobile custom paint techniques can successfully be applied to wood instruments, Jeremie is interested in custom painting other instruments to order.

I have been using this bass on gigs with excellent results and would be very interested to hear from anyone owning or making anything similar. It seems to be that in the light of modern technology and attitudes towards bass, there is room to develop what has long been regarded as a white elephant.

Neil Charlesworth (01) 251 2175; Jeremie Frank aka Airbrush Jeremie (01) 837 6569.

From page 19

Gambino. Gambino has worked extensively with Rico and the Specials, and is a dab hand at using a smidgeon of octave divider at the appropriate spot.

To finish off, a dodgy question. Do people think you're an egomaniac, Julian? 'Probably, yeah, I wouldn't be surprised. It isn't egomania, it's just that I've suddenly realised there's no point in delegating to a lot of people, when you could do it as well yourself.'

Doesn't that make it difficult to strike a balance with the other players? 'Yeah, sometimes it does. It just means you've gotta fight it and you've gotta explain a lot to them. I have to say "Look I want it this way but I don't want it this way just because of this".'

'Y'see, I've got this real belief that my stuff is good, but my execution of my stuff isn't good enough. And I think that everybody in the band are all good

musicians, but if I go out of the room I come back and they've written a song and it's 'orrible. And it's always really well played with like good funk drumming and basslines and things like that.

'And it's not me being immodest or anything, but it's one of those things where if you see, say, Beefheart's band, as soon as they got rid of Beefheart they became Mallard and they did a real crap album. I believe in democracy in the band insofar as you should do what you do best. Like Gary is best as a drummer, but there's no point in me asking him what he thinks of a particular lyric or "would it be OK if I sing about this?" because Gary doesn't really mind. And if you start giving him this token gesture, he feels like he's gotta make a decision. And I don't think Gary would wanna make that decision, it's not important for him.'

In that case, what differentiates the

other band members from session players? That's what they are really, isn't it?

Julian: 'Um . . . in a way, but I just think they come in on the songs much earlier. The songs are really worked. You can tell when a band's a session band.

'And besides, they're all musicians who really love playing. There's an energy on that stage which is so incredibly physical, which I never got from the old band. Everybody worked hard, but I never got that feel. Like I can look back and watch Troy, and you can get this - I know it sounds hippyish - you can get a really good vibe about something. There's an atmosphere on stage which is very together - it's five people having a real good time.'

So Julian Cope, pop star in the making, this is your life. Just watch where you're pointing that gun . . . ■



# H/H Performer Combo

Gary Cooper



I've been wanting to get my hands on one of H/H's *Performer* series amps for some while now. What interested me about them is that, traditionally, H/H equipment has been the mainstay of the semi-professional guitar and bass amplification market, both in this country and in many continental countries. Of course, they have products which are widely used in professional applications but these seem to be primarily in the power amplification fields where they stand almost alone as a British manufacturer who competes in the Crown/Phase Linear/BGW league – and in many instances wins.

What interested me (and confused many people when they were launched) was that this particular H/H range is not really in the low/mid price bracket which one associates with them. The RRP of this 60w combo, with effects module, is £503.56 – pushing upwards in price, well beyond the basic combo market and even beginning to nudge some of the ostensibly professional valve products from other sources. The vital question is: does this small combo represent value-for-money at this sort of price for the semi-pro player, or is it aimed at the up-

market pro?

To look at it you'd assume that the *Super Sixty* is very much a professional's product. The constructional and design qualities of this amp look as if they were designed to take it into battle; a heavy wood cabinet covered in high quality vinyl has its edges protected from the tender ministrations of anyone's road crew by large moulded end-panels. The amp is probably the best made and best protected that I have seen – and that's an accolade which can equally well go to any of the *Performer* range that I have come to grips with. They look *beautifully* designed and made.

In addition to a fairly substantial carrying strap on top, the *Super Sixty* also features two recessed carrying handles at the sides, making it easy to transport – although it doesn't weigh a great deal anyway.

The facilities it offers also seem to imply a professional's product. The back panel (beautifully laid-out, of course) offers a variety of options for usage – twin speaker jack outs (minimum load four ohms), two sets of effects sends and returns, mixer output and a locking multi-way input socket for the effects and

channel switching footswitch. The speaker cabinet is open and shows within one of H/H Acoustics' own *PL100* 12in speakers. This looks to be a nicely made job and certainly boasts the high standards of finish of all H/H products – complete with a printed performance graph on the back! Like the rest of the package, the speaker exudes those small cosmetic touches which set H/H apart from every other amp maker. It's a 100 watt four ohm job and would seem to be well up to the task it is required to do.

The front panel may be a little controversial in its design. It all depends on whether you're one of the 'back to the roots' people who like the old Fender/Vox/Marshall 'basic' layouts or whether you're the sort of person who appreciates the modern studio touch, complete with variable options and flashing lights. At heart I tend to look backwards, but I have to admit that there is something seductively modernistic about the *Super Sixty's* front panel that appeals.

Input options are threefold. The amp has two channels, each with its own single input. In addition to these, however, a red-rimmed jack socket, situated between the other two, enables you to plug in to the channel switching arrangement, whereby you can control which of the twin channels you use by means of the LED-illuminated footswitch which comes with the amp.

Each channel sports a red LED to let you know which you're playing through and, in use, the switching between the two from the footswitch is both instantaneous and silent – a significant improvement over some other channel switching amps that I have come across in recent months.

Channel one offers a variable compressor, channel volume, bass and treble controls and then two plastic-capped flick switches, one to switch through access to the built-in Accutronics spring reverb, the other to the pretentiously-named *21st Century* effects module. Channel two deletes the compressor but has a middle control instead. It also has the same two flick switches for effects send and reverb.

Each channel also has its own master volume, these two being the last two controls before you come to the effects module. The version which I tried had the *Series 2* module. Basically, these are built-in effects units which come as a group, a metal-backed box with a cleverly illuminated perspex-like front. To change effects modules (which will probably become a series I would assume) you simply unscrew the front panel and clip the module in, screw it into place and





you're away. The reason for offering effects in this way (apart from making more money, of course!) is so that they can interface with the amp's circuitry in the best place to minimise noise and not have to float around the floor as separate (and hence fragile) extras. Mind you, if you use the convenient effects sends and returns on the back you can gain the first advantage with any effects unit. The new module (the one I had) offers Chorus, ADT, Echo and Phasing. The top left switch controls which of the effects you have on (you can't have two on at once, I'm afraid), the next across controls the effects level. Below that you have a repeat control with two green LEDs above it (these flash at the phase/chorus rate) and to the left of that another pot, this time for delay or speed (depending on which effect you're using).

Finally on the front panel (still with me?) you have a depth reverb control and a large plastic internally-illuminated mains switch. A comprehensive selection of things to play with by anybody's standards. As soon as you switch on, the whole front panel comes to life. The large H/H logo lights up, as does the mains switch. The LED of the channel you're switched into bursts into brightness and the pulse rate on the LEDs starts showing. Again, the H/H near obsession with making things look thorough and right shows clear - it's not mere cosmetics (although there is a large cosmetic appeal in the principle) but a desire to offer ergonomic perfection.

The amp is quiet in use, just a barely detectable click, click, click as the LEDs flicker, backed by a mains hum and a light hiss dependent on the volume you've set.

Thus far we've got a picture of an amplifier which, in terms of its layout, design and construction is undoubtedly a professional piece of equipment - certainly bearing in mind the price. Facilities, however, I'm not too sure about. Aren't we missing something in the EQ department? After all, even the more beneficially equipped channel only offers bass, middle and treble, and the mere pair of tones on the compressor channel seems positively antediluvian when compared with the current craze for parametric

equalisers scattered about like confetti. As it is, I would suggest that this combo is rather under-provided for in the important area of equalisation.

Over the years H/H have been among the pioneers of Mos-Fet transistor application. Basically, Mos-Fets exhibit some of the characteristics of thermionic devices (valves) without some of the disadvantages. They do not suffer from thermal runaway as do conventional bipolar transistors and should, in theory, produce a sound largely free of the unpleasant harshness which many players have objected to in overdriven bipolar powered amps.

Having raised several storms over their misguided attack on the valve with the VS ('valve sound') *Musician* series (they did not sound like valve amps to me, or almost anyone else I've spoken to!), H/H have fought shy with the *Performer* series of making comparisons between Mos-Fet *Performers* and valve amps. All they say is that they sound different from valve amps and different from standard tranny amps. In some senses this is true, but I shall get on with it before we run out of space.

The *Super Sixty* is a loud amp - very loud. You can never honestly say that a so-called 50 or 60 watt amp is delivering more than the rated output because, of course, so much of the actual loudness which we hear is due to speaker efficiency, cabinet design and a host of other factors. All I'll say therefore is that H/H are being conservative in their estimate of this amp's power. It may only deliver 60 watts but it's massively loud - quite good enough for most gigs which the average player will encounter.

The characteristic sound is (and I wouldn't deny this) warmer than most bipolar powered amps, and, again as H/H say, it does not sound like a valve amp. Of course, there's no reason why it should, not everyone likes them and one suspects that H/H are mightily sick of the whole controversy anyway.

The amp is not only powerful, it's clean too. Sparklingly clean, but without the dryness which one normally associates with the older generation of tranny amps. It would be ideally suited to the cabaret player, the folk guitarist, the

jazz player, the pub guitarist, in fact almost any guitar player who didn't want a convincing rock/heavy/new wave distortion. It is here, in my opinion, that the H/H founders, not to say flounders. I ran both my own Fender *Jag* and a high powered Ibanez *AR100CS* through it and neither guitar could get what I would want to use as a solo sound. If the master volume is set up low and the channel up high then, yes, the amp will run into distortion but it is not a sound which I would want to play with - or listen to.

Fair enough: if you want that sort of sound then it may be better to look elsewhere. For a clean player and someone who wanted clean versatility then it may be that this doesn't matter, in which case tonal variability and the effects may be of more interest to you. Read on. The compressor on channel one is nice. Compressors have their fans and I'm one of them for some types of work. Indeed, using the compressor on this amp combined with a judicious use of the master volume set-up is about the only way of getting a halfway decent standard rock/lead sound. Used together it is just about possible to get the sort of sound that James Last's guitarist might call a rock sound - need I say more? Still, the compressor is useful for a smooth, fast lead break.

The tonal range is adequate - perfectly good enough by the standards of earlier tranny amps but not up to comparisons with the latest parametric-equipped amps and not even very much when you look at some valve amps of several years ago with their traditional bass, middle, presence and treble controls. The two tone controls on channel one and the three on channel two work all right but I wouldn't lose any sleep over them.

On the effects front, I quite like what is on offer. I feel that phasing is now a fairly dated effect (at least one new range of FX units on the market hasn't bothered to include it). A flanger might have been a more modern choice. The phaser is, however, rich and warm, a good one which will appeal to those who still want this effect. The echo is a fairly typical pedal-sounding type with a variable delay from 37mS to 100mS. If you don't mind non-tape echoes (I don't for guitar use) then this is OK, but I'd have appreciated a few more repeats and a much longer delay than I could get from my sample. The ADT is basically a very short echo with a delay time from 24mS to 55mS. Again, it's a useful effect and not bad of its type. The chorus, too, is OK if you like choruses.

If I seem equivocal about these effects it's because I honestly feel that effects are very much a matter of opinion, some you





like and some you don't. As long as they are quiet (these are) and reliable (these should be) it can only be up to individuals to see if they like them. I certainly found this module acceptable and the price isn't bad. You do lose the advantage of buying from several different makers this way (with the consequent choice of several different voicings, of course) but you also lose batteries, snagged leads, broken knobs and what have you. Possibly the only major problem is that you cannot have them all on together on this system. You might just want to.

The on-board reverb is excellent, I will say that much. Reverb is easier to be definite about and I liked this one very much indeed. H/H have made excellent use of the latest Accutronics model and are to be congratulated on it. The reverb is clear and deep with bags more there than you could ever reasonably want or need.

So, what on earth do I make of this amp? Well, yet again, it is beautifully designed and made. It does, however, lack absolute tonal range and versatility when compared with more modern designs currently on the market. Notwithstanding arguments about available front panel space, surely something could have been done to offer

more? This makes the *Super Sixty* seem curiously out of date, an odd thought when it looks so much more modern than anything else on the market.

For the player whose work called for solid power outputs of clean, warmish tones sprinkled with the occasional effect, then this would be a nice piece of equipment to have – and certainly an easy one to take about with you. That would suit it for pubs and clubs, cabarets, dance bands, jazz groups, folk bands, small rock bands, weddings, socials – you know the sort of gig I mean (and we've all played them, haven't we?).

And yet there is the price. Even without the effects module the *Super Sixty* isn't all that cheap. I wonder if the market which would appreciate it can afford it? I have heard it said that semi-pros have more money than the pros and it could be that H/H are right in assuming that this market (which is surely where they have aimed this amp) can and will pay for the excellent qualities which it possesses.

I had hoped that this amp would have shown a move up into the sort of equipment which H/H must be capable of making. A definite sound – a statement of personalty – with a firm rock approach. As it is, the *Super Sixty* seems to me to be

curiously old-fashioned in some areas and very expensive for what it is.

But, no doubt, there will be those who disagree with me. And anyway, not everyone wants a screaming, tearing rock sound. If you do want that sound then fine, buy a Marshall or a Vox or a Hiwatt. If not, then this may be the amp you need. But for me it misses the boat – especially for almost £370 (combo minus effects module).

A final thought on that price and the strangely out-of-date feel about this amp. Could it be that the price of the superb mouldings, custom-made component parts, special knobs, switches and what have you shows a degree of production inflexibility? Once you've tooled-up to make an amp like this, one assumes that your break-even point must be some way off. Updating modifications cost money, as do replacements; maybe a simpler, more conventional amp might have been up-dated by now? Who knows?

This amp is not for me, I'm afraid, but it may suit a number of you out there providing you understand what you are buying and why. Don't be seduced by the flashing lights – let your ears do the talking! It's a great pity, really, because I wanted to like this amp. So it goes□

# TEISCO

## sounds of the future



The Teisco 60F Synthesiser is the smallest in the new range of Teisco Synthesisers. Housed in a robust metal case with a full 2½ octave keyboard, switchable over 6 pitch levels – 4', 8', 16', 32', 64' and low. There is also a touch sensitive Pitch Bend on the cheek block to instantly move the pitch up or down. The synthesiser comes complete with a very useful 30 page booklet "How to Play your Synthesiser".

R.R.P £299.00 incl. VAT.



Trade Distributors  
**John Hornby Skewes & Co.Ltd.**  
Salem House, Garforth, Leeds LS25.



# Sequential Circuits Pro-one

Dave Crombie

From the Californian-based company of Sequential Circuits Inc comes a brand new monophonic synthesiser – the *Pro-One*. I'm sure that you are all aware that SCI are the people responsible for the extremely popular *Prophet-5* polyphonic synth, and, more recently, the dual manual version, the *Prophet-10* (see review *SI* Feb '81). So, why has this company, which has produced these professional products, moved into what is, in effect, the semi-pro market, and developed a low-cost monophonic instrument? And why a monophonic synth, when it would appear that the field is almost saturated with low-cost units from practically all the other major synth manufacturers?

The first question can be fairly easily answered – 'Don't put all your eggs in one basket.' If the bottom falls out of the professional market (unlikely, but possible), SCI, with basically just two top end products, are going to be left high and dry – an expensive plant, and a fairly large workforce, idle. So, it was an obvious move to broaden their base. As to why they chose a monophonic – well, the *Pro-One* is basically a single-voice version of the *Prophet-5*, so most of the design work had been done, and, as a large proportion of the components that go into the manufacture of the *Pro-One* are already being used in their polyphonic machines, it was therefore possible to cost the new instrument from a position of strength: that is to say, they could buy in the components at a very good price because

of the quantities involved. It is true that there are a lot of good monophonics around (Moog *Prodigy*, ARP *Solus*, Roland *SH-2*, etc), and all are competing for the low-cost 'dual oscillator' custom. Sequential did their sums and reckoned that they could produce an attractive instrument with extra features not to be found on the competitors' models, at a very reasonable price: hence, the *Pro-One*.

Obviously, in order to keep costs down, Sequential Circuits have had to change some of the control media that were to be found on the *Prophet* – for example, it would have been impossible to keep the LED push-button switches because they are just so expensive, and the control knobs don't have the distinctive silver trim – but it's really what the instrument can do and how it sounds that is important, not minor changes in appearance (though I will have something to say about the switches later on).

The *Pro-One* is controlled by an 8021 microprocessor, and, if you were to look inside the unit, you would be stunned by the apparent lack of circuitry. This is, in fact, deceptive because the *Pro-One* (as with the *Prophet*) uses the Curtis Electronics custom music chips, which basically means that you've got a voltage-controlled oscillator (VCO) sealed in a chip the size of a thumbnail, whereas a discrete VCO would consist of at least 20 separate components, and probably more. Curtis chips are also used for the filter (VCF), the amplifier (VCA), and the

two envelope generators.

Anyway, let's get back on the outside of the unit. The casework is made out of vacuum-formed, black ABS (two parts – one for the keyboard, the other housing the circuitry and controls), with wooden end cheeks. It looks attractive, and not a lot dissimilar to the Moog *Prodigy*. The casework is nicely finished, and is fairly solid, especially considering that it's basically of plastic construction; however, I would strongly recommend the purchase of a flight-case for any prospective *Pro-One* owner wishing to take it on the road. Dimension-wise, the *Pro-One* is a tidy 25½ × 15½ × 5in (655 × 394 × 127mm), and it is pretty lightweight (around 15lb, I would estimate).

The keyboard, along with 90% of other American electronic instruments' keyboards, is manufactured by Pratt & Reed, in Connecticut. As in Italy, the keyboard manufacturing industry has grown out of the wreckage of the furniture industry, which took quite a dive in between the wars. The *Pro-One's* keyboard spans three octaves, C to C (37 notes), and, as with most synths, has bevel-fronted keys. The action isn't too light, the keys offering some resistance against which to play, so that most players will find the keyboard easy to get on with.

To the left of the keyboard is the pitchbend and modulation wheel, but otherwise, all the controls are to be found on the control panel, above the keyboard. As previously mentioned, these controls bear marked similarity to those of the

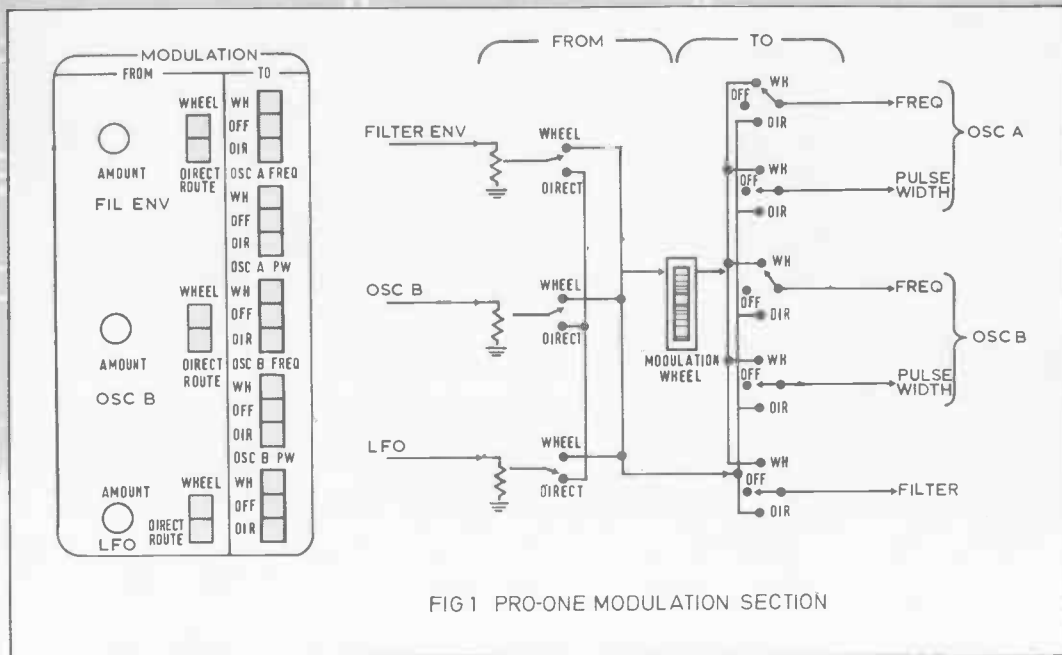


FIG 1 PRO-ONE MODULATION SECTION

*Prophet* (no programmer, though). Oscillator A produces ramp and rectangular (width variable and 'modulationable') waveshapes, and Oscillator B ramp, triangle and rectangular (again, width-adjustable) waves. Oscillator A will always track the keyboard and can be pitched in any of four different octave registers, as well as being continuously variable over the octave. Similarly, the pitch of Oscillator B can be varied; however, for modulation purposes, Osc B can also be freed from the keyboard and switched to a low frequency setting. A sync facility can be used to force Osc A to latch on to a harmonic of Osc B for more complex waveform production.

I'm a firm believer in having continuously variable mixing controls for the oscillators, as it enables far more subtle variations in timbre to be created. The *Pro-One* has such mixing controls, as well as level control for either the noise source, or an external signal input. In common with almost all other monophonics, the mixed signal is then fed to the voltage-controlled filter, which, for those unfamiliar with synthesiser terms, is a glorified tone control. In this case, the filter is a 24dB/octave (four-pole) low pass type (the best for synth work). The filter is like the soundboard of a piano, or a guitar, in that it determines the overall quality of the sound produced. To this end, there are two prime controls: the cut-off frequency, which sets the point at which higher frequencies start to be attenuated, and the resonance, which introduces an element of feedback to the signal. If the resonance control is turned up too far, the filter will act like an oscillator, producing a perfectly pure sine wave pitched at the cut-off frequency. This is a most important facility, as the filter cut-off frequency can

be made to track the keyboard; thus, when resonating, the filter can be 'played' just like an oscillator.

The tone of an acoustic instrument is constantly changing through the duration of every note: the *Pro-One* has (as, in fact, do most synthesisers) an envelope generator for sweeping the cut-off frequency during the course of a note. This envelope is broken up into four sections: the attack rate – the time it takes for the envelope to reach its peak level; the decay rate – the time it takes to reach the third section, the sustain level; the sustain level, at which the envelope remains until the key is released; and the release time – the time it takes for the envelope to die away to the initial zero position. This is the envelope, and its effect on the filter can be varied to create the desired effect. A second envelope generator is used to shape the amplitude of the note, and it is identical, in terms of control section, to the filter envelope. Both envelopes are normally triggered every time a new key is depressed; however, the *Pro-One* has a further section, marked 'Mode', and this consists of three little switches, and a little LED to clarify matters. The first of these switches is marked 'Retrig-Normal'. In normal mode, the keyboard will adopt a low note single triggering priority, which means that, if more than one note is held, the low one will sound. It also means that all the keys have to be released before a trigger pulse can be produced by a new key. In the retrig(ger) position, a trigger/gate pulse will be generated every time a new key is pressed, no matter what else is going on. A useful facility, this, because it enables you to have more control over the instrument's sound, purely from how the keyboard is played. The second switch,

marked 'Repeat/Ext(ernal)-Normal', enables the envelopes to be automatically triggered, either by the low frequency oscillator, or by an external trigger. And, finally in this section, the 'Drone' switch simply opens up the VCA to give a continuous tone. The LED shows then that the gate is 'on'.

Another useful feature, and, to the best of my knowledge (though I'll probably be proved wrong) only to be found elsewhere on Kawai (Teisco) synths, is the automatic glide. The *Pro-One* has a glide control that is similar to all those found on other synths, ie you can vary the rate at which one note slews up (or down) to the next. However, there is an automatic mode, which only activates the glide between notes when the previous note is being, ie it will only glide when the notes are played 'legato' (bit of culture here), so, again like the mode switch, another parameter can be controlled purely in the manner in which the keyboard is played.

### Modulation and the Performance Controls

On first appearances, the modulation section looks a bit confusing, but figure 1 will probably help sort things out. Firstly, you have to consider where the modulation is coming from: there are three possible sources – filter envelope, Oscillator B, or the Low Frequency Oscillator (which offers ramp triangle, and/or square waveshapes). There are separate amount controls that set the amount of each modulation source. Each source is then routed either through the modulation wheel or mixed into what is known as the direct modulation signal. So, you have two possible different modulation signals,



which can be subsequently routed to any or all of the following: Oscillator A frequency, Oscillator B frequency, Oscillator A pulse width, Oscillator B pulse width, and the Filter cut-off frequency. It seems more complex than it actually is, but the possible effects greatly outweigh this apparent complexity of operation. For example, you can both frequency- and pulse-width modulate Oscillator A with different periodic (oscillator) waveforms – a useful possibility, and, up to now, only possible on modular synths.

The other performance control is the pitchbend wheel, which raises the pitch of the two oscillators just under a perfect fifth but lowers it a fifth. There is a centre stop provided, which facilitates accurate and easy return to the set tuning. For some reason, though, Sequential Circuits have failed to label which wheel is the pitchbend, and which the modulation amount: still, it takes a matter of seconds to pick up which is which.

### Sequencer and Arpeggiator

Now, these are two very interesting sections, which will especially appeal to the 'new wave of electronic musicians' school. The sequencer will record two 20-note sequences (or one sequence of up to 40 notes) in step time, which means that all notes and rests will be of equal duration. There are but two switches for controlling the function of the sequencer – a Record-Play and a Sequence 1-Off-Sequence 2 selector – so programming is simplicity itself. The sequence is played back at a rate determined by the frequency of the low frequency oscillator, and, although you cannot obviously play along with the sequence, the keyboard can be used to transpose the pattern. Alternatively, and, I found, very effectively, the sequencer can

be triggered by an external pulse from, say, a rhythm unit, so you can have automatic drums and bass or melody patterns playing away automatically – neat!

The Arpeggiator is much better than it might at first sound. It's a similar principle to the one used in the ARP *Quadra*, in that if you play a chord on the keyboard, each note will sound in turn: again, at a rate determined by the LFO/Clock. However, if you use a much faster external trigger pulse, it is almost possible to get a polyphonic effect – though this isn't particularly satisfactory, except for special effects.

So, that's about it for the *Pro-One*, save that on the back you will find CV and Gate input and output sockets, as well as an audio input, and a standard line output. A particularly important feature of the audio input is that there is a threshold detector circuit built into the *Pro-One*, which enables a microphone or a guitar to be fed into the mixer before the filter. The threshold is set by the Noise/Ext knob, so that a trigger pulse is generated every time a new note, or chord, is played. This opens up a lot of possibilities to the creative synthesist. Mmmmm.

I really think that the *Pro-One* is a great instrument: it has almost everything you'd ever want from a mono synth and can be found in the shops at a very encouraging price of £355 (inc VAT). The sound quality and texture, overall, are very clear and uncoloured. This is, to my mind, a great asset; however, it does mean that the *Pro-One* isn't quite as beefy in terms of sound quality as, say, a *Minimoog*, or Oberheim *OB-1A*. Where this uncoloured sound is useful is in imitating other instruments or creating sounds that one wouldn't immediately recognise as being

a synthesiser. The tonal quality of the *Pro-One* is very much in fashion these days, but I must quickly stress I'm not a fashion-conscious person – it just seems that the *Pro-One* has the right sound. The only minor criticisms I had were related to the slightly flimsy construction – the rotary controls felt as if they could be secured a bit more firmly, and the rotary switches (because they were of the break-before-make type) caused the octaves to jump if they were altered whilst a note was being played. That being said, the unit is incredibly well-designed, both in terms of ergonomics and for servicing access to the gubbins, which is so easy. I didn't like the small slide switches, as it is difficult to determine their status at a glance. I think it would be worth SCI's while to invest in some of those plastic caps for the slide switches (as do Moog); it would be possible then to use the same actual switches, but their positions could easily be seen. Failing that, maybe the switches' plastic sliders could be of white plastic instead of black – just an idea.

No, I don't think that SCI need have any worries about this one selling, and, best of all for them, their move down-market hasn't caused deterioration in their exemplary design standards: their reputation remains intact. □

Before you move on to the next fascinating article, a brief word about the latest update to the *Prophet-5*. As of April 1, all *Prophet-5s* manufactured by Sequential Circuits have had both digital and analogue interface sockets on the back. This is in preparation for the appearance of the new polyphonic sequencer, which have been available since the end of May: this will be of similar spec to the *Prophet-10s* sequencer, save that it will have its own power supply.

# Rod Argent's Keyboards



We are the sole U.K. distributor of all Sequential Circuits products, and are pleased to announce the introduction of the new Prophet 5 and Prophet 10 polyphonic synthesizers.

Additional features to what is already the world's premier keyboard instrument, the Prophet 5, include cassette interface for storage of recorded sounds to enable the user to build libraries of programs. The Prophet can now be programmed with different tuning scales (pythagorean, mean tone, just intonation, etc.) for even more realistic imitative sounds and "beat-free" multi-tracking with other instruments. Also included is a crystal referenced oscillator (accurate to 0.1 HZ) for tuning purposes and complete edit facilities for instant modification of sounds. The Prophet now comes with low-note priority single-triggering in unison mode (just like a minimoog!), and completely re-designed circuitry for improved roadworthiness and faster servicing.

These new features, together with those that have made the

Prophet 5 the synthesizer chosen by nearly every major keyboard player in the industry, make this instrument unsurpassable in every respect.

Now from Sequential Circuits comes the Prophet 10. Like the Prophet 5 it is completely programmable and polyphonic. It has 10 voices, two manuals (for playing two sounds at one time), a polyphonic sequencer with built in computer cassette, multitrack facilities and, of course, the incredible Prophet sound. For more detailed information or demonstrations contact us at our address given below.

Sequential Circuits Prophet 10	£4,600.00
Sequential Circuits Prophet 5	£2,450.000
Pro One Monophonic Synthesizer	£355.00

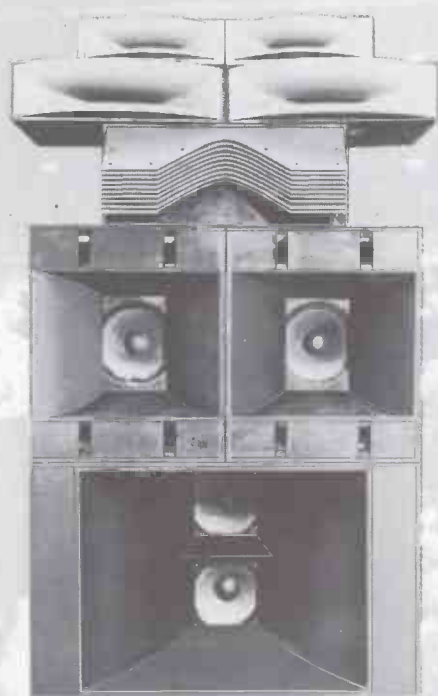
(Prices include value added tax)

20 DENMARK ST LONDON WC2 Tel. 01-240 0084



# PA: Speakers 3

Ben Duncan



It often makes sense to dispense with horn loading at the bass end in small venues, because adequate sound levels and more frugal projection can be achieved with smaller, cheaper cabinets. Direct radiator and vented bass cabinets, again with a sensible cone area (eg: 2 or 4x15in or 2x18in) provide intimate bass which 'happens' close up, and provided these enclosures are used with a tri-amped system, the sound quality needn't suffer. Finely tuned vented bass cabinets of the *Theile* variety are the best choice, as they couple reasonable efficiency – circa 8% – and small size, with a dead flat response to around 60Hz, or lower still with active equalisation: The Electrovoice TL606A and TL606D are good examples of this breed. Electrovoice can provide TL606A DIY builders' plans, but it should be noted that the critical nature of the *Theile* 'tuning' means that the cabinet is only suited to Electrovoice drivers.

While it's very trendy to own a PA looking something like a scaled down 80kW rig, and stuff everything through it, your music might benefit from something far simpler. The first rule is to avoid putting guitarists through the PA and the next rule is to avoid putting *everything* through the same speaker stack until you have a system powerful enough to handle all the instruments at high level, without creating a muddy wall of grossly intermodulated sound. In a club or pub, it's usually only the kick drum and vocals that are in desperate need of reinforcement. By restricting the PA mix to these essentials, and adding judicious equalisation, you'll find it easier to get

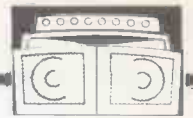
the vocals to 'cut through' – a perpetual headache for hard rockers. Of course, it's very tempting to mic up other parts of the drum kit, and, oh yeah, the bassist wants a 'bit more' and hey man, now our guitarist feels emasculated ... but do you want to descend once more into cacophonous anarchy?

When the vocals are in sole need of reinforcement, a good column or *line source* speaker (eg: 4x10in, 6x8in) is perhaps without parallel for its subtle rendition of the human voice – and equally the guitar, whether electric or acoustic – but *not* all at the same time, please! Columns have good projection properties (as Charlie Watkins proved at the Hyde Park concerts of 1969), reasonable efficiency and their horizontal dispersion is wide (Typically 80°), though this narrows at high frequencies. This problem can be overcome and the clarity at high levels can be improved by adding a treble horn with wide horizontal dispersion, and Bi-amping the arrangement with a two-way active crossover so that the columns are superseded by the tweeter above 4kHz. The vertical dispersion tends to be restricted, so if your columns are high above the punters, they should be aimed slightly downwards. Columns are essentially midrange, single source speakers, and even though it's possible to scale them up for bass, they only excel with vocals and vocalising instruments, and are inherently unsuited to stacking. Nonetheless, the dictates of fashion have declared columns 'obsolete' and therefore made them accessible secondhand to penniless musicians.

## Drivers – a highway code

The suicide mechanisms in loudspeaker drivers are basically twofold, complicated, and frequently misunderstood. Confusion arises because every speaker manufacturer has an idiosyncratic – albeit sensible – method of power rating. Determining the maximum power a music speaker can handle with continuous tones (eg: 1kHz sine wave) is simple, reliable and meaningless. Rock is the antithesis of a continuous pure tone; the power and frequency content varies erratically in time, according to the nature of the music. Rating a music speaker boils down to a compatible juxtaposition of the short term stresses (eg: repetitive and massive millisecond peaks from percussion instruments) – and the long-term average power capacity; Feeding 100 watts of *music* into a driver averages out over several hours at around 10 watts, and if the speaker is 10% efficient, the tiny voice coil area has to dissipate nine watts of heat.

Driver voice coils move up and down with enormous acceleration in a minute magnetic gap, typically 0.01 in wide. Such *finesse* can easily go astray if the speaker is driven so hard that the cone tries to leap out of the cabinet? A minute warping of the speaker chassis caused by overtightening the mounting bolts or dropping the driver can also produce out-of-centre voice coils. The offending coil of wire either rubs against the magnet producing lots of distortion or smashes to pieces and promptly shuts up. Since diaphragm exertions are proportional to power – and inversely proportional to frequency, adding lots of bass boost at



high levels is bad news for any driver. Excessive diaphragm (or cone) movements occur when horn or reflex loaded speakers are driven at frequencies below the cut-off frequency, above which the enclosure restrains or 'loads' the driver.

Compression drivers are particularly prone to this fate if the crossover frequency is set too low, or the crossover fails or the driver is thrashed without being coupled to a suitable horn. Cone speakers are tougher, but nonetheless, bass speakers are frequently silenced by the overenthusiastic application of bass boost. Fortunately imminent over-exertion often produces explicit warning: compression drivers tend to honk and rasp whilst cone speakers produce an easily recognisable 'cone flop' sound. Develop a relationship with your bass speakers, test their limits and learn to recognise their cries of agony!

Drivers also suffer from a more surreptitious, almost ritualistic form of demise – the conflagration of the voice coil! This could be the result of pairing a 100 watt driver to a 500 watt amplifier and using the combination at full power, but more often, it's a case of pairing speakers and amplifiers with equal nominal ratings, and then, on finding the PA isn't loud enough, winding everything up to produce 100% overload and hideous squarewaves. Apart from their unpleasant musical qualities, squarewaves produce *twice the heating effect* of equally big squarewaves, so our 100 watts of music, which we assume for simplicity averages out as a sine wave – becomes 200 watts and the speaker promptly and very reasonably expires. Squarewaves are also deadly because their almost vertical sides demand mind-boggling acceleration from the diaphragm, with g-forces around 2000 – remember that aircraft wings fall off at 10s of gs!

One answer is to use drivers rated at two or even four times the amplifier's power *à la* Marshall Stack. Then regardless of how much you clip and distort the waveform, the speakers will grin and bear. Or, paradoxically, you can use an amplifier which is two or four times more powerful than the driver, together with

an accurate peak programme meter. By setting the amplifier's gain control so that its average level is equal to the driver's rating and then safely gaffer taping it in place, the long term power rating will be heeded, and while the short term percussion transients will exceed the driver's rating, at least they won't turn into hideous squarewaves!

As a rule of thumb, compression drivers and tweeters find squarewaves more objectionable than occasional over-exertion, and are therefore best paired to turned-down, over-powered amplifiers, while bass and midrange cone speakers are quite happy to accept squarewaves – as millions of combo owners will attest – but would prefer not to have their voice coils decanted by sudden power bursts please... Unfortunately, the situation is further complicated, and should be qualified, according to the crossover techniques employed, the vagaries of amplifier power ratings and the precise nature of the music. And of course, you have to assume the manufacturer's power rating is gospel. Often it isn't – at least not in an intuitive, commonsense fashion. Practical/scandalous knowledge of this nature can often be gleaned by chatting up to sound engineers.

#### Distortion and colouration – A South African dilemma

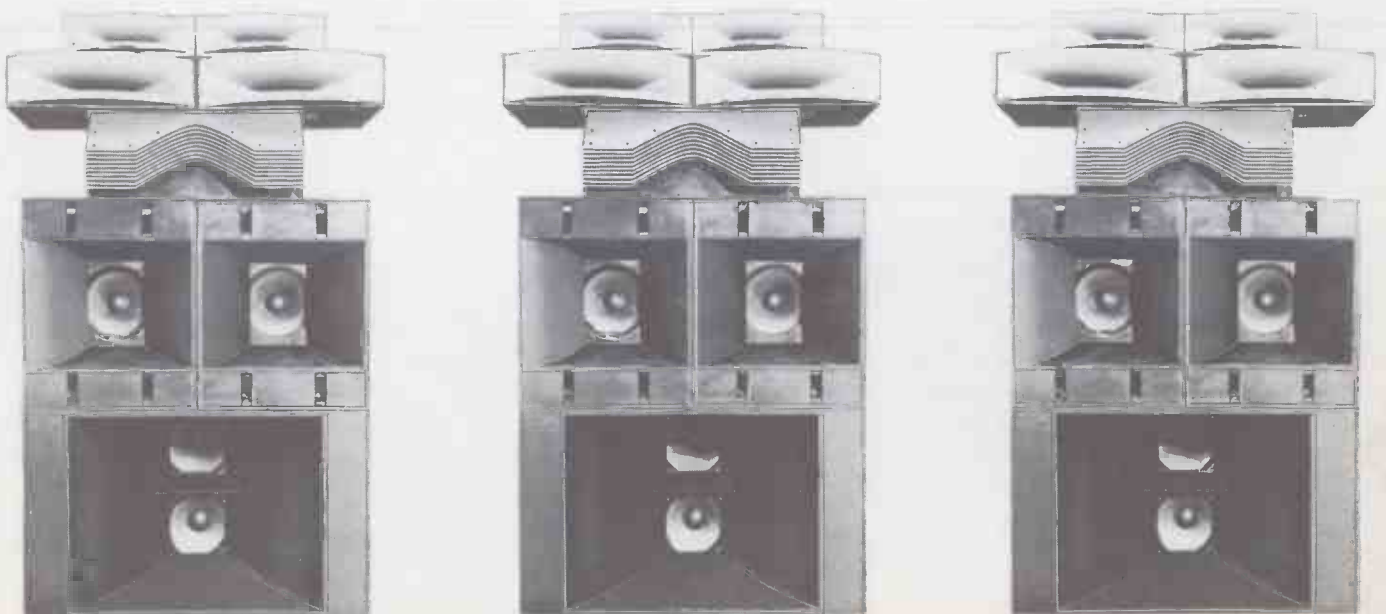
Distortion in horns (eg: The 'flare') is predominantly composed of low order harmonics, which means they tend to sound pleasantly rounded or punchy rather than sharp or muddy. This is fortunate, as the distortion can be quite high – it's rarely less than 5% at high levels, added to which is the distortion generated by the driver. A horn's distortion is roughly proportional to its efficiency and the number of octaves over which it is driven, and again, this is fortunate, because in the bass regions, where the octave bandwidth is wide and high efficiency means fewer bins to hump around, distortion is not a serious ear-offender, you can just about hear 25% distortion at 100Hz, but it doesn't imitate. In the midrange however, the ear is *very* sensitive to distortion and here, low distortion is more important than

high efficiency. Treble distortion is again relatively innocuous – for instance, 20% 3rd harmonic distortion at 10kHz is rather irrelevant, because the 3rd harmonic of 10kHz is 30 kHz. Can you hear 30kHz??

Traditionally, the major shortcomings in horn-loaded speakers has been their unpleasant colouration – the spurious manner in which they either emphasise or belittle different frequencies. Again, colouration is most disagreeable in the midrange, but it's more or less equally undesirable at any frequency between 60Hz and 16kHz. However, the arbitrary objective reality of rock music can make colouration acceptable, provided it sympathises with the spirit of *your* music and doesn't unbalance the PA. For instance, a tweeter with a 16kHz peak will provide lots of 'test', which sounds great if your bass goes down to 40Hz, but otherwise it merely emphasises the bottom end deficiencies. Sympathetic colouration broadly suggests warmth for reggae, bluesy rock, soul, disco and cabaret bands, hence peaks in the high midrange are *verboten*, and the bass mustn't be overturned by excessive treble. Weirdo synth bands (Apologies to Richard Burgess)/jazz-rock/punk tends to thrive on the opposite – a cold, harsh, almost clinical sound.

Regardless of frequency response graphs, the only way you can reliably assess a real, and therefore coloured horn is to try it out on *your* PA with your music, whilst playing around with the equalisation, the crossover frequencies and the method of stacking. Alternatively, reasonably flat horns can be judged by listening to them on any decent sound system with music you both know and like. Finally, remember that the colouration of a horn can be radically modified by the driver it's coupled to – and *vice versa*; and again only experimentation and discussion coupled with sensitive appraisal will reveal the nature of the combination; indeed, this attitude rather than that of regarding manufacturers' recommendations as sacrosanct is a major ingredient in the world's best sounding PA systems. □

Next: amplifiers.



# SOUND REVIEWS

Things have generally improved with *Landscape's From The Tea-rooms Of Mars To The Hell-holes Of Uranus* (RCA LP5003), which hasn't been far from my *Stowaway* (or similar brand) for some time now. There was a slight feeling of shock on first encounter, but I'd noted in my review of their first album (*SI* Oct '79) that it was the likes of the 'patchwork core' of *Mechanical Bride* from that record which pointed towards the band's future – and, it would seem, deserved success. *Einstein A Go-Go*, Lyricon-woven, saw the band confront *TOTP* and win. Minor criticisms of *Tea-rooms* like the length of the *Norman Bates* theme cannot stop this latest platter from confidently pushing the limits of human-assisted technology with the drivers firmly in control. **Quincy Jones** new LP *The Dude* (A&M AMLH63721) boasts the very cream of Californian session players cut into the grooves. Material and treatment need to be more single-minded – I'll play Michael Jackson's QJ-produced *Off The Wall* much more. *Suckin' In The Seventies* from the **Rolling Stones** (Rolling Stones CUNS 39112) is pretty dull, really. 'Success,' states a Mr Jagger (vocals) on a pretty restrained *Shattered*, 'does it matter?' Evidently yes: the Stones choose a tedious live version of *When The Whip Comes Down* and the dated but attractive *Time Waits For No-one* as representatives of their 1970s. Into the Eighties lads... where you will find the talented **John Cale** in form on his new *Honi Soit* album (A&M AMLH64849). The one-time Velvet Undergroundsman rarely turns in a duff'un, and this proves to be a passport to few previously uncharted areas and could even be considered as a sort of sampler of his career to date. *Riverbank* is a gem, conjuring up Cale's 1973 classic *Paris 1919*, while John's period of collaboration with Brian Eno in the later 1970s has also paid him dividends. The disc is worth investigating, despite its rather eclectic nature.

Tony Bacon

The **Fabulous Thunderbirds** *Butt Rocking* (Chrysalis CHR 1319) The second album didn't quite have the sparkle of their first but the Fab Thuns are right back on the ball with this, their third. Again there's one immaculate Slim Harpo revival (*Tip On In*), one speciality number (the aged *Cherry Pink And Apple Blossom White* transformed into a showcase for Kim Wilson's breath control) and a clutch of Wilson songs that could have been written last year or 1957. The joint composition with Nick Lowe *One's Too Many* is presumably dedicated to guitarist Jimmie Vaughan's left leg. **Delbert McClinton** *The Jealous Kind* (Capitol EST 12115) McClinton has long been one of the very best live honky tonk singers, equally at home with laconic R&B, emotional country or steamy soul. Unfortunately you've had to leave England to find this out but now following a year in which dull 'luminaries' like John Belushi have been wont to leap onstage and share his milk, he has a hit in the US from this very album. The bad news is that he's had to go the Muscle Shoals route to do it – clean, tidy production by Barry Beckett and co and a severe over-reliance on Bonnie Bramlett's 'background' vocals are the result, but now that Capitol have got the nod from the great unwashed, maybe there'll be a live album ere long. **DJ Kane & the Millionaires** (Radar RAD 29) British four-piece makes good first impression. Nothing spectacularly original but good songs, useful hooks, punchy rhythm section and potential hitlet or two, notably each side's opening cutlet. *Snips La Rocca* EMI EMC 3359 *Snips'* own dramatic shorthand lyrics (10 songs out of 12) with suitably sparse and jagged accompaniment by producer Chris Spedding and Bill Nelson provide the one-time Sharks vocalist with a surprisingly good return to your local record store. *Tight Shoes* and *Work* (no words wasted on the titles either) are the standouts.

Rob Mackie

**A Certain Ratio** *To Each...* (Factory Records Fact 35): I'd waited so long for this LP it had to be good. It's not just good, it's excellent. Reaching a peak, which is already being transcended, the nine tracks in evidence are the logical successor to their previous produce. From their first tentative steps, the drummerless *All Night Party* (Factory FAC 5), the drummerful *Graveyard And The Ballroom* (Factory cassette Fact 16) to their more percussive excursions *Shack Up* (Factory Benelux FACBN 1-004) and *Flight* (Factory 12in FAC 22) **A Certain Ratio** have perpetrated their impulsive dance music. The climax of this phase is a magnetic collation of ideas – well-produced and, like their recent live shows, heavily percussive. It would be sinful to single out tracks as the LP is structured perfectly, each track complementing the other. The versatility of the platter makes it easy to listen to in any situation, holding its own as hot dance music or as a rhythmic relaxer. All this and more. It comes in a tasteful gatefold sleeve (remember them), and has sat confidently on my turntable all week.

Apart from gaining **A Certain Ratio** my Wharfedeales have been vibrating with an array of sound old and new: **ESG** *You're No Good* (Factory FAC 34). A new feast from Factory, simple but effective with a tinge of Motown percussion and some nice effects; **Echo** and the Bunnymen *Pictures On My Wall* (Zoo Cage 004) This is nearly worn flat, the emotional Bunnymen before the Korova hatchet production, garnished with drum-machine. **Orange Juice** *Poor Old Soul* (Postcard 81 2) Punchy, expressive and reviewed elsewhere. **KID** *Don't Stop* (Groove EMI 5143) Hot brass, girlie vocals, pulsating synth, disco-funk with affection. With the funk revival rife **Parliament's Mothership Connection** (Casablanca NBLP 7022) still provides the definitive sound.

Dave Henderson



A Lemon looks on (Picture Steve Pyke).

## The Moonlight, The Music, and Me.

The Lemons and The Sinatras  
Moonlight club. London.

The Moonlight is regarded as one of the more important venues on the London circuit, but visiting bands beware. I've seen lots of good combos there sinking beneath a sea of warm beer. The actual place is fine: house PA and engineer, good stage, good ventilation and Dave Kitson's comprehensive booking always ensures interesting billing and varied clientele. So what's the problem? It's something in the air. Even if groups are breaking new barriers in sound the audience seem unable to raise two hands simultaneously. This, in part, is a custom of all London audiences but at the Moonlight even God's seven day world was greeted with cries of, "Excuse me can I get to the bar." Tonight was no exception, in the red corner The Lemons from London and the Sinatras from Leicester, in the blue corner the audience. The Sinatras, though leg weary from their journey down, performed admirably for the po-faced punters. Sound problems prevailed but through it all came some twangy pop. The audience was in a quandary. These were unfamiliar sounds from unfamiliar faces, no-one has ever written about them so why bother to listen. Well I really enjoyed them, the songs were slices of emotion served up with powerful rhythm and coloured with guitar and vocals. The group looked good in their suits and stage stance, but did the audience learn that there's more to life than having the right records in your collection and leaning against the bar (decom) posing? The Lemons looked even snazzier in their selection of threads, lemon suits for the boys and a black lurex dress for the girl. Gyration's a-go-go, choreography no problem. They looked so professional and the lurex voice was superb, a real gem somewhere between Helen Shapiro

and Brenda Lee. The music was a bit confusing though, R&B, ska, pop, the lot, and no obvious direction, but they don't need a manifesto to have fun. The Lemons are fun, and with a string of live gigs already under their belt the majors are beginning to take an interest. Meanwhile the audience was having another drink. Apart from camp followers maniacally fulfilling themselves at the front, the overall appreciation level had been raised marginally. This was probably due to the realisation that this was the main band and having paid to get in a certain level of enjoyment should be reached. The Lemons carried on regardless with a great cover of *Stranded In The Jungle*, sleazy sax, doo-wop vocals and they're still bouncing. They even did the theme music from *The Ipcress File* with those lurex lips on trumpet, the audience still trying to remember how to enjoy themselves and the band proving that they knew all along.

Dave Henderson

## The Beat, The Music, and 1966

Come with me now as we plunge headlong through *Beat Instrumental* of 15 years ago, and find out just what was happening in the world of pop music in June 1966, a month which saw Frank Sinatra's *Strangers In The Night* nudge ahead of *Paint It Black*, *Wild Thing*, *Sorrow* and *Monday Monday* in the 45 best-sellers. But back to *Beat*, and hardly a page is turned before John Entwistle is reporting his desire for a set-up with 15in speakers and a 200watt amp, and Roger Daltrey confided in the interviewer, 'As we told *Bi* a few months ago, we really thought we were in trouble, but then *Generation* broke for us and it's been progress, progress ever since.' Sounds about right, really. But then Manfred Mann appears all over this issue – a roving reporter gets close to the group's HQ and noticed a girl in dark glasses near the dartboard. 'She used to be John



Clockwise from top left: Jones, postman, Jon Lord, DDDDBM&amp;T.

£400 OF GEAR TO BE WON!

## BEAT INSTRUMENTAL 2/6



Mayall's *au pair* girl,' Paul Jones assured the observer. And 'Player Of The Month' in June '66 *BI* was MM guitarist Tom McGuinness, telling how he used a *Telecaster* mainly, but also wielded a National steel guitar on *Pretty Flamingo* (the 12th best-selling single that month).

In the Alan Price column, a must for organists everywhere, Mr P offered the invaluable advice that 'amplification can be tricky if you don't pay attention to such details as speakers and outputs.' Obviously well genned-up on such shit was Jon Lord, whose group the Artwoods (including Keef Hartley on drums) had just toured Poland, no less, wherein Jon had played a Lowrey *Holiday* organ with a specially-built Leslie amp and cab. You'll be interested to learn that the Lovin' Spoonful were in the country lugging around Stadel transistor amps and a Mackintosh PA - *Daydream* was, of course, chartbound and *Summer In The City* followed a month later. Another visitor to the UK was Lee Dorsey who found a good group to back him here called the League Of Gentlemen...

Steve Marriott reported for *BI* on a gig at the Sunderland Top Rank - Sunderland mods rule, didn't they. Seems the Small Faces were forced off the stage twice by the rampaging Sunderlanders - the second and last time, after they'd made the mistake of playing *Sha La La Lee* without an armed guard, resulted in Steve, Plonk and the boys 'shifting a good few cokes'. Should think so, too. No such problems for session players and their studio tans: '£150 a week for good men' on p14 turns out to be the fantastic sum that 'a top London session man earns'. And it must be right, cos Johnny Howard says so. Who... never mind. Let's see now -



John Maus of the Walker Brothers (nasty teen-rave stuff, though Julian Cope elsewhere in this *SI* disagrees) told *BI* June '66: 'When we make a record we have a 25-piece orchestra with brass, a string section and an occasional harpsichord. It costs us from £500 to £1000, but we get what we want so it's worth it. We don't go for these beat group sessions that cost under £300. They may be all right for the groups, but they're hit and miss affairs and definitely not for us.' So there. From 'the groups', Brian Jones explains Indian instruments, primarily the sitar and how he used it on *Paint It Black*, suggesting that 'a sitar is a basic blues pattern'. I see. And Allan Smethurst, the Singing Postman, said that even John Lennon likes his songs and that he 'wouldn't be surprised if it was he who put Dick James up to publishing them.'

In guitarland in June '66, the demand that was to force Gibson to reintroduce the *Les Paul* guitar was evidently hotting up in London: a news item in *BI* tells readers that if they had a *Les Paul Custom* they could sell it 'to anyone'. But if they were lucky enough to have 'the three pickup job which Jimmy Page uses', then they'd be 'rich'. Presumably getting somewhere near rich was Reg Presley of the ever-lovable Troggs, who allowed the *BI* reader into the darkest recesses of the top composer's mind: 'I try to visualise a scene, a picture of something that has happened, and as soon as I've got it I put it down in words. The music just comes,' he explained, not bothering to add that it's best to split your hands so that one beat is doing it on the top-floor-skin. But we sort of assumed that anyway, didn't we? As Ray Davies says in 'Profile' of *BI* June '66, 'People change without realising it.'



All quiet on the independent front, very few good singles or LPs this month, but the following should keep you going.

**ORANGE JUICE *Poor Old Soul parts 1 & 2*** (Postcard 81 2) From Scotland, passion building nicely with twangy guitar and off-beat vocals. The climax is reached with frenetic *La Bamba*-meets-Motown piano. This is the kind of thing that should be constantly on the radio in summer (that's not meant as an insult). Orange Juice have produced some good pop singles over the last year; worth listening to are *Falling And Laughing* (Postcard 80 ), *Blue Boy* (Postcard 80 2), *Simply Thrilled Honey* (Postcard 80 6) and of course this one.

**JOSEF K *Sorry For Laughing/Revelation*** (Crepescale TWI 023) Orange Juice label-mates Josef K have this import Crepescale single available as well as their two Postcard singles, *Radio Drill Time* (Postcard 80 3) and *It's Kinda Funny* (Postcard 80 5). In this instance, Josef K present psychedelic cabaret, manic guitars, cabaret artistes' vocal phrasing (raw-edged and soulful on *Sorry For Laughing*). *Revelation* is more manic and less cabaret and ends up about twice as effective. A single worth investigation and there is rumour of an LP in the very near future.

**THE BREAKFAST BAND *LA14/Dolphins Ride*** (Disc Empire DEF 1) I know very little about the origin of this record apart from the fact it is available on 7 or 12in. Disc Empire have been soul, jazz and funk record wholesalers for some time and their taste in records has always been good. This is their first stab at releasing records and it is an excellent slab of sleazy latenight jazz-funk that we are treated to on *LA14*. It sounds like everything under the sun has been used in the studio, as steel drums, keyboards and brass twist about on the hard rhythm section. *Dolphins Ride* is very reserved: almost a samba. A very slick production but over-shadowed by the excellence of the A-side.

**SOFT CELL *Memorabilia/Persuasion*** (Some Bizarre Hard 12 12in): ***A Man Can Get Lost/Memorabilia*** (Some Bizarre Hard 1 7in) From one funk to another, these two products from Soft Cell thankfully overshadow their dreadful appearance on the *Some Bizarre* album. Actually it is the track *Memorabilia* which does this. *Persuasion* smacks of theatrical conceptualism which is only half formulated - where's the film? It all sounds so selfish. *A Man Can Get Lost* is the total opposite: a stab at the pop market, this falls a poor middle of the road between *Persuasion* and *Memorabilia*, the latter holding the only candle in town. *Memorabilia* is real electro-disco, like a heavy funk through a steel door, an impulsive dancer, feet trained in the direction that electronic music or muzak should have gone. With three such diverse offerings one can only assume that either the group are extremely versatile or haven't a clue where they are heading. I hope they are heading towards *Memorabilia*.

**FAD GADGET *Make Room/Lady Shave*** (Mute 012) Fad Gadget's new single is a bit of a return to form after his last attempt, *Fireside Favourites* (Mute 009), which I thought was a bit disappointing after the excellent *Back To Nature* (Mute 002) and *Ricky's Hand* (Mute 006). *Make Room* is a much more interesting piece. Co-written by Mr Gadget and ex-Ski Patrol bassist Pete Balmer this is a move towards modern popism. Orthodox drums from Wire's Robert Gotobed and persistent bass from Balmer are the crux about which weave the vocals and various tape treatments: a very impulsive record. *Lady Shave* is a bit restrained for my liking: it's the electronic alternative, a simulated scenario, but it doesn't seem to go anywhere. Maybe it isn't supposed to.

**THE PAST SEVEN DAYS *Raindance/So Many Others*** (4AD AD102) The Past Seven Days are from Sheffield and on their first vinyl outing have produced the best record that 4AD have released. *Raindance* has a long build, the scratchy guitar over off-beat drums lifted by the vocals and synth intonations. The song itself doesn't really go anywhere but it is so cleverly put together that it keeps you hanging on one level, a very effective technique. So *Many Others* is melodically disjointed and even more fun, which is extremely unlike 4AD who have previously gone out of their way to let the general public have their share of doom and despondency. The vocals and instrumentation over both tracks work really well, and this is a single worthy of many a collection. I'd like to see more of the Past Seven Days.

# CLASSIFIED

£10.00 per single column centimetre, Box Nos £2.00 extra.  
Minimum – 2 cm. All advertisements must be prepaid.

**SEX DISCRIMINATION ACT 1975:** No job advertisement which indicates or can reasonably be understood as indicating an intention to discriminate on grounds of sex (e.g. by inviting applications only from males or only from females) may be accepted, unless (1) the job is for the purpose of a private householder or (2) it is in a business employing less than six persons or (3) it is otherwise excepted from the requirements of the Sex Discrimination Act. A statement must be made at the time this advertisement is placed saying which of the exceptions in the Act is considered to apply.

## STUDIO FOCUS

24 track from around £14 per hour, 16 track from around £12 per hour. This means a 14 hour day is £200\* for 24 track, £160\* for 16 track. 8 hour days from £100\*

We now have a new Studer A80 24 track machine. Our new spacious air-conditioned studio is fully operational. And our 32 channel micro-processor-controlled desk \* Amcron & B&W monitoring \* Dolby A \* Studer B67 \* 2 Eventide Harmonizers \* 2 VocalStressers \* Scamp rack \* Time Modulator \* Ursa Major Space Station \* Free use of our Gretsch kit, Yamaha electric grand and CS80 Synth, Mini-Moog, Solina strings, Rhodes, Gidson SG, Precision bass and amps. Use of 2" tape, a reel of 1/2" tape, tea, coffee, video games and films, kitchen and TV room are all included. And our friendly engineers will help you produce the best from it all.



Phone Gary any time for more details.

\*Includes discount VAT extra

Spaceward Ltd. (035 389) 600  
The Old School, Stretham, Cambridge. CB6 3LD.

8 track recording – Brenell, Allen & Heath, Revox, Teac, M.X.R., Trident, A.K.G., Beyer, Quad, B & W, Turnkey.

Oberheim 4 voice polyphonic synthesiser, Yamaha CS5, Arp Odyssey, Arp Quartet, Yamaha electric grand piano, Premier Ludwig and Tama drums, Gibson, Martin, Fender Framus guitars, Fender amplifiers. All instruments available on request.

**DRONESTUDIO**

Phone: Manchester (061) 881 2381  
Rates: £8.00 per hour (daytime until 6.00 p.m.)  
£10.00 per hour after 6.00 p.m.  
No V.A.T.  
(DISCOUNTS FOR BLOCK BOOKINGS)

**STOCKPORT**  
HIGH QUALITY RECORDING AT A VERY LOW COST

**16 TRACK SENSATION**  
**£10 PER HOUR**  
(+ TAPE + VAT)

**Crescent Studio**  
280 WELLINGTON ROAD SOUTH · STOCKPORT · CHESHIRE SK2 8ND  
061 480 6073 061 483 7294

YOU WOULDN'T BELIEVE WHAT WE CAN GET ON TAPE  
We do work for some of the biggest companies as well as the smallest. Give us a call, you'll find we're very helpful. Whatever your problem.

**CASSETTE DUPLICATING SPECIALISTS**  
To or from cass. 1/4", 1/2" or 1".

**OUR BIGGEST ASSET IS WE CARE**  
We have fantastic references, can other companies say the same? WELL, WE'RE WAITING!

**20-20 SOUND FACILITIES LTD.**  
13 Bethnal Green Road, London E1 6LH  
Tel. 01-739 5550 or 01-739 5558

**DENMARK STREET**  
**STUDIO**  
**8 TRACK**  
Tel: 01-836 6061

100 C-60 cassettes beautifully copied in stereo  
**Just £59.50 (plus VAT)**

We can copy from 100 to 5,000 high quality cassettes on our high speed loop-bin system, load them precisely into top class shells. Price includes library case and all production work from your 3 1/2 in. edited master. Any length C-5 to C-90. Ring for price check.

**STUDIO REPUBLIC**  
High Street, Pinner  
01-868 5555

Sound by **BOSE**<sup>®</sup>

**Hi-Fi and Pro-Audio Products**

**SPECIAL REDUCTIONS**

ON THE SALE OF  
ANY BOSE PRODUCT

Call **01-607 0087**  
5-year guarantee

**JIGSAW STUDIOS**

Equipment includes:

- MCI and Studer tape machines
- Trident desk
- JBL monitoring
- Neumann, Electrovoice, Beyer, AKG mics

We can also quote for a complete start to finish service which includes:

- Recording
- Cutting
- Label printing
- Sleeve design
- Pressings

**16 track - £15 per hour**  
**01-668 3457/6484**

THE ATTENTION OF ADVERTISERS IS DRAWN TO "THE BUSINESS ADVERTISEMENTS (DISCLOSURE) ORDER 1977". WHICH REQUIRES THAT, FROM 1st JANUARY 1978, ALL ADVERTISEMENTS BY PERSONS WHO SEEK TO SELL GOODS IN THE COURSE OF BUSINESS MUST MAKE THAT FACT CLEAR. FROM THE ABOVE DATE, CONSUMERS THEREFORE SHOULD KNOW WHETHER AN ADVERTISEMENT RELATES TO A SALE BY A TRADER OR A PRIVATE SELLER.

**27 9L cassette tape loader and unloader with tape transfer system. Delivers the load of 1 minute-120 minutes. £995.**

**Cassette Tape Improvements**  
201 Brynfedw, Llanendeyrn, Cardiff  
Tel: 0222 732186

**Gemini Sound**  **PRECISION REAL-TIME CASSETTE-DUPLICATION SERVICE**

Superb quality cassette copies from your 15/75ips masters. Dolby A&B. Unique purpose-built real-time copying plant with phase-corrected record amplifiers giving unrivalled HF transient performance. Expert personal attention.

Ring: David Wright now on (025 672) 2605 for further details or write:  
Church Path, Hook, Basingstoke, Hants RG27 9LZ.

**ICC STUDIOS**  
EASTBOURNE – SUSSEX

STUDIO 1 24-track £25 per hour  
STUDIO 2 8-track £8 per hour  
In-house Cassette Duplication  
LOW PRICES

A reputation for quality and reliability  
**PHONE EASTBOURNE (0323) 26134.**

**CHERRY STUDIOS**

MASTER STUDIO: Ampex 16 and 8 Track, Alice ACM 30-16, A and D Compressor Limiters, Neumann, Sennheiser AKG.

**VIDEO FACILITIES AVAILABLE – £20**

16 Track ..... £11 per hour  
8 Track ..... £9 per hour  
Long Runs, Cassette Copying, Tape Duplicating, Record Pressing.

Call us now: 01-654 1197  
01-684 2801

**FOR SALE TRADE**

**D.I BOX**, passive, –20dB insertion, ground lift, suit guitar, keyboards, etc. Ideal for stage or studio use. ONLY £19.50. Sound Advice, 396 Godstone Road, Whyteleafe, Surrey. (X)

**FOR SALE PRIVATE**

**MERLIN 100w** amplifier with treble, bass, speed, depth, tremolo, reverb and presence. Two inputs. £100. Tel: 01-460 6146. (X)

**SERVICES**

**GLASGOW** – tight budget? Don't worry gentle spring four track rehearsal studio has rates to suit you! Free demo package. Tel: 041-641 7116 or 041-334 6654.(F)

**DISC Cutting** – Masters and Demos. Pressings, cassettes, Mobile recording studio. Free brochure – Tam Studios, 13a Hamilton Way, London N.3. Tel: 01-346 0033. (X)

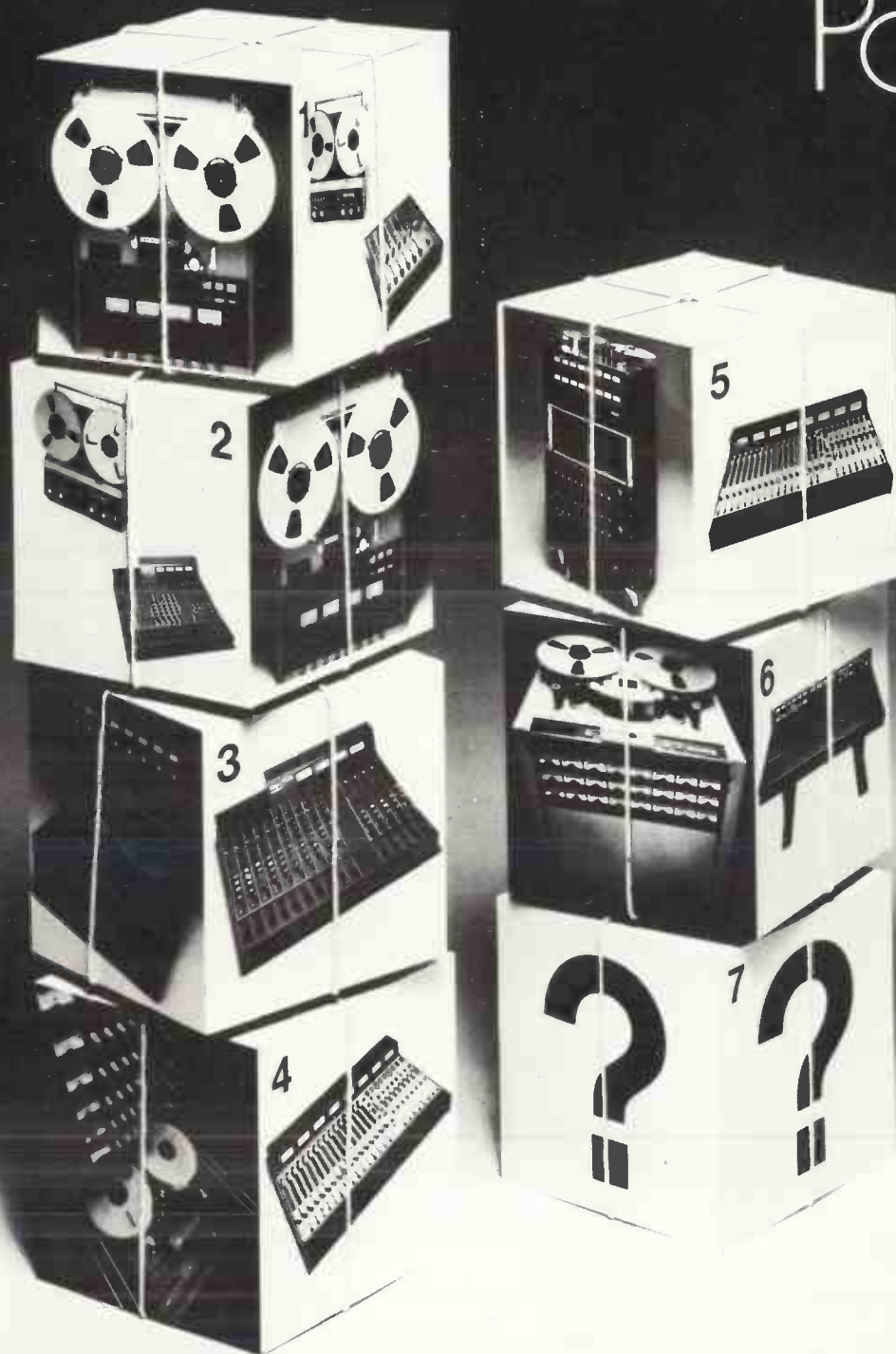
**STUDIO FACILITIES** (Steinway), record pressing, sleeve printing service for the connoisseur. Specify requirements. Sound News Studios, 18 Blenheim Road, London, W4. 995 1661. (F)

**BERNARD MONSHIN** "Orchestral contractor" complete service "fixing" musicians for: records, films, T.V. jingles etc... prompt and personal attention. 32 Cardrew Avenue, London N12 9LD. Phone (01) 445-7593 or 5274. (J)

**GUITAR EFFECTS**

**BRITISH GUITAR EFFECTS** cheaper and more reliable! At last, a range of British manufactured guitar effects units for musicians who require high quality, good looks, reliability, but at far less cost than similar imported units. What's more, we can produce effects to suite your own requirements! Current range includes Distortion, Fetamp, CVA, Octivider and Chorus at prices from as little as £20.50+VAT. Demonstration Models available. Send for literature or details of sounds effects you require to: Psychedelic Sounds, 1 Station Road, Twickenham, Middx TW3 4LL. 01-892 7044. (F)

# Penny-pinching Packages from ITA



Prices exclusive of VAT

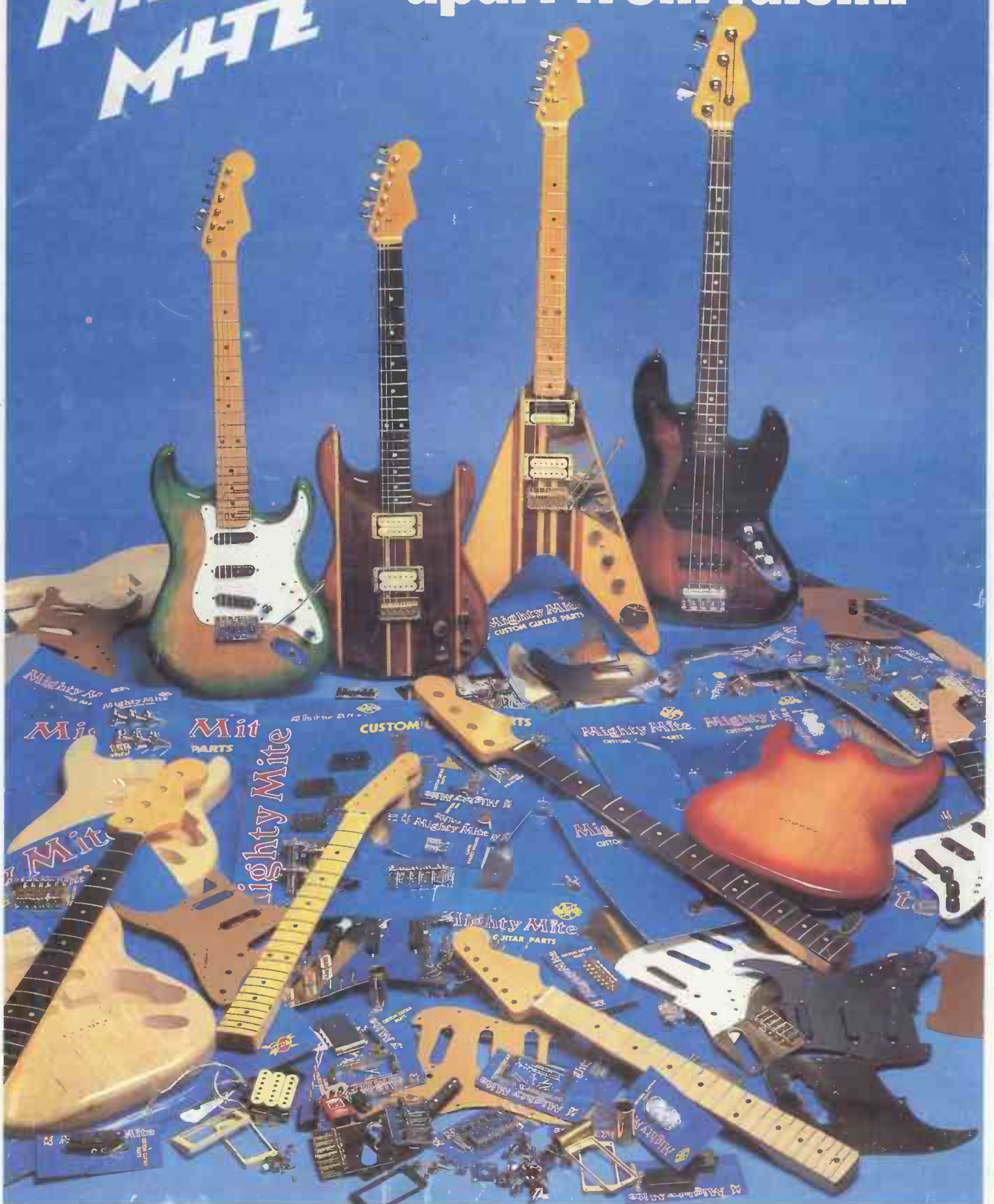
Full range of ancillary equipment available. Finance facility.  
Full after sales service back up.

**ITA, 1-7 Harewood Ave., Marylebone Road, London  
NW1. Tel: 01-724 2497. Telex: 21879.**

	List	Package
1. 4 track package. Teac A3440, Revox HS77, Model 2A Mixer	£1668	£1350
2. 4 track package. Teac A3440, Revox HS77, Itam 10-4 Mixer	£2535	£2090
3. 8 track 1/2 inch package. Itam 806, 10-4 Mixer, Revox HS77	£3917	£3220
4. 8 track 1 inch package. Otari MX7800, Allen & Heath 16x8 Mixer	£7185	£6395
5. 16 track 1 inch package. Itam 1610, Allen & Heath 16x8, Revox HS77	£9045	£8185
6. 16 track 2 inch packages	From	£138000
7. 24 track 2 inch packages	From	£23000
8. Any other package tailored to your requirements	?	?

# MAIGHTY MITE

## All you'll ever need, apart from talent.



"Mighty Mite Products are Distributed Exclusively in the U.K. by Rosetti Limited.  
For full details, write or phone, The House of Music, 138/140 Old Street, London EC1V 9BL.  
Telephone 01-253 7294."