Established 1981

Music Technology

THE WORLD'S PREMIER HI-TECH MUSIC MAGAZINE

OCTOBER 1991
£1.60

ON TEST

E-mu Pro/cussion Drum Expander

Datamusic Fractal Music ST Software

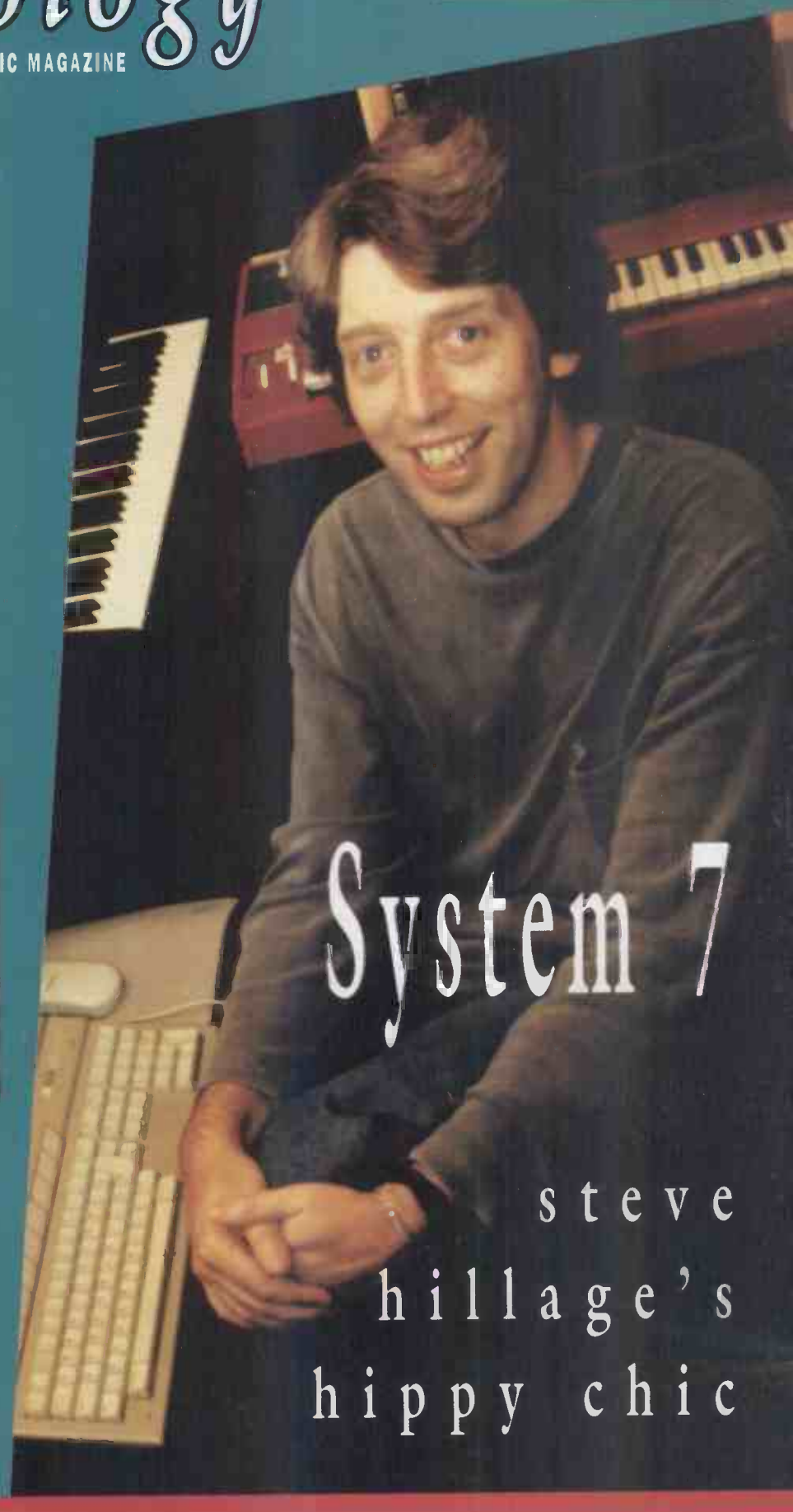
Casio Rap 1 Personal Music System

Korg A5 Effects Units

HitSound Guitar Sample CD

YAMAHA SY99 SYNTH
bigger means better

WINDOWS
making the pc musical?



System 7

steve hillage's hippy chic

WIN *datafile dance sample cds*

THE MUSIC WALKSTATION

YAMAHA
THE SPIRIT OF MUSIC

Now **this** is hip. Yamaha's QY10 – a music workstation the size of a video tape.

It's a multitrack sequencer, it's a synthesizer and it's a drum machine – in fact it's everything you need to program complete compositions or musical accompaniments.

Just add headphones and you're making music. Add a cassette deck and you're recording it. Add a good idea and you could be famous.

Check the spec:

- 8-song memory with 8 tracks each
- 30 PCM voices plus 26 drum instruments
- 32-note sequencer polyphony
- 28-note synth polyphony
- Real or step time programming via on-board "micro-keyboard" or external MIDI instrument
- 76 preset and 24 user patterns

Feel inspired? Then stroll down to your nearest Yamaha dealer. For £259* you could walk out with a walkstation. The Yamaha QY10.

* Manufacturer's suggested selling price.

24 HR ACTION LINE
CALL
081-419 5419
FOR FREE BROCHURE PACK

Yamaha-Kemble Music (U.K.) Limited
Professional Music Division

SOFTWARE

OPCODE•STEINBERG•PASSPORT•MOTU•CODA•C-LAB•TSC

OPCODE STUDIOVISION

Whatever you are looking for, TSC has got it from the remarkable **Opcode Studiovision** which integrates hard disk audio with MIDI recording, "quantize those Vocals", to **Galaxy Plus editors** generic editor librarian for most synths. Now in stock **Opcode Trackchart** - design your own cassette labels and time sheets - £139+vat)

- Opcode Studiovision
- Opcode Vision
- Opcaode Galaxy+ Editors
- Steinberg Cubase
- Passport Pro 4.5
- MOTU Performer
- Digital Performer
- Coda Finale
- Passport Encore
- Opcode Track Chart

The superb **Passport Encore** composing and printing music software for IBM and Mac brings the power of sequencing to **Music Notation** and is the only serious choice. 64 **parts** with multiple key signatires, voices, meters, clefs, staff types, lyrics are **all** catered for.

DMR8 + DRU8

FROM YAMAHA•THE COMPLETE DIGITAL 8 TRACK SYSTEM

The **DMR8** is an integrated, all-digital system for multitrack audio recording and mixing, with an **8 track digital recorder**, digital mixer, locator, and **mixing automation** integrated into a single unit.
The **DRU8** is fully functional **8 track recorder** using the same technology as the DMR8. 8 tracks of the 20bit recording giving **120db** dynamic range plus an internal time code generator. **TSC rating 10.**

SYNTHESIZERS

KORG•ROLAND•ENSONIQ•YAMAHA•KURZWEIL•WALDORF

The **Waldorf Microwave** is probably the worlds best digital synth. If you don't believe us call TSC and we will prove it.

KORG 01/WFD + 01/W

Lots of new Products this month • The superb **Korg 01/W** and **01/WFD** workstations are sure to be winners both featuring AI Square Non-Linear Synthesis. The New **Kurzweil** 2000 VAST synthesizer has an amazing spec as does the **K1200** with its 88 keys. We are impressed with the **Yamaha TG77, QY10 &RY30** • Emu's Procussion is the latest addition to their range of sample replay units which now include **Proteus 1 & 2.** If you have a **Proteus 1** you must get it upgraded with a **Protologic** Board to give you twice the synth for half the price.

WAVESTATION AD

All the zip and power of the Wavestation - PCM sounds, Advanced Vector Synthesis with 4 meg of ROM. **External audio processing** - allowing any audio source to be used as additional waveforms for synthesis. All this Plus **6** simulanteous **digital fx** on- board. This gets a superb **TSC rating of 9.**

ROLAND JD800 New Synth £Low!!!

HARD DISK RECORDING

++++++DIGIDESIGN•MACINTOSH•AKAI•SPECTRAL++++++

Authorised Dealer

DIGIDESIGN PRO TOOLS & AKAI DD1000

Lots of new Products this month • **Digidesign Sound Tools**, Sample Cell, Optical Hard Disks, **Macintosh** front end for Akai DD1000, the new **Yamaha DTR2** with 18bit D/A convertors. Great package prices and **support contracts.** Call for trade up deals from Sound to Pro Tools.

APPLE MACINTOSH

CLASSIC•LC•IISI•MAC IIFX•LARGE SCREENS•HARD DRIVES

TSC IS AN APPLE™ AUTHORISED DEALER, we give you the largest selection, the most professional support AND the BEST PRICES.

STOP PRESS...If you want a sneak preview of the new 68040 and Notebook Macs then give us a call - you won't be disappointed!

ANALOGUE AT TSC

PROPHET V•TR808•VOCODER•OB8•OBM•MIDI MOOG+++++

MIDI MOOG

If you can't get a great Bass sound your don't have a **Midi Moog.** It really is twice as **big, fat and good** as you remember. Call now!

OBERHEIM MATRIX 1000

A firm favourite with TSC clients, the Matrix 1000 in 1 unit of rackspace offers rich analogue sounds normally associated with synthesizers costing ten times its price. **TSC rating 10.**

NEW HAMMOND XR2

Hammond XR2, Rhodes VK1000, Voce DMRA 64. The drawbars you love and the features you need. At TSC you will find the latest organs all giving those **classic sounds** and tones you thought had gone forever. New on the block is the superb **Hammond XR2** which we have **in stock and on demo.**

STRUMMER/DRUMMER

These great new MIDI processing devices from Oberheim at **£149** each cost less than a piece of software. The **Strummer** converts keyboard chords to guitar inversions - you select the strum rate and direction. The **Drummer** gives you over 10,000 possible rhythms which interact with your playing.

CLASSIFIEDS

NEW•2ND USER•EX-DEMO•DEALS•SPECIALS•BARGAINS++

Macintosh LC S/H mint condition £895,00
Akai S1000 S/H 3 month TSC warranty £1440.00
Roland D550 choice of two £550.00
Emu Proteus S/H sample player £349.00
Roland RV1000 reverb new to sell @£99.00
Roland S770 sampler S/H £POA
Roland CN20 chord arranger £39.00
Emax h/d racks ex famous band £999.00.
S/H **Digidesign Soundtools** Mac £995.00
S/H **Digidesign Soundtools** Atari £995.00
Miscellaneous Software Titles **£29.00**
MOTU Performer sequencer used £195.00

SAMPLERS

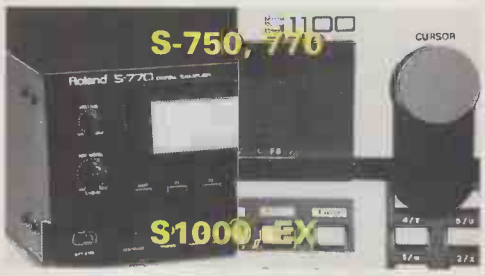
AKAI S1100•1100EX•S950•ROLAND S770•S750•EMU EIII•+

ROLAND S750 SPECIAL

Roland S750 with 18 meg of RAM and the ultimate TSC sample library is now available for the most **unbelievable price ever!**

TSC HAS THE LARGEST SAMPLE LIBRARIES IN THE UK & THEY'RE FREE TO TSC CLIENTS

Not only do we have the largest selection of samplers in the UK at the right prices we also have every possible accessory to enhance your machine from Memory Cards to Storage devices • CNI removable drives only **£395.00** (disk extra) • Optical Drives from **£1495.00** • JUST ARRIVED **Invision CD ROM** for the Akai S1000/1100 volumes 2 & 3 priced at **£235.00** • **Roland S750** • **Akai S1100 expander.**



ZOOM 9030 & 8050

DRAWMER•YAMAHA•ROLAND•ALESIS•LEXICON•ZOOM++

It's New, It's Clever, It's Exciting, It's **Stunning**, it's at TSC. The **Zoom** 9030 is simply the best multi effects processor we have ever seen. Priced at just £449 and with it's 47 effects it leave the competition standing.

ORDER DIRECT Tel: 071 258 3454 Fax: 071 262 8215

Authorised Dealer Spot a similar ad in this magazine and we'll give you £20 off your next purchase.

All prices exclude VAT.

contents

COMMENT 4
What's the point of hi-fi if you're playing lo-fi recordings? Tim Goodyer compares musicians' attitudes to technology with those of the listener.

NEWSDESK 6
Have you read the news. . ? If you're reading this the answer's probably "no" - so turn to page six and get clued in.

COMMUNIQUE 11
From the bulging MT mailbag we've chosen just one letter this month - but it raises some important issues for those trying to break into technology.

COMPETITION 12
If you're making sample-based dance music, killer samples are the key. Unless you've already struck gold, you need to win this month's exclusive competition - the definitive Datafile sample CDs.

READERS' ADS 74
Forget the stock exchange, forget Christies, forget the Bangkok slave market. . .If you're buying or selling in the hi-tech field, MT's Readers' Ads are the only place to go.

Appraisal

YAMAHA SY99 26
On from the revolutionary DX7, on from the souped-up DX7 II, on even from the mighty SY77, comes the SY99. Simon Trask takes the new Yamaha flagship on her maiden voyage.

E-MU SYSTEMS PRO/CUSSION 44
Having set standards with their Proteus sample reader and their Pro/formance piano module, E-mu are trying again. Simon Trask beats up the new Pro/cussion drum expand

VOLUME 5 NUMBER 11 OCTOBER 1991

DATAMUSIC FRACTAL MUSIC 62

Recently we looked at the theoretic application of fractal maths in music. This month Ian Waugh composes a complex number with this ST software . . .

CASIO RAP1 68

Casio's curious Rapman is a read[illegible] regarded as a toy by many a music cynic - but it's captivated pros like Manu Katché and Peter Gabriel. Tom Robinson reviews it - and buys it.

Music

SYSTEM 7 36

If you can't imagine how Steve Hillage, Derrick May and The Orb would sound making music together, you can buy their forthcoming LP and find out. Simon Trask talks to the man behind the guitar and the project.

THE FARM 50

The Farm: taking pop to football louts or bringing hooliganism to the pop charts? Tim Goodyer gets casual with keyboardsman Ben Leach and tries to find out.

Studio

KORG A5 54

Korg's A5 series of effects is aimed to offer a variety of effects to a variety of musicians. Simon Trask test drives them and discovers guitar distortion works for drum machines.

Technology

PATCHWORK 14

The job of capturing a guitar on a sample CD is a daunting one, but HitSound's Guitar CD carries it off. Tim Goodyer discovers that there's more to guitars than widdly widdly.

ON THE BEAT 16

If a thing's worth doing, it's worth doing again - so says Nigel Lord as he devotes this month's rhythm programming feature to double bass and snare drums.

SCREEN WITH A VIEW 60

With the arrival of Microsoft's Multimedia Windows, the much-derided PC could become a musician-friendly computer. Adrian Sutton gets a clearer view.

POWER PLAY 72

If you've got problems with your power supply, you've got problems with your MIDI setup - you've probably got problems you never imagined. Mark Burletson plays at megalomania.

DOUBLE STANDARDS

THE RECENT FAILURE of my faithful old JVC hi-fi amplifier brought me face-to-face with the wonderful world of the audiophile once again. In attempting to replace it I discovered that, as in the world of hi-tech music, advances in technology had brought hi-fi its share of benefits - and, inevitably, heightened the almost religious opinions of the most devout audiophiles. All this wasn't exactly news to me - it's probably not to you either - but it raises some serious questions when you re-enter the comparatively bullshit-free area of music technology.

To set the tone, let me quote from a story which appeared in a recent edition of *Hi-fi Choice*. As part of a regular series in which someone's (necessarily impressive) hi-fi system is examined and its owner quizzed on it and his opinions on the subject, Dave Ruffell's £70,000 system was featured. Now, Ruffell used to be a recording studio owner, so he should know the score from both sides of the record shop counter. Nevertheless, during his endeavours to obtain the perfect music reproduction system, he had the electricity authority replace the feed to his house - at a cost of some £600. Another article I read recently extolled the virtues of disassembling the mains socket feeding your hi-fi and ensuring that the wiring was up to scratch. Somehow it managed to overlook the fact that there's another end to the wiring. . . Serious stuff, this - and we're not even discussing the signal path yet. . .

So what's the point? It is this: in the world of hi-fi, leads, plugs, equipment and speaker mountings and room furnishings are all considered to be important aspects of constructing the ideal hi-fi system. On such a carefully - no, lovingly - assembled rig, the listener expects to reap the fullest rewards of the music produced by singers, musicians, programmers, engineers and producers. Fine.

But those same musicians, engineers, and so on are more likely to be judging the performance of an instrument on its sample resolution and bandwidth or how it sounded through a 10K PA rig at last night's gig than how it will sound through a 70 grand hi-fi. In the studio itself the signal so revered by the audiophile is routed through countless patchbays and effects processors and then judged on speakers situated on the far side of a mixing desk well known to adversely affect the sound to a significant degree. How many of us have simply trapped bare wires in a mains socket when there was no mains plug readily available to connect it up properly? Without recommending it, I have to admit to being guilty. This is the technical reality behind much of the music destined for the audiophile's platter (sic).

Before the deluge of mail begins, let me concede that the majority of professional recording engineers and programmers are not guilty of such malpractices. Neither do they treat the musical or technical quality of the music they're recording with the ignorance I've described above. But there's no escaping convoluted signal routings and poor monitoring conditions that exist in many modern recording environments, for example.

I'm not endorsing the extremes to which hi-fi junkies are prepared to go, but those extremes contrast starkly with many aspects of the way in which music is recorded. Think about it.

Perhaps appropriately, those involved in recording classical music are most aware of the qualities of the instruments they're recording and therefore least guilty of sins against the audiophile. The classical world is almost alone in paying equal attention to both musical and acoustic detail - take the reputation of such labels as Chandos and Nimbus as an indication, if you're in any doubt. Perhaps there's more to be learnt by the average popular musician from this area of music than anyone presently appreciates. ***Tg***

MUSIC TECHNOLOGY (ISSN 0957-6606) is published by Music Technology (Publications) Ltd, a subsidiary of Music Maker Publications (Holdings) plc, Alexander House, Forehill, Ely, Cambs CB7 4AF. Tel: (0353) 665577 (all departments). FAX: (0353) 662489 (PAN: Musicmaker)

Printing by *Cooper Clegg Ltd, Tewkesbury, Gloucestershire.* **Distributed by** *AGB Impress Ltd, London. Tel: 071-253 3456.*

All material *is subject to worldwide copy protection, and reproduction or imitation in whole or in part is expressly forbidden without written consent from the publishers. All reasonable care is taken to ensure accuracy in the preparation of the magazine, but Music Technology (Publications) Ltd cannot be held legally responsible for its contents. The publishers cannot assume responsibility for the return of unsolicited manuscripts, photographs or artwork.*

Copyright 1991 *Music Technology (Publications) Limited.* **Cover Photography** *E/James Cumpsty*

EDITORIAL

EDITOR
Tim Goodyer
ASSISTANT EDITOR
Simon Trask
PRODUCTION EDITOR
Debbie Poyser
EDITORIAL ASSISTANT
Italia De Santis

ART STUDIO

DIRECTOR
Stuart Catterson
DEPUTY DIRECTOR
Sam Masters

Darryl Tooth, Hilary Reed, Chris Brennand

PHOTOGRAPHY

James Cumpsty, Tim Goodyer

ADVERTISING

GROUP ADVERTISEMENT MANAGER
Colin McKee
CLASSIFIEDS
Alex Day
AD PRODUCTION CO-ORDINATORS
Alex Willers
Sarah Short

ADMINISTRATION

MAIL ORDER
Cheryl Oates, Jenny Butcher
GROUP PRODUCTION MANAGER
Mike Stapleton
EXECUTIVE DIRECTORS
Alan Goodes (Marketing)

MANAGING DIRECTOR
Dennis Hill

CHAIRMAN
Terry Day

Roland JD-800

Programmable Synthesizer

Out of this world

The Roland JD-800 puts technology at your fingertips – no more fumbling with multi-menu parameter and increment buttons. Designed for the musician who cannot live within the boundaries of factory presets or the inflexibilities of software-controlled musical instruments, it combines the high quality of digital sound with the freedom of analogue control. Technology *and* music? You want the best of both worlds. You want the JD-800.

For a list of authorised dealers and a free leaflet contact:

Roland UK Ltd, Atlantic Close, Swansea Enterprise Park, Swansea, West Glamorgan, SA7 9FJ.
Fax: 0792 310248 • Tel: 0792 310247

READING MUSIC

It's a bit early for thinking about Crissie pressies, but if you're a book person you might like to add *Music In Sequence* by William Lloyd and Paul Terry to your list (next to the S1000 with 100Meg hard drive and Mac IIFX). Published by Musonix and distributed by Music Sales, this 112-page book claims to be a complete guide to MIDI sequencing. It contains 20 different pieces to record, "ranging from Bach and Tchaikovsky through to minimalism and funk", and deals with such topics as synth playing techniques, drum patterns, voicing, MIDI controllers, step-writing and the use of multitimbral synths.

As for the authors, according to their potted biogs, William Lloyd is a professional pianist, conductor and record producer who also teaches Performance and Communication skills; Paul Terry has spent 20 years teaching music at all levels. He is a chief examiner for A-Level music and runs his own company specialising in all aspects of computer-based music.

Since the book is being distributed by Music Sales, it should be available now from most music and book shops. Its retail price is £12.95 and should you need to order it, its ISBN is 0 9517214 0 2. ***Dp***

MEET THE COMMODORE

If you have a Commodore computer, the 15th annual World Of Commodore show could be a date to put in your diary. It's being held at Earls Court II in London on November 15th, 16th and 17th this year. Opening hours on the 15th and 16th are 9am to 5.30pm, and on the 17th, 9am to 4pm. Tickets cost £4.95 for adults and £2.95 for under 14s (if bought in advance from the ticket hotline on 051-356 5085).

Visitors will be regaled with a Christmas Shopping mall, the latest developments in CDTV and virtual reality, a games arcade and a multimedia theatre, amongst other attractions. For anyone with sprogs, there will also be a creche available. Computing gets the human touch. ***Dp***

STEP ON IT

John Hornby Skewes "are pleased to" announce the release of the new DMC7 MIDI Controller Pedal, a footpedal-type MIDI device which was created to help guitarists and keyboard players transmit MIDI program changes to their gear during live performances and studio work.

The new unit is very inexpensive, retailing at £129, but according to JHS is "rugged and functional". The DMC7 covers all 128 MIDI programs and 16 MIDI channels, and offers a large four-digit LED for program and channel number display. There are seven foot switches on the unit; five are dual numbered for program changes and two are labelled up and down for channel incrementing and decrementing. The DMC7 is hooked up using a standard five-pin MIDI cable and is powered by an external power supply included with the unit.

More information from John Hornby Skewes at Salem House, Garforth, Leeds LS25 1PX. Tel: (0532) 865381. ***Dp***

STEPPIN' IN

Let your Adidas do the work with the MP128 MIDI Buddy from the Rolls Corporation. Once more, this is a footpedal controller for MIDI devices, and according to its designer is "the only MIDI controller in its price band offering random access to up to 128 programs". It will also send program change information on any of the 16 MIDI channels. Features include a MIDI share jack which requires no patch box to prevent signal loss when the unit is used in a chain, plus the potential for phantom powering. The MP128 retails for £115 including VAT. The Rolls Corporation also make an even cheaper MIDI footswitch unit in the MP80, which steps through program numbers in increments of eight rather than the 10-step increments of the MP128. The MP80 retails for £89.95 including VAT.

More information from UK distributors The Bass Centre at 131 Wapping High Street London E1. Tel: 071-265 1567. ***Dp***

JUST ONE STILETTO

To wrap up any confusion which may have arisen regarding the correct address and telephone number of Stiletto Sound Systems - purveyors of fine samples at silly prices - here are the correct details: Stiletto Sound Systems, 14 Nelson Street, Dumfries DG2 9AY. Tel: (0387) 50748.

Following a change of address a while ago, the details appeared incorrectly in MT on a couple of occasions. Apologies all round. ***Tg***

SAMPLE SIMPLE

If you own an Akai S612 sampler and one of the Roland MC range of sequencers, a new program from Redditch company Bound To Please may be of interest to you. Akai S612 owners will be only too aware that the 2.8" Quick Disks used by the S612 are often difficult to find and usually expensive; the new program allows samples from the S612 to be saved onto the 3.5" floppies used by MC-series sequencers, and no less than ten samples can be stored on each disk. In addition, the program allows the manipulation of samples in ways impossible within the S612. For example, three different samples may be added together to make an unavailable sound - perhaps the attack of a guitar sample merged with the sustain of a string sample and the decay of a human voice. The composite sample can then be saved as a new sound.

The program runs in Roland's S-MRC format and comes complete with instructions and ten new samples from (the evocatively-named) Bound To Please, Crescent Villa, Brook Street, Redditch, Worcs B98 8NJ, for the very reasonable price of £10 (S612 owners could easily save that much on disks before too long). Cheques/Postal Orders should be made out to Ross Anderson. ***Dp***

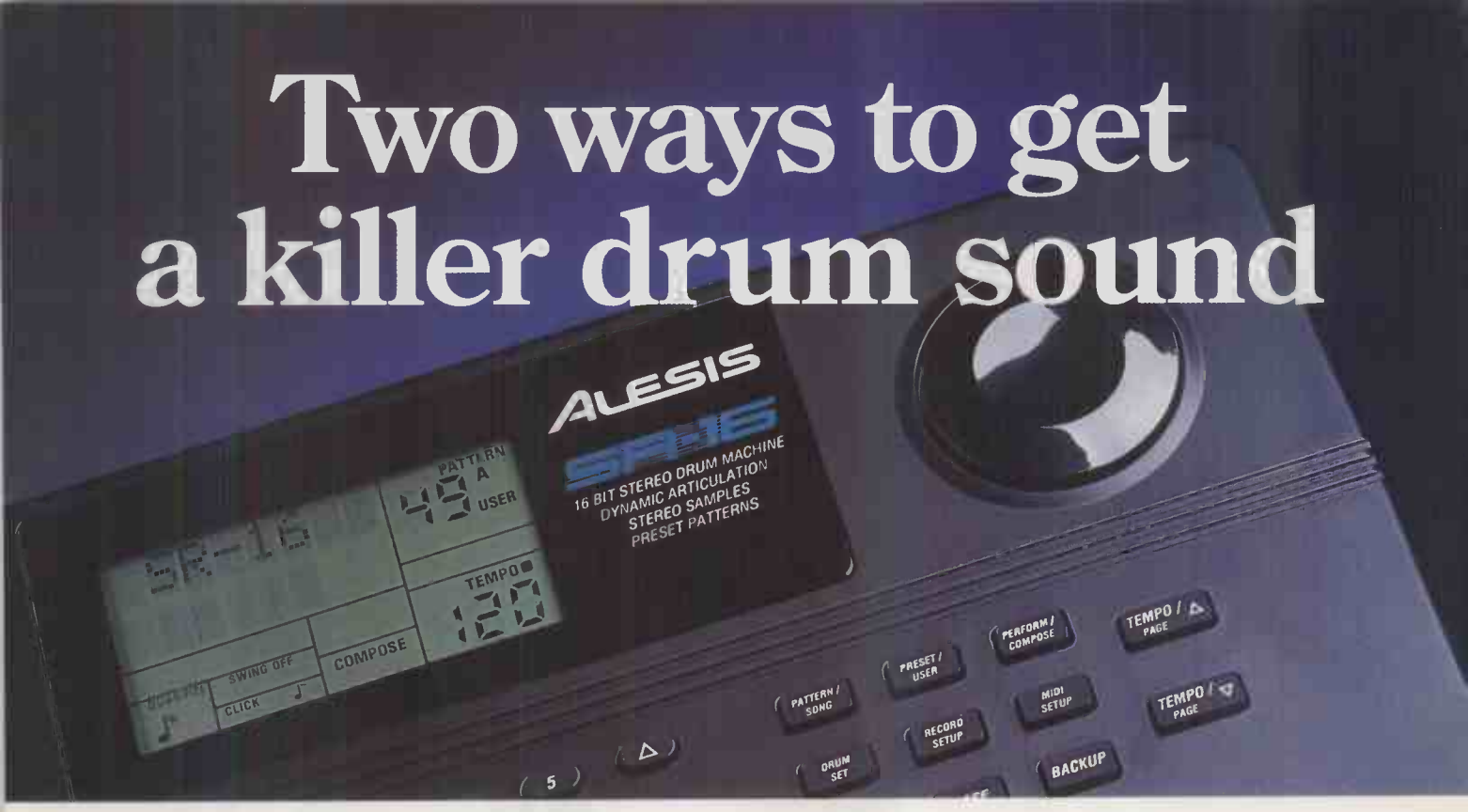
SAMPLE FIDDLE

AMG are pleased to announce the UK release of Optical Media International's Denny Jaeger Master Violin Library. Formerly only available to the few musicians with expensive laser disc systems, OMI now offer this library on CD-ROM, Magneto Optical and RM-45. Formats supported include Akai, Digidesign, E-Mu, Ensoniq, Korg, Kurzweil and Roland, though at present in the UK there is only Emulator III availability, with the S1000/S1100 version due in the next couple of weeks and further formats to be released over the coming months.

According to OMI, synthesist, composer and innovator Denny Jaeger spent two years and $400,000 creating this violin library, and, to quote them, "leading composers who have used this library have called it the finest work ever achieved with sampled strings". If you're intrigued by this, you'll be able to "sample" the quality of the library by purchasing the demo CD from AMG for the sum of £6. The library itself won't come quite that cheap, though - a mere £999 plus VAT.

More info from AMG at Hurst Lane, Privett, nr Alton, Hants GU34 3PL. Tel: (0730) 88383. Fax: (0730) 88390. ***Dp***

Two ways to get a killer drum sound



Way 1

World Class Studio Sampling, Drum and Rhythm Sessions

Professional studio time £100/hr	£20,000
A great engineer and producer	£10,000
Rental of hundreds of superb drums and percussion instruments	£10,000
Rental of exotic audiophile mics	£2,000
Rental of professional studio reverbs, use of live ambience and chambers	£5,000
16 Bit Stereo storage and playback hardware and sound manipulation software	£10,000
MIDI rhythm programming hardware/software	£500
A great drummer to play rhythms and fills with dynamics and feeling	£5,000
Inspiration, creativity and years of sampling and studio experience	Priceless
Unlimited stacking of sounds	Very difficult
Easy and unlimited writing of your own rhythms and songs	N/A
Write songs on the fly with a footswitch	N/A
Up to 120 Sounds available through MIDI	N/A
TOTALS	**£50,000 plus.**

Way 2

ALESIS SR-16 DRUM MACHINE
16 Bit Stereo, with Dynamic Articulation,
233 Sounds, Stereo Samples and Preset Patterns

	Included
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	Incl.
	£310.00 Suggested Retail inc. VAT.

Choose one.

See your Alesis dealer after you've made your choice.

ALESIS
STUDIO ELECTRONICS

LOS ANGELES: Alesis Corporation • 3630 Holdrege Avenue • Los Angeles, CA 90016

LONDON: 17 Letchworth Point • Letchworth, Hertfordshire SG6 1ND
TEL: 0462 480500 FAX: 0462 480600

COTTAGE INDUSTRY

You already know Thatched Cottage as a successful retail emporium; now they're announcing the launch of their new budget recording console, the 16:8:2 S2. The new desk is made exclusively for TCA by a well-known console manufacturer, and provides various features, including EQ on monitors, connections for two sets of speakers and a comprehensive MIDI muting computer on board, with "built-in sequencer facilities" - whatever that means. The desk is expandable in groups of eight, simply by bolting on a module, and includes full metering. It will retail for £1899 plus VAT. More info from Thatched Cottage Audio, North Road, Wendy Nr Royston, Herts SG8 0AB. Tel: (0223) 207979. Fax: (0223) 207952. ***Dp***

ORGAN SCHMORGAN

Yet another contender for the Hammond crown, in the shape of the new Fujiha (who they?) drawbar keyboard and MIDI expander module. Relying on samples to produce an authentic organ sound (approved by MT'S Ed at IMS), both instruments offer real drawbars for immediate sound modification, optional "clean" or "dirty" key-click, three-stage vibrato, and a two-speed effect which synthesises a rotary tone cabinet. According to their UK distributor "even the different treble/bass speed-up and slowdown, caused by inertia of spinning baffles, has been included". Variable "overdrive" permits the user to add distortion to get a sound ranging from clean to that of a blown speaker!

The Fujiha keyboard and expander will be available from selected music stores at £499.99 for the expander and £699.99 for the keyboard. Full details are available from UK distributors BCK Products, 136 Hornchurch Road, Hornchurch, Essex RM11 1DP. Tel: (04024) 48799. Fax: (04024) 46765. ***Dp***

PICK UP STIX

If Peterborough is your local metropolis, you'll be interested to know that Stix Music of Lincoln Road have just completed a revamp and extension of their Peterborough store. The shop now occupies nearly 2000 square feet on two floors, the top floor of which is devoted entirely to keyboards and hi-tech equipment. Stix are Roland main dealers and stockists of Fostex, Teac, Alesis, Yamaha, Oberheim, Atari and Ensoniq equipment. More info from Stix Music at 603 Lincoln Road, Peterborough. Tel: (0733) 52357.

ERRATA

A couple of errors got through the net last month, so to set the record straight, PC specialists Digital Music's telephone number is in fact (0703) 252131 and not 270405, which is their fax line. Apologies to the chaps at Digital Music and to anyone who's been trying in vain to speak to them via the fax line. Gremlins also illicitly entered the works in the classified ad pages, where the telephone number of Heavenly Music Ltd, purveyors of Dr Beat MIDI File drum patterns on ST disk, was printed with an incorrect code. The real number is (0255) 434217. Apologies again for any inconvenience. ***Dp***

AKAI IN CONCERT

Akai Professional are going on the raod with a series of concerts and clinics throughout September and October. The concerts will feature the whole Akai demo team and will be showing off the abilities of the Akai samplers, the full range of Akai Digital Pro Audio equipment, digital pianos and the newly-released MPC60II. There will also be two brand new items which we don't even have details of. During the afternoon the Akai equipment will be set up for an informal hands-on demo and there will be plenty of Akai staff around to help with your enquiries. During the clinic sessions, Akai will also be selling official sound library disks for S900, S950, S1000 and MPC60 at "attractively low prices".

Clinics will be taking place in the following towns and cities: 10th September, Romford, The Dolphin; 11th September, Southampton, Heritage Theatre; 12th September, Lewisham, venue TBA; 16th September, Maidstone, Trotters 2 Diner; 18th September, Norwich, Norwich Arts Centre; 25th September, Dublin, Sachs Hotel; 1st October, Wendy, near Royston, Thatched Cottage; 2nd October, Birmingham, Royal Angus Hotel; 3rd October, Oxford, venue TBA; 8th October, Glasgow, Sound Control; 9th October, Newcastle, Cairn Hotel; 10th October, Manchester, UMIST. Clinics take place from 2pm to 6pm, concerts begin at 8pm.

For more info, contact Akai on 081-897 2487 (24 hours) or your local Akai dealer. ***Dp***

PRO TO GO

A new pro audio and music superstore is now open in Chelmsford. All the latest gear, from Portastudios and drum machines to the best in synthesisers and 24-track tape machines will be in stock at Music Connections (for that is its name). There's plenty of free parking, and access is very easy, Music Connections being situated in a retail park just outside town and only ten minutes from the M25. More information from Music Connections Chelmsford, Chelford Court, Robjohns Road, Chelmsford CM1 3AC. Tel: (0245) 354777. Fax: (0245) 355007. ***Dp***

NEW SONGS

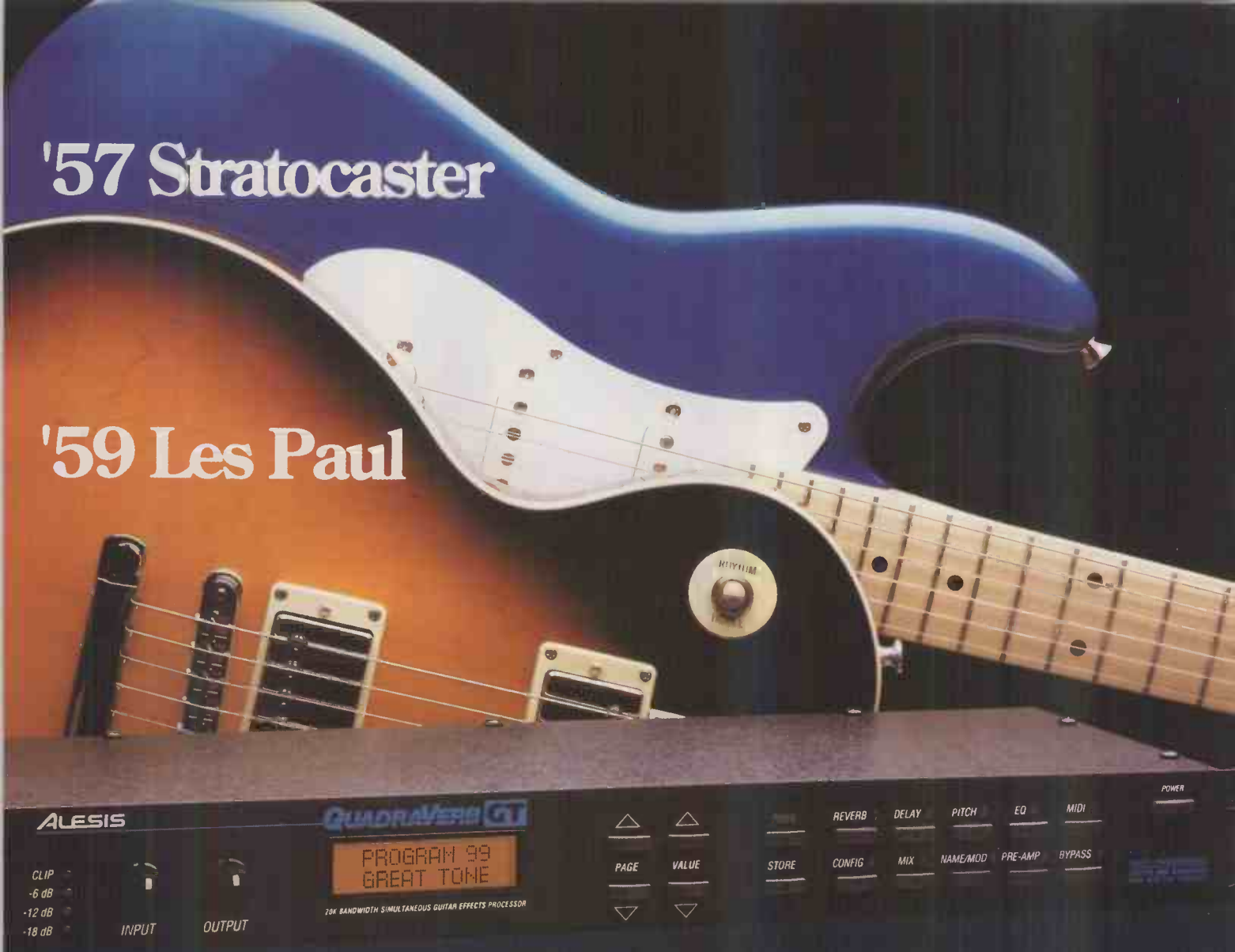
We've been asked to let you all know about the Newtronic MIDIMusic Collection, which now features MIDI sequences for over 1100 songs. Newtronic claim that the sequences reproduce the originals exceptionally faithfully, and they provide a detailed track sheet on or with each disk. The Collection is supplied on 3.5" disks in MIDI File Format, for either MIDI File compatible Atari ST, PC sequencers and MIDI data recorders/playback units, Kawai Q80, Roland MC500/50/300/W30 in Super MRC Format, or for MIDI File compatible Amiga sequencers. However, some formats may not be available for all songs. The list of song titles available is quite extensive, with individual titles costing £9.90. Bands/artistes covered range from the Beatles through Phil Collins and MC Hammer to Jean-Michel Jarre, Kraftwerk and the Pet Shop Boys.

For more detailed info, contact Newtronic at 62B Manor Avenue, London SE4 1TE. Tel: 081-691 1087. ***Dp***

GRAND SLAM

According to Intrinsic Technology, if you have an Akai sampler and less than 50 disks for it, you should undoubtedly sell it without delay and buy a dishwasher (MT's in-house catering staff did just that). However, if you've got more than 50 disks for it, you should, they claim, buy a copy of their new program, Slam for the Atari.

Slam is a sample librarian and manager for the Akai sampler range which will "catalogue your entire sample library, allowing you to categorise and find any disk. The Akai data can be read via MIDI, Akai DD disks can be read directly in the ST drive, or information can be entered manually". In addition, an individual comment can be added to each sample and/or program as well as a disk title, bank type and overall disk comment. Slam can also print disk labels and a printout for reference, and runs on any ST from 520 upwards, in high or medium screen resolution. Other uses for the software include cataloguing your Atari format disks, such as sequencer song files, sound files, lyric files and so on, and cataloguing sample CDs. The program comes packaged in a box folder with a comprehensive manual, costs £89 and is available from "better" music shops or direct from Intrinsic Technology Ltd, 4 Auckland Court, London SE27 9PE. Tel/Fax: 081-761 0178. As an added attraction, if you buy a copy of Slam, upon registering it you will be given the opportunity to join the European MIDI Association for just £10 instead of the usual £30. You'll also be given two free sample disks. Can't say fairer than that. ***Dp***



'91 Quadraverb GT

Introducing the new classic in guitar technology, the Alesis Quadraverb GT. Like the two classic guitars of all time, the Quadraverb GT cuts straight to the heart of why you play guitar.

Build your tone from the ground up using the GT's warm Analog Pre-Amp section. There's distortion, compression, overdrive and tons of EQ options from preset curves to 5 band parametric. Plus, selectable bass boost and cabinet simulators let you easily target the tone of your favorite amp.

For precise control of overtones, a powerful resonator section lets you manipulate the basic harmonic structure of your guitar. You'll get a great tone in the studio or on stage, direct or through an amp.

And because the GT is built on the award winning Quadraverb, the world's most popular digital signal processor, you get superb reverb, chorus, delays and a lot more. You can even load your Quadraverb programs into the GT.

Leave your amp with your roadie. Throw your pedals in the closet. Pick up a Quadraverb GT at your Alesis dealer today.

Then run home and change your strings... it's time to play a classic.

Remember. GT means Great Tone.

Stratocaster® is a registered trademark of Fender Musical Instruments, Inc. Les Paul® is a registered trademark of Gibson U.S.A. Fender Musical Instruments, Inc. and Gibson U.S.A. are not affiliated with Alesis.

ALESIS
STUDIO ELECTRONICS

LOS ANGELES: Alesis Corporation. 3630 Holdrege Avenue. Los Angeles, CA 90016

LONDON: 17 Letchworth Point. Letchworth, Hertfordshire SG6 1ND
TEL: 0462 480500 FAX: 0462 480600

ABC music ✆0372 468114

Number 1 in Music

All the new products at ABC Music

At ABC Music we stock all the latest gear from Roland, Yamaha, Fostex, Korg, Alesis, Akai etc etc. And it's all on permanent demonstration in one of our six handy stores. Check out D4, SY99, EMP100, JX-1, JD800, Wavestation AD.

Why delay? Call into ABC Music today!

Britain's BEST Stores with the BEST DEALS

By buying BIG and keeping overheads low we can offer the very best prices on Hi-Tech, Recording, Guitars, Amps and Drums. Check out these super-low deals. Just a small selection!

Whatever you want, we've got - at a price you can afford!

Pad 80 was £540 £349

The classic Octopad from Roland is ideal for Drummers and extrovert keyboard players. Comprehesive triggering.

ART SGE Mk2 £749 £449

Astonishing studio effects processor/digital reverb/pitch transposer. 9 fx at once. Also in stock X11 foot controller £99.

Roland W-30 Exclusive Deal!!

The ultimate workstation that features a 61-key velocity and aftertouch keyboard with 108 split points, powerful 16 track sequencer, high quality digital sampling, multi timbral capability with 8 separate outs and 3.5" floppy disk drive. And because the W-30 features an "open-system" design with all functions software driven, the W-30 can be updated simply by loading new software! This exclusive ABC offer is very limited and comes with FREE library.

Total £1469 OR £35.28 a month dep £199 then 36 payments 9% PA 17.5% APR

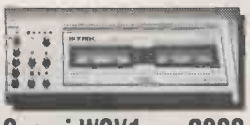
was £1899 ONLY £1199

Yamaha PF85 ONLY £799

88 weighted-action keys, grand & upright piano voices + harpsichord. Spurb sound + built in speakers and MIDI.

Yamaha SY77 ONLY £1599

The flagship from Yamaha. Amazingly powerful, 16 track sequencer, drums, 3.5" floppy drive, fx. Save £500!!



Sansui WSX1 £1299 £699

12 tracks on cassette, on board full function mixer, great eq facilities, 2 track mix-down deck, on board reverb. Limited Offer!

Yamaha SY99 £NEW

Launched at APRS. All of the SY77 plus LOADS more. 8 meg ROM with 267 pre-set waves, 76 keys, 63 digital fx.

Clearance Specials

ROLAND	
JX1 synth at a new low price	399
CM32P	199
CM64	399
CP40 Pitch to Midi	149
CF10 fader	89
CA30 arranged	199
E30 keyboard	699
CR80 drum machine	299
PG10/PG30 programmers	149 each
Handypad 5 drum pads	99
HD5 - h.disk interface for S550	99
BC13 (GKI Converter)	50
MT100 (MT32 & PR100)	399
Rhodes 660 paino	699
RC100 (remote S550/550)	99
DT100 (digitiser)	99
PK5 Bass Pedals, stomping!	225
YAMAHA	
TG77 demo	799
WX11 demo	199
PF2000	799
PSR4600	599
EMT10 can you afford not to?	199
MDFI (midi date filter)	99
RX8 drum machine	199
RX7 drum machine	299
MSS1	149
PLA7	99
OTHERS	
Korg T3 never again price!	1695
Korg S3	649
Korg DZ3	99
Korg DD1 ROM	5
Ensoniq EPS Keyboard	999
Ensoniq SQR (demo)	699
Ensoniq ESQ 1 plus	699
Ensoniq VFX SD brilliant!	1199
Ensoniq SQ1 super sound!	799
Kawai 4R synth	399
Kawai R50 low, low price..	199
Kawai GB1	99
Akai VX90	195
Akai XR10 drum machine	249
Akai MX76	899
Cheetah MD8	49
Cheetah MQ8	149
Cheetah SX16 sampler (dem)	499
Cheetah MK5 (demo)	149
SOFTWARE	
Roland Super MRC	49
Roland SYS 502	5
Roland SYS 553	49
Steinberg S900 Soundworks	49
Steinberg Time Lock	75
Steinberg Avalon + DA Board	299
Saro Musigraph	99
Midiman Software	175
Midiman Interface	99
Exel Audio D110 ROM	30
Passport MT Jnr	50

0% Finance Many items are available on 0% credit. Call for details!

Clearance Specials

Not repeatable, many one-offs. Check branch for availability.

RECORDING	
Tascam 246	599
Tascam 38 used	899
Tascam 238	699
Tascam 324 Mixer	799
MTR 12 :8:2 Mixer demo	699
Studiomaster Proline 16:2R	899
Studiomaster Proline 8:4:2R	699
Tascam MO6ST	269
Vestafire MR10B	179
Vestafire MR100 FX	299
Vestafire MR200	229
Tascam RC88 remote	89
Tannoy Stratford demo	149
Tannoy Eclipse demo	89
Roland M12E r/mount mixer	499
EFFECTS	
Yamaha EMP100	199
Yamaha BSP100	39
Yamaha DP100	45
Yamaha Q100	65
Yamaha PW100	25
Yamaha SPX 1000 demo	699
Yamaha SPX900	475
Yamaha REX 50	19
Boss RCE 10 (chorus)	79
Boss RPM 10 (phaser)	69
Boss RSD 10 (sampler/delay)	99
Boss RPW 7 P.S.U.	22
Boss GL100	199
Boss GE 215 E.Q.	175
Boss GE231	299
Roland RE3	225
Korg DRV1000	229
Korg A3	499
Korg KME563 input EQ	99
Art DRX	499
Digitech HM4	349
Digitech DSP 256	299
Lexicon LXP5	299
Akai AR900	279
Akai EX75N	50
Akai EX75D	50
Soundtech ST15EQ	169
Soundtech ST31EQ	159
Soundtech ST62EQ	299
Studiomaster U/fex dual parametric EQ	149
Alesis Microgate	89
Alesis Microenhancer	89
Alesis Microlimiter	89
Tascam GS30D	99
MORE SOFTWARE	
Exel Audio M1 ROM	30
Exel Audio D77 ROM	30
D.R.T.ST	50
Dididesign Soft Synth	99
T.D.M. Prodigy	89
T.D.M. Virtuoso	225

EDUCATION

Attention Teachers, Schools, Colleges, Universities.
We have a special Education Division open 24hours a day.
24hr Tel 0831 205950
9-5 Tel 0372 468114

STORES that offer YOU more

- Huge selection of equipment attractively displayed, ready for demonstration or for you to try.
- Prices that are hard to beat.
- Helpful, knowledgeable, fully trained staff.
- Each store has a specialist ready to answer your query or solve any problems you may have.
- Legendary After Sales Service. We replace or offer quick turnaround repair on all product we sell.
- Extended ABC Warranty for up to 3 yeors available.
- Interest Free and Low Finance credit deals available.
- Leasing facilities our speciality.
- Part-exchange always welcome.
- Top prices poid for all used equipment.

MAIL ORDER

If you can't make it to any one of our 6 stores we offer Instant Despatch. Just phone **0372 468114** and quote your credit card number.

24 hr DESPATCH

✆ 0372 468114 ✆
FAX 0372 468114 FAX

The CUSTOMER always comes FIRST at the Top Music Stores in the UK - ABC Music

ALL Prices inc 17.5% VAT

❑ **Addlestone (A)** 5 mins Junction 11 M25
14-16 High Street **Tel: 0932 854877**

❑ **Oxford (OX)** M40 to Birmingham now open
44 St Clements **Tel: 0865 724820**

❑ **Bristol (B)** Off Whiteladies Road
34 Alma Vale Road, Clifton **Tel: 0272 238200**

❑ **Kingston (K)** 15 mins direct from Waterloo. We'll pick you up from Surbiton Station.
56 Surbiton Road **Tel: 081 546 9877**

❑ **Slough (SL)** Junction 6 on the M4. Bring your car - we have loads of FREE Parking.
324 Farnham Road **Tel: 0753 822754**

❑ **Exeter (EX)** The South West's Leading Music Store. All roads South West lead to ABC Exeter.
68 Bartholomew Street West **Tel: 0392 425125**

ABC music

Access VISA

communiqué

the price is wrong

Recently I went to my record shop to buy an album by Billy Bragg. I found it filed under Easy Listening bearing a sticker which said "Don't let capitalism kill music; expect to pay no more than £7.99 for this album". Now, this letter isn't being written as a political exercise, but it is interesting to think about how the marketing men have capitalised on technology. If Go! Discs can produce and market a CD for £7.99, why can't everybody else? When CDs were introduced, they were highly priced because it cost a lot to produce them. It was understandable and perhaps even acceptable. This was a price I was prepared to pay for technological advancement. However, in today's age when CDs are the best-selling musical medium, the price is still as high as it was years ago. We are, of course, being ripped off.

When I left school I wanted to set up a synth system similar to the one I'd used there and learn more about synthesis. But what did I find? High prices, prohibitively high prices for me, a poor student (which is what I still am). If I wanted to learn guitar, I could pick up a secondhand one for around £30. OK, it wouldn't be brilliant quality, but it would be decent. But to buy a usable synth (with a keyboard of more than an octave) you're talking £200 at base. That will be secondhand and probably over five years old ("it's not much, mate, the keys usually hang off like that").

Look at Korg, Ensoniq or practically any synth company (except, possibly, Kawai, God bless 'em). What do they hope to achieve by pricing syths at £2000 a go? And the Fairlight and Synclavier are utterly crazy! It's obvious that these companies care more about making a profit than they do about musicians. But why? It's madness. If they want to make more money, why don't they make something else rather than extorting it from musicians, who feel more of a "need" rather than a "want" to make music?

Technological music is odd as an art form because of its expensive lifestyle. I suppose the whole thing applies to any musical instruments, but if you pay £200 for a decent violin you're paying for craftsmanship and care. Paying £2000 for a production-line assembled synth is just not on. Perhaps research and development could be expensive, but then again the humble vacuum cleaner must have benefitted from some R&D and I've never paid £2000 for a Hoover.

So what do I have to do; save up? I'm a student and have no income. Second mortgage the house? I don't own one. Knock off my parents and claim the insurance? No, what I do is write to you and bitch about it. It's easy to see how rap grew up from the ghettos using any available equipment because nobody could afford to buy anything else.

I'm open to donations. If any philanthropist reading this would care to slip me a T1 in the post, I wouldn't say no. And before you throw that old piece of equipment away, send it to me. It's the only way I'm going to get a synth system together.

Keir Thomas
Northenden
Manchester

PS Please print my address

You're a sad man, Keir. Winding up your letter by begging is indicative of what I'd consider a thoroughly destructive attitude - and it's really only yourself you're hurting. You began your letter by demonstrating your lack of understanding of the development and funding of the keyboards you crave, so let's begin there.

The facts are these: R&D on hi-tech musical equipment is very expensive, yet instruments have been becoming cheaper for years. Your supposition that R&D "could be expensive" would horrify manufacturers like Yamaha, Roland and Korg who regularly pour small fortunes and tens of man-years into an instrument, (someone speculated that some of the technology we use is second in sophistication only to that of the space programme). Looking back a few years, the 60-grand Fairlight represented technology that was unavailable at any other price. Today you can buy all of those once-exclusive facilities for a fraction of the price. The Synclavier presently represents the height of sophistication and integration of musical hi-tech. But it's no longer the only way to do the job.

So what's wrong with secondhand gear? Or gear that's "probably over five years old"? Why does it need to be state-of-the-art to be any good? If you read the Bomb the Bass interview in July's MT you'll know that Tim Simenon bought up Martin Rushent's old Roland System 700 recently. He didn't seem to think it was so bad. Coming down the price scale, you can pick up a lot of useful gear for a couple of hundred quid these days and it's a valuable route into the hi-tech jungle. The prospect of trying to buy your way into the guitar world with 30 quid, however, elicited the following response from a member of the Guitarist staff: "you'd be lucky to get a steel-strung acoustic with an action like a cheese grater and no chance of ever playing anything musical on it". (Incidentally, you might like to check your violin theory while you're shopping - I think you'll find that even a reasonable student's instrument will cost you between £250 and £600; a pro will pay up to a grand for a bow alone.

Turning to your comparison of hi-tech keyboards and vacuum cleaners, quite apart from the difference in likely R&D costs, you should realise that the market for a vacuum cleaner is vast compared to that of a synthesiser. This, obviously, is reflected in the amount that must be charged on each unit to recoup the development cost. Seen a major breakthrough in vacuum cleaner technology lately? 'Cos I ain't.

Next: you're a student and you're broke. While I understand that money's a major problem to you, I think you could be a lot more positive about dealing with it. Try working at the SU bar in the evenings. Other people do it - some of them even spend their grant on gear and worry about education later. I'm not advocating this, but it shows you how much you're feeling your "need" to make music. It's obviously not the same need that the rap musicians you implicity deride felt, because they've built an entire musical culture around their feelings. You've written me a letter.

Finally, you'll have noticed that I declined your request to print your address. We usually withold addresses to prevent Communiqué being used as a shopping list by opportunist thieves, but in your case they'd obviously be wasting their time. Instead I'm protecting you from a postbag full of protesting letters from people who really do have problems. If the T1 shows up, I'll forward it. ***Tg***

PS You're completely right about CD prices.

ZERO OPTION

PHOTOGRAPHY: TIM GOODYER

Sample mania is with us - in fact, it's been with us for several years but is showing no sign of abating just yet. The charts are full of records using samples, synths are full of synthesis systems using samples and samplers. . . Actually samplers present the biggest problem because it's down to you to find samples for yourself. You might choose to buy them "off the shelf", but then your samples are the same as everybody else doing the same thing. Alternatively, you can find your own - it's far more original and satisfying than using somebody else's, but it's damn hard work. So what's your best bet?

One good option is to use sample CDs. These provide you with basic sample material, but require you to make some of the decisions yourself. Choose *good* sample CDs and the hard work of finding worthwhile material is taken care of; treat it right and you have an excellent chance of producing samples which are unique to you. Now all you have to find some good CDs...

Or rather you haven't - not if you enter this month's MT competition and win Zero-G's Datafile One and Two.

For those of you who missed the review of Datafile One (MT, August '91), it won out as being simply the best dance sample CD currently available - featuring over 1000 samples covering drum and percussion sounds (including TR707/727/808/909), drum loops, bass sounds and too many vocals, and effects to go into here. Now it's being joined by Datafile Two - a further 1000 samples of breakbeats, drums, vocal hooks and effects. Together these two discs represent the most comprehensive dance sample resource presently in circulation.

One of the things that sets the Zero-G series apart from other dance samples is that they were all originally selected by Ed Stratton for his own use. What makes that special is the fact that he's the man behind Jack 'n' Chill and, more recently, Man Machine. This isn't someone cashing in on the sampling boom, it's ammunition from the front line. Now it's over to you - Ed's done his bit, it's up to you to do yours.

If you want to win a copy of both Datafile One and Two (along with a hip Japanese-style Man Machine hooded sweatshirt), all you have to do is answer a few questions. Actually, you'll have three chances to win because there are six CDs (three of each) and three sweatshirts up for grabs. Sounds good.

Reading the sleeve notes to the Datafile discs it's impossible not to tumble to Ed's interest in old sci-fi movies - a lot of the more bizarre samples come from them. Result: this month's questions are all about sci-fi. All you have to do is identify the robot characters which appeared in the following sci-fi films or TV series:

Q1
Star Wars

a) VLSI & SNCF
b) BLT & TV-AM
c) R2-D2 & C3PO

Q2
Logan's Run

a) RAM
b) REM
c) ROM

Q3
Silent Running

a) Huey, Duey & Louie
b) Curly, Larry & Mo
c) Nib, Nab & Nob

Once you've finished robot spotting, call your answers in to the MT Competition Hotline on **(0898) 100768** no later than *Friday, 18th October* (calls cost 34p per minute cheap rate and 45p per minute at all other times). Please speak clearly and remember to leave your name and address with your answers. The editor's decision is final and no correspondence will be entered into. Readers submitting multiple entries will be sampled and held as extras for the next series of *The Tomorrow People*. ■

MS6

Analogue Multi-timbral Synthesizer Module

More and more serious musicians are realising that Digital synthesizers just cannot produce the powerful and warm Analogue sound with any great degree of realism.

But you DON'T have to search for an old Analogue synth to retro-fit with MIDI or pay vast sums for a modified monster in order to get that classic fat sound.

The Cheetah MS6 has the original filter circuitry of the 'old greats' from the USA incorporated in a modern British design which brings the Analogue synth into the 90's without compromising on performance.

It's Multi-timbral and Programmable from the front panel. It's Velocity and Aftertouch sensitive too. It has over 400 superb sounds, which you can customise in 96 Programmable Memories, and 64 Programmable Performance Memories. It even supports MIDI overflow for extra polyphony.

No wonder the MS6 is used by the elite of professional musicians for bass lines, sync leads, filter sweeps and warm pads, because the MS6 offers fat, powerful, real Analogue sounds for the most discerning of users in a compact 1U high case which doesn't use up all your rack space.

Combining professional performance at a very affordable price, the MS6 is a real modern 'classic'.

CHEETAH IS SETTING THE STANDARD

FEATURES

- 320 editable ROM sounds
- 96 Programmable RAM sounds
- 64 Programmable Performance Memories
- Multi-timbral
- Programmable from the front panel
- Velocity Sensitive
- Aftertouch Sensitive
- Real Analogue USA Filter circuitry
- 2 Oscillators per voice
- 2 Envelopes per voice
- 6 Independent Voices
- MIDI overflow
- MIDI IN/OUT/THRU
- 1U 19" Rackmount case

£349.99 inc. VAT

Affordable Excellence

CHEETAH

CHEETAH INTERNATIONAL LTD
Cheetah House
Bedwas Business Park
Bedwas
Gwent NP1 8DW
Tel: 0222–867777
Fax: 0222–865575

All specifications and prices subject to change without notice.

HITSOUND SAMPLING CD

Guitar

Those of you who read my recent editorial on the shortcomings of using a sampler to imitate "real" instruments will already be familiar with my thoughts on the subject (see MT, June '91). Briefly, while it's easy to copy the sound of almost any instrument, being able to produce a convincing performance of most instruments ranges from difficult to bloody impossible.

One of the least sampler-friendly instruments around has to be the guitar - apart from the range of guitars around and the variety of sounds they are capable of making, guitarists employ such a range of techniques in the delivery of those sounds that a sampler soon starts to look like a very inadequate alternative to the real thing. But while keyboard players remain keyboard players and guitarists (largely) remain power-crazed animals, there's going to be a demand for guitar sounds which are divorced from their parent instrument.

One fresh source of guitar samples takes the form of HitSounds' *Guitar* sample CD - a stylishly-presented collection of electric and acoustic guitar sounds.

The disc opens with a couple of demo songs almost exclusively comprised of the sounds to be found on *Guitar*. They're interesting in their own right and do serve to demonstrate how the sounds might be applied, but I could live without them. Moving on to the real business, tracks three to 12 are the sort of stuff you'd expect to find on a CD of guitar samples. Taken from an unidentified Fender electric (probably a Strat) and a Gibson Les Paul they offer a very useful range of sustained, damped and bent notes, divebombs, harmonics, powerchords and so on. Track 13, however, gives you the first indication that Guitar might be something more than a competent collection of guitar *sounds*. Here, and in the next two tracks, you're offered a selection of riffs, scales and playing "effects" that underline the difference between a guitar and a sampled substitute.

More "conventional" samples follow, this time from a clean Strat - harmonics, bends, harmonic bends, unison bends, pulloffs, major chords, minor chords, sevenths. . . You can't say that the HitSound team have been shy of the variety of sounds a guitar will produce.

Nor have they stopped at the sounds of the guitar itself, as tracks 26-28 offer us a bite at that fashionable item, the wah-wah guitar. It's a Strat again, this time playing a variety of "wah-ed" rhythms including a rather effective Motown rhythm. This takes us neatly into some straight rhythm work on tracks 29-34. While it's hardly exhaustive, a useful variety of chords in characteristic inversions are available. Incidentally, the documentation for all the rhythmic samples gives its tempo (in bpm) along with details of the chords.

The pace hots up still further with a large selection of licks and rhythms being found in track 35. If you're into sampling "musical events" as well as straight notes, there's surely something for you here - from C&W to James Brown and a lot of less readily categorised stops in between.

The disc's final ten tracks (excluding the 1kHz slate tone on the last track) are given over to acoustic guitar sounds. Again the conventional approach to sampling is catered for with some rich notes and pulls, and so are the more exotic requirements of the adventurous samplist. If you're looking for something as simple (but effective) as a 12th fret harmonic strike or something as unlikely as a flash of flamenco, you may well find it here. Some of the rhythmic chordal work (again presented in a variety of chord progressions) has to be heard to be appreciated. The clever balance of good-sounding but not musically dominating playing found here is a tribute to the musical insight of the HitSound MD.

That's a general run down of *Guitar*, but what's it actually like to sample and use? The short answer is "remarkably difficult" - but that's not the bad reflection on the disc that you'd expect. Far from it; it's the thoroughness and sheer variety of guitar sounds that make up *Guitar* that present the problem. If you simply want to make a high-quality guitar sample or two to add to your sample library (most notes and chords are presented as chromatic series' with anything from 10-20 multisamples to choose from), then the job is comparatively easy. However, to let it rest there would be a grave mistake. There's such a range of sounds, and HitSound have tried so hard to keep your options wide open that it would be a crime not to explore some of the more idiosyncratic material on *Guitar*. Then there are the possibilities opened up by creative sampling - by accident I had a (seriously out of range) divebomb playing back a synth pad part with devastating results. What's more, it wasn't an effect I could accurately have predicted without trying it. I can't recommend too strongly that there's a lot to be gained by experimenting with the sounds on this disc.

If you're looking for a quick musical return from a sample CD, I'd give *Guitar* a miss. If, on the other hand, you're serious about guitar samples and the incredible amount of "humanisation" they can bring to a sampled or synthesised piece of music, then *Guitar* deserves some careful consideration. When I first slotted this disc into my CD player I was expecting to find a professional collection of guitar samples capable of bringing an important instrument further into my music. I wasn't expecting to find a wealth of sounds that stretched so far beyond what can be done with the guitar itself or a useful resource of licks that can bring fresh musical inspiration with them. Handle with care: highly recommended. ***Tim Goodyer***

Price *£35 including VAT.*
More from *The Advanced Media Group, Hurst Lane, Privett, Nr Alton, Hants GU34 3PL. Tel: (0730 88) 383.*

SOUND CONTROL

M A I L O R D E R

WHERE ELSE CAN YOU GET SUCH A GREAT DEAL

(Calling our Freephone Hotline won't cost you a penny)

Freephone 0800 52 52 60

ROLAND

ALL ROLAND IN STOCK

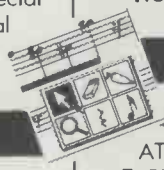
JX-1	£	Special
JD 800	£	Special
D-70	£	Special
GP-16 Effex Processor	£	Special
GR50 / GK-2	£	799.00
R-8 Rhythm Composer	£	Special
SPD-8	£	Special
W-30	£	Special
SC-55 / SB-55	£	Special
MC-50	£	Special
MV-30	£	Special

YAMAHA

YAMAHA SPECIAL DEALS

EMP100 Multi Efex	£	In Stock
FX 500	£	In Stock
SY Series Synths in stock	£	In Stock
YAMAHA TG -33	£	In Stock
YAMAHA TG 55	£	In Stock
YAMAHA TG -77	£	In Stock
QY10 (Back in Stock)	£	In Stock

Freephone for a Great Yahama Deal.



ATARI

SEQUENCING SPECIALS

ATARI (1 Meg) - CUBEAT	£	Special
ATARI (1 Meg) - CUBASE	£	849.00
ATARI (1 Meg) - CREATOR	£	Special
ATARI (1 Meg) - NOTATOR	£	869.00
All Mac - Atari - PC Software	£	In Stock

ALESIS

SAME DAY DISPATCH

Microverb - 3	£	Call Free
Midiverb - 3	£	Call Free
Quadraverb Plus / GT	£	Call Free
Datadisk SQ	£	Call Free
MEQ -230	£	Call Free
3630 Compressor/Limiter	£	Call Free
RA-100 Power Amp	£	Call Free
SR -16	£	Call Free

ENSONIQ

ALL PRODUCTS IN STOCK

EPS16 + Keyboard / Rack	£	Call Free
SQ1 + Keyboard / Rack	£	Call Free
SQ 2	£	Call Free
SD1's	£	Call Free

Mega Deals on the last SQ1's - CALL !

BOSS

BEST UK PRICE

SE 50 "Pro" Series Multi FX with Built in Vocoder	£	UK's Best
BE 5M Multi FX / Memory	£	MEGA
RV-1000	£	139.00
RE-1000	£	159.00
FC 50 Midi Foot Switch	£	Special
Full Range of Efex Pedals	£	In Stock

AKAI

AKAI SPECIAL OFFERS

AKAI S - 950	£	In Stock
AKAI S - 1000 Series	£	In Stock
AKAI S - 1100	£	In Stock

KORG

A5 EFFEX ALL IN STOCK

KORG M1	£	Special
KORG T Series	£	Special

PA/STUDIO DEALS

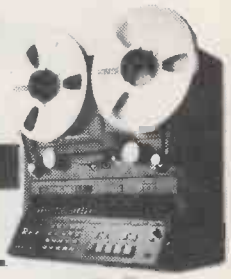
Soundcraft / Studiomaster

Soundcraft Spirit Desks	£	In Stock
Full Range of Live/Studios	£	CALL !
Studiomaster Desks	£	In Stock
SHURE SM 57 Microphone	£	79.00
SHURE SM 58 Microphone	£	89.00
NDYM 257	£	89.00
BEYER M300	£	69.00
AKG Series	£	In Stock
BOSE 802	£	CALL !
E.V. S200	£	In Stock

Full Range of P.A. equipment from,TOA, JBL, Peavey, Calsbro, E.V., Dynacord, etc.

FOSTEX

THE NEW X28 IN STOCK



FOSTEX X-26	£	UK's Best
FOSTEX X-28	£	UK's Best
FOSTEX 280	£	In Stock
FOSTEX R-8	£	In Stock

TASCAM

BEST UK PRICE

PORTA 03 /05	£	Special
TASCAM - 424 / 488	£	Special
TASCAM - 688	£	Special
TSR8	£	Special
M2516 Desk	£	Special
All new desks in stock	£	Call Now

ZOOM

NO QUESTION BEST PRICE

ZOOM 9002 Multi - FX	£	Special
ZOOM 9030 (NEW).	£	Special

DEALS ON DAT

AIWA MEGA DEALS

AIWA HDS1	£	399.00

In stock - Casio, Tascam, Sony, Yamaha. So call our freephone number today and save yourself £'s on a Great DAT Deal.

SOUND CONTROL

MAIL ORDER DIVISION

73 Elgin St, Dunfermline, Fife. KY12 7SD

Freephone: 0800 52 52 60

Fax: 0383 725733

All of the above deals are available from the following branches of Sound Control.

DUNFERMLINE. 73 Elgin St, Fife. Tel: **0383 733353**
GLASGOW. 61 Jamaica St. Tel: **041 204 0322**
EDINBURGH. 17 Saint Mary's St. Tel: **031 557 3986**
NEWCASTLE. 10 Mosley St. Tel: **091 232 4175**
DUNDEE. 29 - 31 Castle Street. Tel: **0382 25619**
KIRKALDY. 63 Dunniker Rd, Fife. Tel: **0592 260293**

THE SOUND CONTROL 3 POINT PROMISE

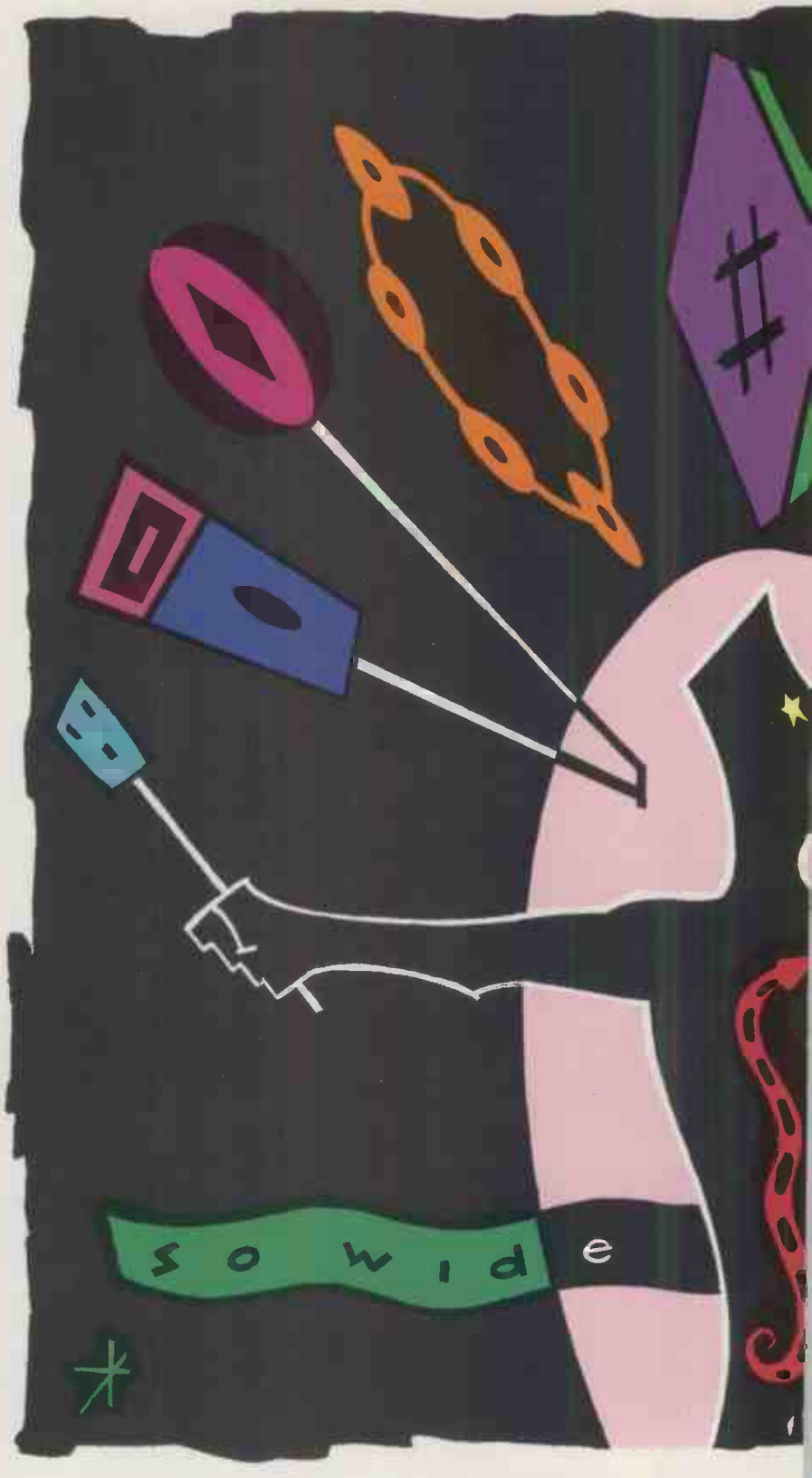
FAX No. 0383 725733

1) ALL OUR PRICES ADVERTISED **INCLUDE V.A.T. & DELIVERY** AND WE GUARANTEE **NO HIDDEN EXTRA CHARGES.** ON URGENT ITEMS A SMALL SURCHARGE INSURES NEXT DAY DELIVERY ANY WHERE IN THE U.K.
2) ALL GOODS PURCHASED FROM US COME COMPLETE WITH A **NO QUIBBLE GUARANTEE.** IF A PIECE OF EQUIPMENT DEVELOPS A FAULT (THROUGH NO MISUSE BY THE USER) WHITIN ITS WARRANTY PERIOD, IT WILL BE REPAIRED OR REPLACED **ABSOLUTELY FREE OF CHARGE.** WE WILL EVEN PAY THE CARRIAGE CHARGES.
3) ALL CALLS TO SOUND CONTROL MAIL ORDER **ARE FREE OF CHARGE.** IT DOES NOT COST YOU A PENNY TO GIVE US A CALL FOR A QUOTE, AND DO NOT WORRY IF YOU CAN'T CALL DURING OFFICE HOURS, WE HAVE AN AFTER HOURS ANSWERING SERVICE AND ARE ABLE TO CALL YOU BACK A.S.A.P.

ON THE BEAT

Part 24

WHERE A HUMAN DRUMMER RARELY CHOOSES TO USE MORE THAN ONE SNARE OR BASS DRUM, MOST BEATBOXES ARE WELL EQUIPPED TO HANDLE MULTIPLE INSTRUMENTS. AND WITH THIS MONTH'S ON THE BEAT, SO ARE YOU. TEXT BY NIGEL LORD.



THOUGH NOT BOUND by any stylistic considerations, this month's patterns come with the benefit of a unifying theme insofar as each of them features either dual snare drum and/or dual bass drum parts. If you've never tried doubling up your snare or bass drum voices in any of your programming activities, you could be forgiven for thinking this seems a somewhat uninspired theme on which to base an article. But, as I hope to demonstrate with the six patterns presented this month, this is anything but the case.

Providing voices are chosen to complement each other and not overlap too much (either in respect of time or pitch), it is possible to create some richly textured patterns which, for power and intricacy, really can show the beatbox in the best possible light. The reason for this is quite straightforward: under normal circumstances both bass and snare drum are fully committed to maintaining the

ILLUSTRATION: CLIVE GOODYER

overall structure of a pattern and providing the beat on which the rest of the music is built. Only when a second drum is added do we gain the necessary leeway to start experimenting with these instruments and taking them outside their more customary time-keeping role.

Of course, there's never been anything to stop you keeping time with any of the other drums available to you - using the bass and snare drum simply as a means of embellishment. But having experi-mented extensively in this area, I have to conclude that our perception of the bass and snare as instruments which lock together to form the fundamental time-keeping elements of a rhythm is now so deeply ingrained that it's quite impossible to drop them altogether from this role and substitute other instruments. Far better, I've found, to make use of the multiple voices available on all machines these days and simply slot in another snare or bass drum alongside the existing one.

In some cases it is possible to use dual bass drums and dual snare drums in the same pattern - you'll find a couple of examples in this month's patterns. I have found there are few rhythms which cannot be enlivened by the addition of one extra instrument at the very least, even if this only involves a straightforward alternation of voices playing the same part - the substitution of a longer, heavier snare drum beat every fourth bar, for example.

In the rhythms presented here, you'll find the idea being taken much further and in some cases forming the very basis of a pattern. As a general rule, the more complex, intricate snare or bass drum parts tend to be better served by shorter, drier voices. Heavy, more ambient sounds should, generally speaking, be reserved for the less frequent notes used for accenting and embellishments. Of course, this isn't carved in stone, and most modern machines make it quite easy to substitute voices, so there's no excuse for not experimenting.

Pattern 1 highlights the use of a second snare drum part to fill in and embellish the spaces left between the second and fourth snare beats of a fairly conventional dance/pop pattern. The main problem when writing a snare part to perform this function is avoiding the feel of cadence entering a pattern at a point where it's not required. Again, because we're so used to hearing snare drum rolls and fills occurring at the end of a rhythmic phrase, programming them to occur earlier in the pattern can give the effect of bringing it to a premature close. The programming of snare drum 2 in Pattern 1 avoids this by linking it with the more predictable beats of snare drum 1. This provides a continous flow to the pattern which works well.

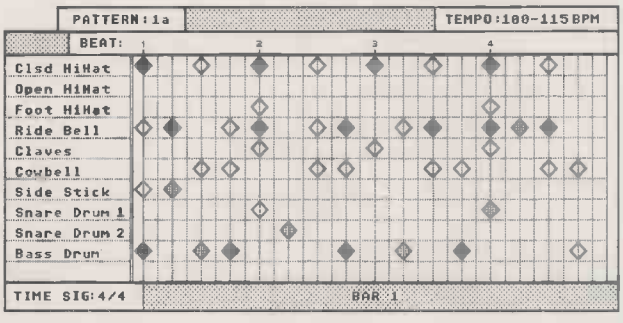
Like most of this month's patterns, there's a fairly hefty instrument complement which can be thinned out if you wish - though I'd recommend you enter all the parts first and then decide what to leave out. Programming should present no real problems; just make sure you keep the level of the snare 2 grace note on beat three of bar two well below that of the lowest dynamic level of the rest of the part.

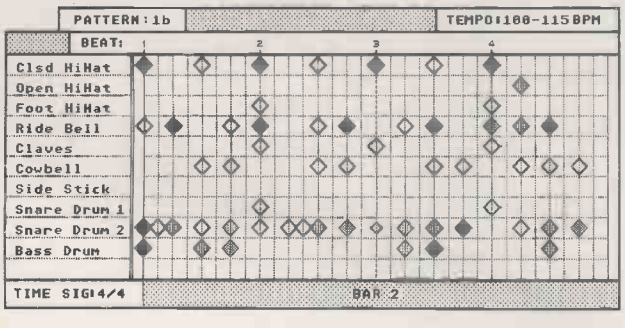
A somewhat simpler pattern, Pattern 2 has a decided swing to it thanks to the triplet programming, but this is

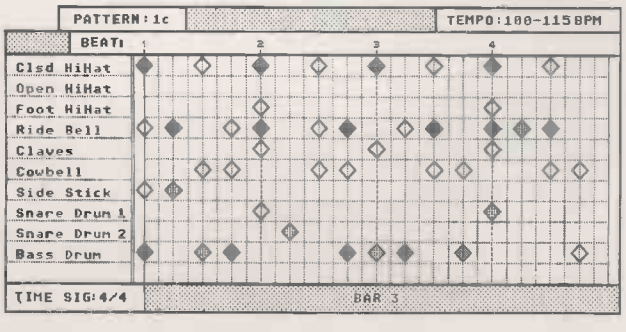
➢ offset to a certain extent by a ride bell part programmed in straight 4/4. As you will hear, the juxtaposing of the ride and hi-hat timings provides an interesting rhythmic contrast which gives the pattern a very distinctive feel but which opens it up to a potentially wider range of applications than would a straightforward triplet rhythm.

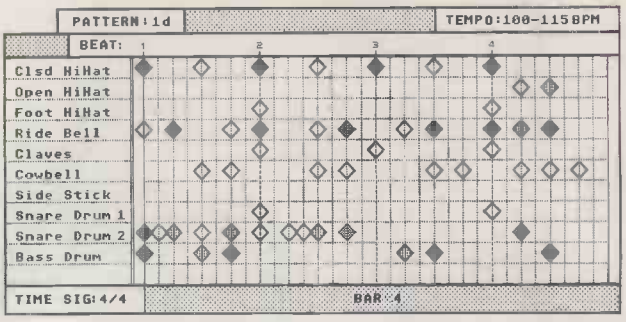
Rather than add a second bass drum part, my intention in this pattern was to show what could be done by splitting the existing part into two and assigning a different bass drum to each. The effect is to add considerable rhythmic interest to what otherwise would be a fairly run-of-the-mill bass drum line. It's a useful trick to remember when you are bound by an existing song structure to a particular rhythm, but are committed to coming up with something a touch more satisfying.

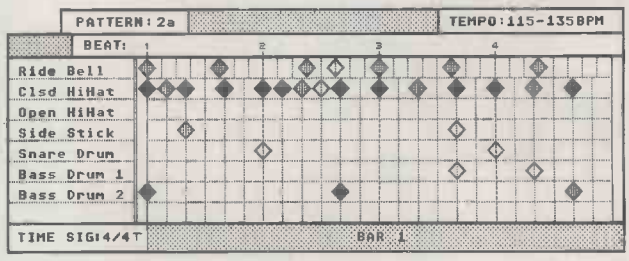
Even more distinctive is Pattern 3, which derives most of its interest from the repeating rhythmic figure formed by the two tom voices, the bass drum and the two contrasting snare parts. Here, the heavier of the two snare voices should be assigned to snare one, but because neither part is particularly complex, you should find you have plenty of scope for experimentation. This is a fairly fast pattern - it won't hang together properly below about 120bpm - but despite this (and the fact that there are 12 instruments to program), it still manages to ➢

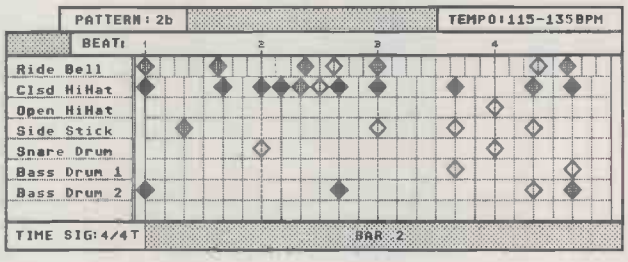


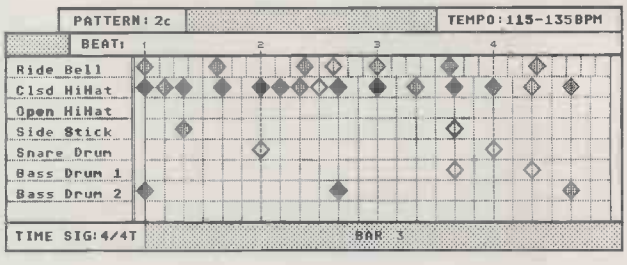


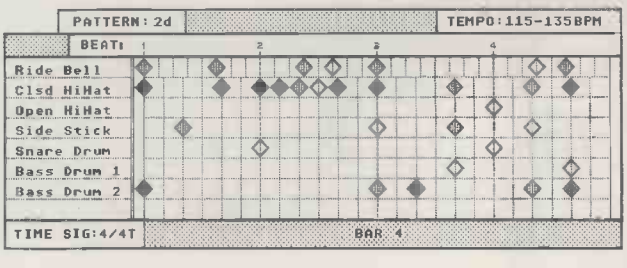


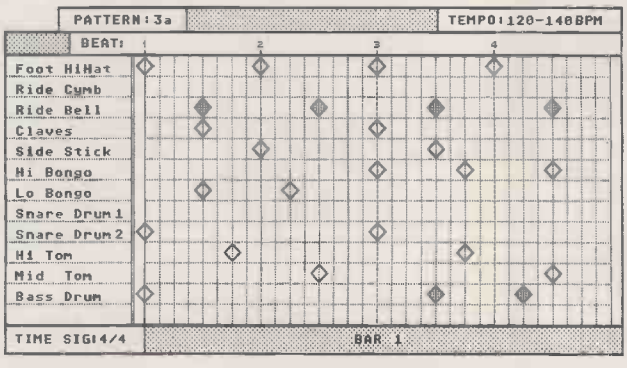












SEND NOW FOR YOUR FREE T-SHIRT!

Simply by subscribing to Music Technology magazine, you will receive a free t-shirt with your first issue!

Please send me my FREE T-shirt
size M ❑ L ❑ XL ❑ XXL ❑ *Tick relevant Box*

Subscribe TODAY!

I wish to subscribe to Music Technology Magazine, to receive 12 issues of the magazine and to automatically become eligible for any offers from the Music Maker Subscriptions Club.

To start off, how about a binder to keep your 12 issues in perfect condition, for only £2.25. Normal cost £4.50. To take advantage of this offer now, please tick box ❑.

UK £20.00, Europe and Overseas surface £25, Europe Airmail £35, Overseas Airmail £45.
Please send me the next 12 issues of MT commencing

with the ..... issue.

I enclose Cheque/Postal Orders to the value of

£..... made payable to Music Technology Publications Ltd.
For payment by credit card or for further details telephone: 0898 100703 ***Calls cost 36p per minute cheap rate and 48p at other times.***

PLEASE PRINT

Name .....

Address.....

.....

.....

.....Post code*.....

* it is essential that you include your correct postcode.

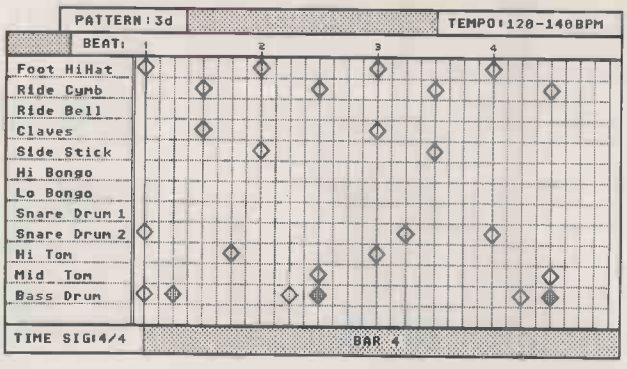
Send to: Mail Order Department, MT, Alexander House, Forehill, Ely, Cambs CB7 4AF.

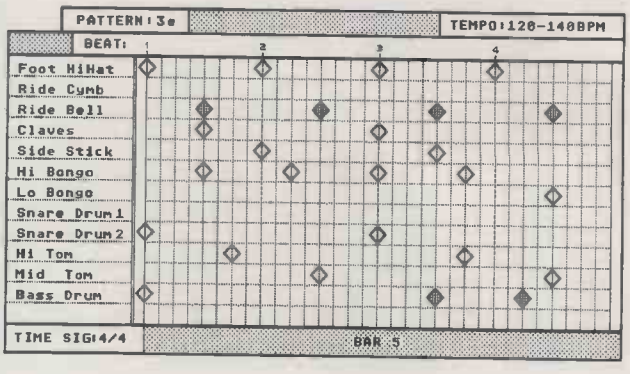
create enough space for itself and should prove readily adaptable.

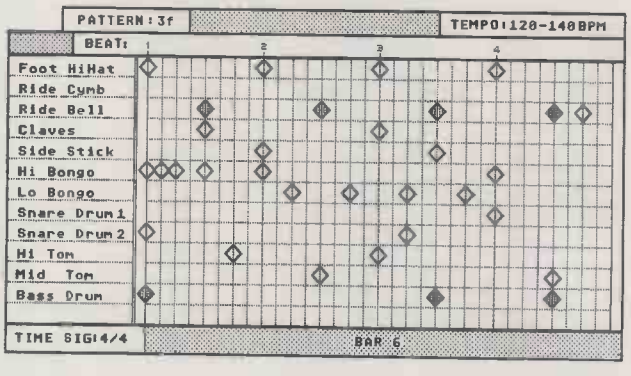
My love of Latin rhythm rears its head again in Pattern 4, adapted from a Brazilian baion (or baiao) - which is one of the oldest rhythms indigenous to that part of the world. Stripped of such exotic instruments as the reco-reco and pandeiro, the pattern is probably unrecognisable to inhabitants of the north-eastern part of Brazil from whence it came, but I'm sure even they would appreciate its immediacy and wonderfully fluid feel.

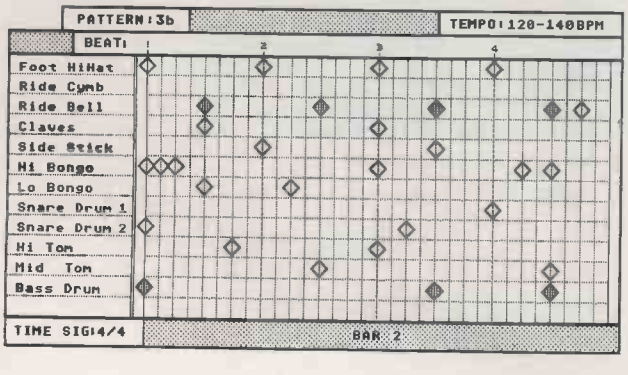
The only instrument which may prove a problem is the triangle, as few machines seem to include them in their lineups, but this can be readily substituted with any bell-like instrument providing the pitch is kept fairly high. The two snare parts, because they're not involved in any time-keeping role and are both quite simple, may be assigned to any suitable voices (long or short) providing they fit in with the overall feel of the patterns as instruments in all Latin rhythms must.

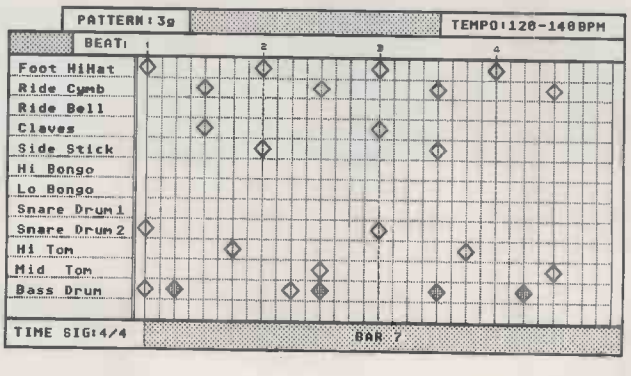
Whereas Pattern 4 stands up on its own, Pattern 5 sounds best when placed in context with a suitable bassline within an appropriate piece of music. The reason for this is that a number of the instruments are programmed "serially". That is, they occur one after another within each bar of the rhythm. This produces something of a "clockwork" effect, which doesn't sound too impressive on its own, but which works extremely well when other rhythmic and melodic instruments are added. Listening to the pattern, I had no problem coming up with half-a-dozen basslines off the top of my head - all of which sounded pretty damn

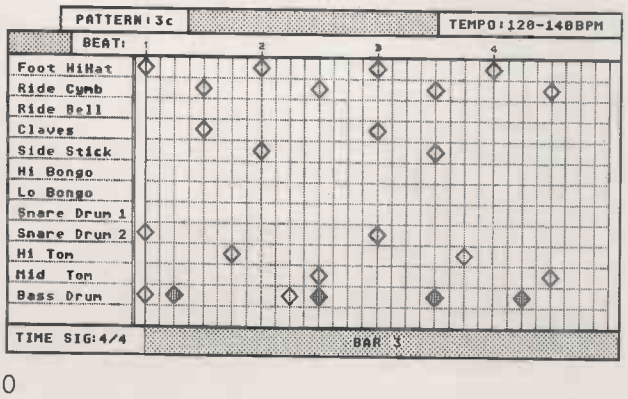


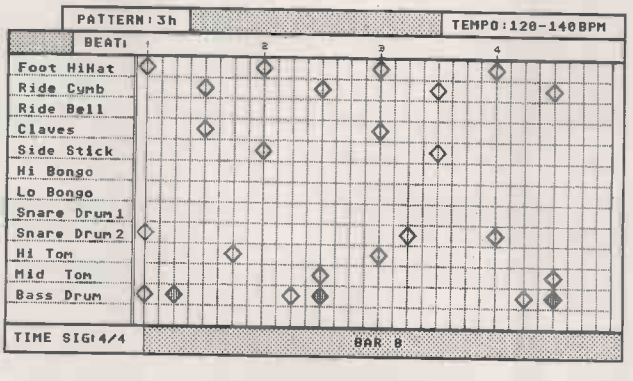












NEWSFLASH!

AMR 36 × 24 production console now installed in the new 24-Track digital Project Studio (Hounslow) Tel: 081-570 4444

WE FIXED THE MIX.

PEAVEY™
AUDIO MEDIA RESEARCH™

A DIVISION OF PEAVEY ELECTRONICS CORPORATION
711 A Street/Meridian, MS 39302-2898
(601) 483-5372/Telex: 504115/Fax: 484-4278

Distributed in the U.K. by: Peavey Electronics (UK) Ltd., Hunters Road, Corby NN17 1JE

PLEASE RUSH ME MORE DETAILS ON THE **AMR 36 X 24 PRODUCTION CONSOLE**

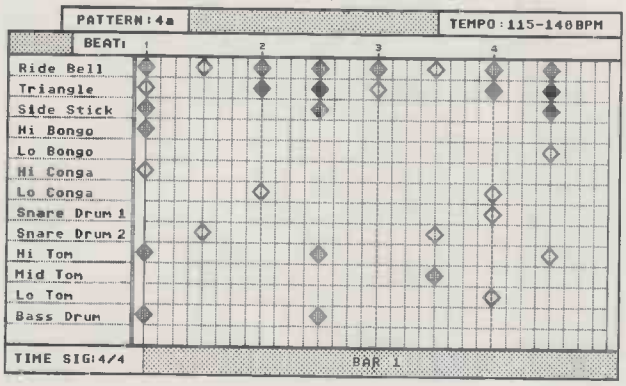
NAME .....

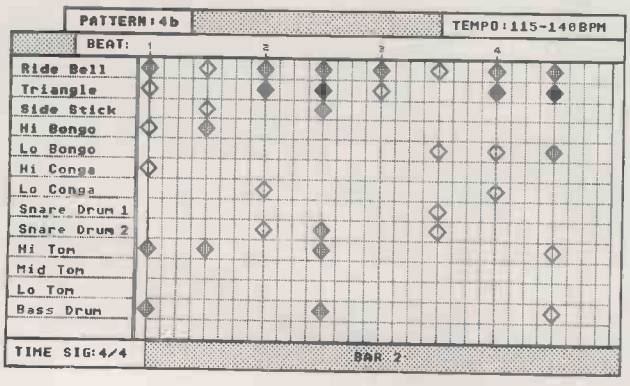
ADDRESS .....

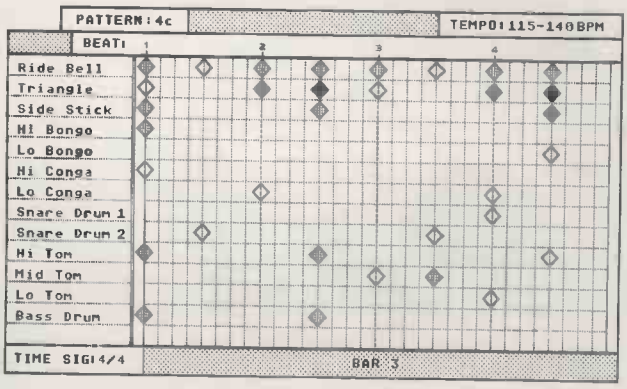
PEAVEY ELECTRONICS (UK) LTD., HUNTERS ROAD, CORBY NN17 1JE

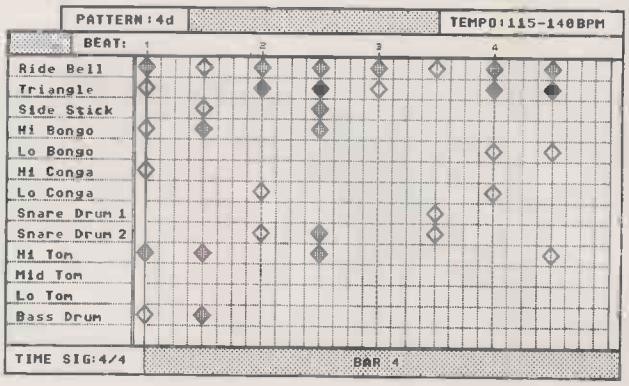
good. That said, I'm not entirely sure why this should be, other than the fact that space is created within the pattern quite differently to the way it would be in a more conventional rhythm. But whatever the process involved, I'd certainly recommend it to your attention as worthy of further experimentation.

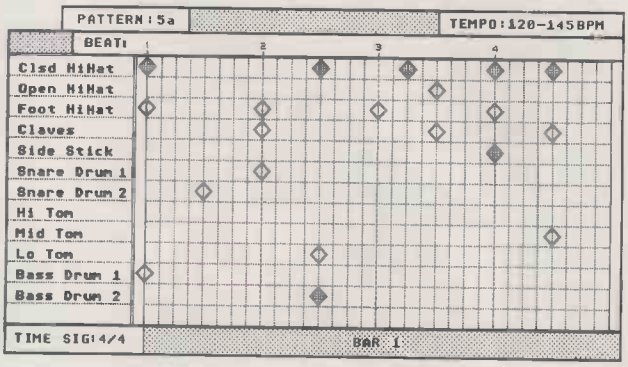
Finally, this month, we get heavy. With no less than three bass drum parts, two snares and three tom-toms, Pattern 6 is designed to hit you between the eyes and keep on going. This is thrash beatbox - uncompromising and clearly limited in its application, but great fun and certainly worth the programming should you find yourself in need of a really heavy program. It would be difficult, if not impossible, to prescribe suitable voices for each of the bass drum parts, you'll simply have to program them and then swap and change the sounds until you get the required flow of the three drums playing in concert. And given the power generated by these three instruments, it would probably make sense to program them first and then add the other instruments - choosing voices which will be heard above the machine gun-like impact of the low-end instruments. ■

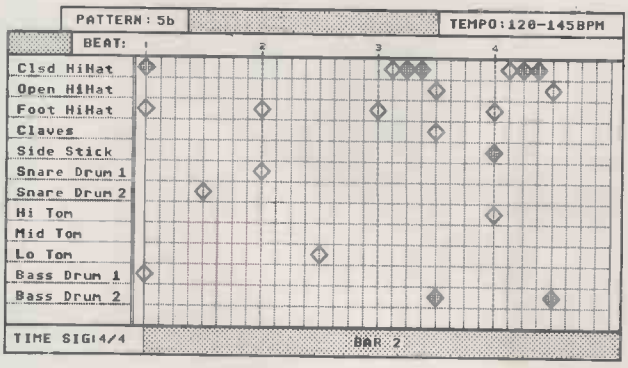


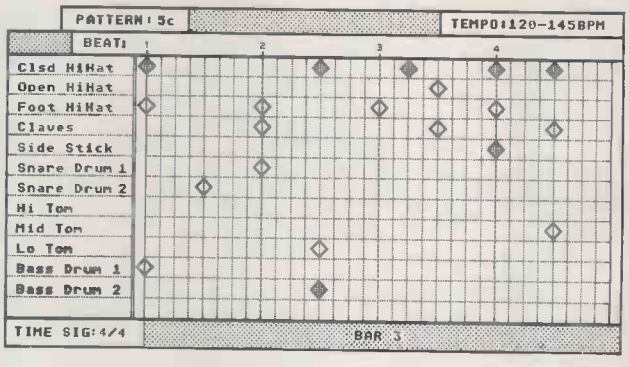


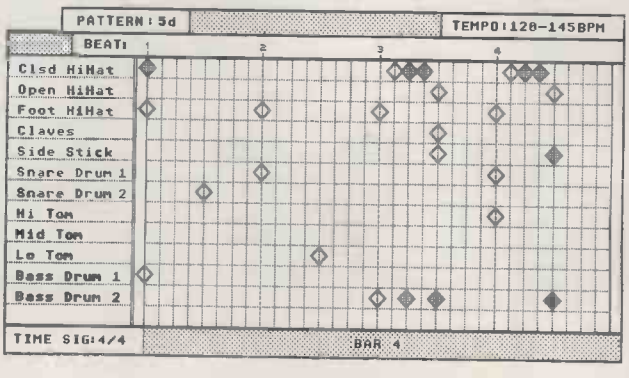












EXCLUSIVE !

Cadenza™

The Graphic Sequencer

£169

Cadenza is the professional PC sequencer that is uncommonly powerful, yet fun and easy to use. With all of Cadenza's advanced features you can get your music the way you want, quickly and intuitively.

SIMPLICITY

Cadenza is easy to learn, thanks to it's modern graphic design and carefully crafted help system. Cadenza doesn't trade power for convenience. Cadenza's thoughtfull design gives you both!

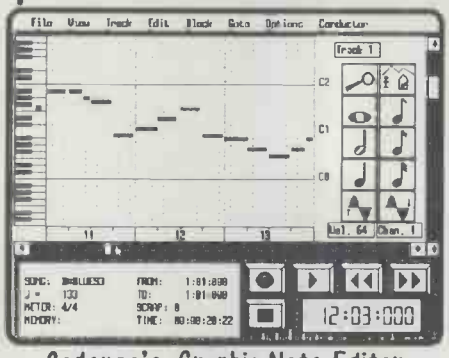
POWER

Cadenza is one of the most powerful sequencers available. Cadenza's graphic editing gives you precise control over all of your music, from notes to MIDI controllers and tempos.

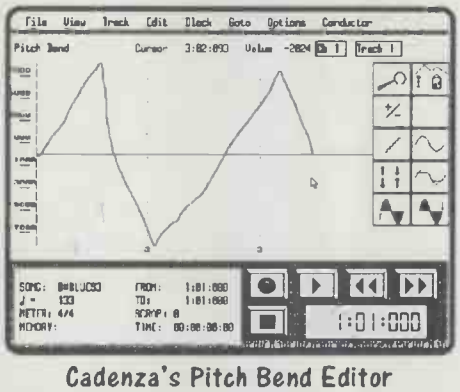
FEATURES

Cadenza gives you everything you expect in a PC based sequencer, and more!
Graphic Editing is just a start - Cadenza is packed with everything you need to get your music right.

The full-featured sequencer with professional power and an intuitive graphic design.



Cadenza's Graphic Note Editor



Cadenza's Pitch Bend Editor

FREE Band in a Box Pro
Buy Cadenza for £169 & get a FREE copy of Band in a Box Pro worth £58
HURRY offer extended due to demand!

Cadenza has the following features...

- 64 Multi-Channel Tracks
- All displays follow playback
- Multiple MIDI ports supported
- Record filter
- Step Record
- Sysex Librarian
- Tempo resolution to the tick
- TAP Tempo
- SMPTE, Chase Lock & FSK tape sync
- Link mode for pattern sequencing
- Reads & Writes SMF
- Completely adjustable quantising
- Humanising
- Each track has independent settings for MIDI channel, transpose, mute, solo, volume & pan
- Independent Track looping
- Tape deck style transport buttons
- Selectable count in
- Punch in-out at any point
- Full metronome control
- Position displayed in both Measure;Beat;Tick; and Hour;Minute;Second;Frame
- Live performance facility

Graphic Editing -

- Song Editor
- Piano Roll Note Editing
- Event List editor
- Conductor track for tempos
- Controller Editing with both faders and Graphs
- Pitch bend graphs
- Aftertouch Graphs
- Graphic velocity editing
- Zoom in/out for detail
- Edit with the mouse

And Many More..

Call us for a copy of the PC TODAY "rave" review. "A dream of a sequencer" they said, and much more!

MIDI Interface Excellence

Four Reasons to Choose Music Quest

Focus

Music Quest's primary aim is the design and manufacture of MIDI interface cards for IBM & Compatible's. This focus has enabled them to keep abreast of your changing needs in a MIDI interface.

Software

With a Music Quest MPU-401 compatible interface you have over 100 programmes to choose from. Plus, users of the more elaborate cards will get advanced features supported by all professional sequencers for IBMs.

Innovation

Music Quest are proud to be able to say that they have been responsible for having pioneered every significant innovation in intelligent interfaces. Amongst these are:
Multi Port operation; Chase Lock & SMPTE tape sync; MIDI Time Code support; Channel Remapping; MIDI metronome; Channel splitting; User selectable interrupt & address.

Choice

Whether you're a beginner, a serious amateur or a seasoned professional, there's a Music Quest card to meet your requirements. Choose from four different models - starting with the budget priced PC MIDI Card, the MQX-16 & MQX-16S adds sophisticated synchronisation for serious multi-track tape work, finally the MQX-32M offers multi-port operation (32 MIDI Ch) along with tape sync, SMPTE & MIDI Time Code.

PC MIDI Card £99. MQX-16 £152. MQX16S £195. MQX-32M £255

Did you know - Music Quest ship more MIDI interfaces than any other company (including Roland), & we are the EXCLUSIVE distributor.

In London? Pop into Soho Soundhouse & see our products there.

THE Musicator™

The ONLY notation-based sequencer for the PC

A concept the competition are still dreaming about!

NEW v2.5 with the following features:-

- 32 Staves / 32 Tracks
- Over 64,000 notes
- Real-Time and smart step-entry from MIDI or PC keyboard
- Each stave transmits on 2 ports/channels
- 32 MIDI channels when used with Music Quest MQX32M
- SMPTE & MTC sync with time indication on any objects pointed to
- Chase Lock tape sync
- MIDI note triggering while editing
- MIDI file import/export
- Overview screen with graphic bar-level editing
- Smart multi-resolution MIDI quantise
- Shuffle/Groove adjust
- Powerful MIDI-controller processing & editing
- 32-parts per score
- Total transcription control of note resolution, voices & rests
- Automatically transpose all clefs and octaves
- Adjustable splitpoint between staves on double staff
- Beam group control
- Adjustable note spacing
- Transposing of MIDI data, notation and chord symbols
- ALL printer types supported
- Print complete Score or parts
- Variable symbol sizes
- Print to PCX files for desktop publishing
- No longer copy protected

EXCLUSIVE !

£314

NEW LOW PRICE
Prism £50
See SOS July 90 for an excellent review of Prism

MAGNETIC MUSIC

For further information about our exclusive product range and services why not call for a free catalogue?
Access & Visa accepted, please add £3 to your order for P&P. All prices excl VAT.

Digital Music

Note: Band in a Box offer is subject to availability.

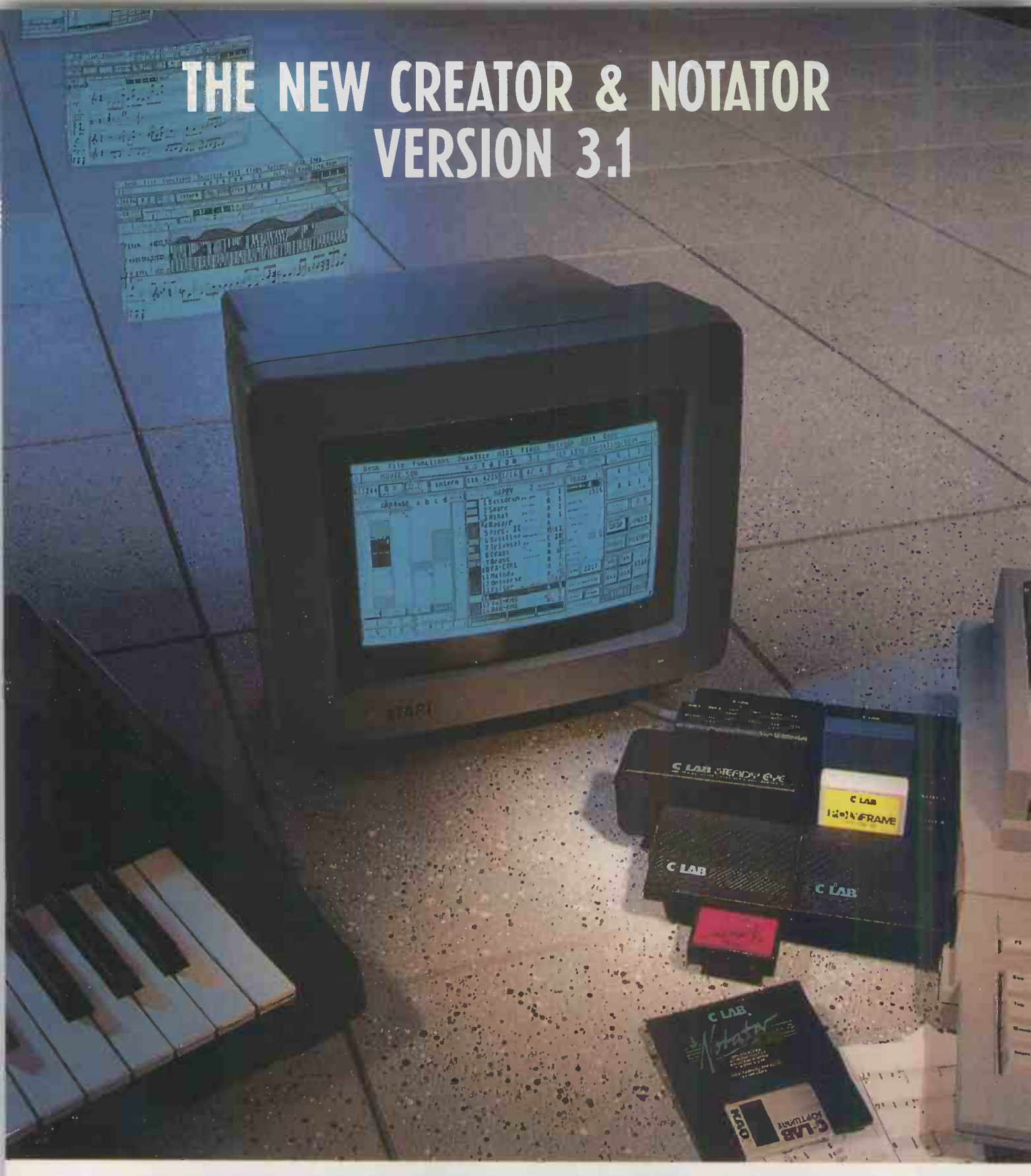
27 Leven Close, Chandlers Ford, Hants, SO5 3SH, England.

☎ 0703 252131
Fax: 0703 270405

UK & Overseas Dealers - Why not cash in on the boom in PC MIDI Music by calling us NOW!

30493

THE NEW CREATOR & NOTATOR VERSION 3.1



THE UNIVERSAL MIDI SEQUENCING & NOTATION SYSTEM FOR THE ATARI

Since the introduction of Creator in 1986 and Notator in 1988, C-LAB have been dedicated to the development of the Universal MIDI Music System. Powerful, flexible, expandable, reliable and yet simple to use. A system that evolves with you. A system that allows you the freedom to realise your full creative potential.

The C-LAB development philosophy continues with the release of Version 3.1 which amongst its many new features includes two vitally important innovations.

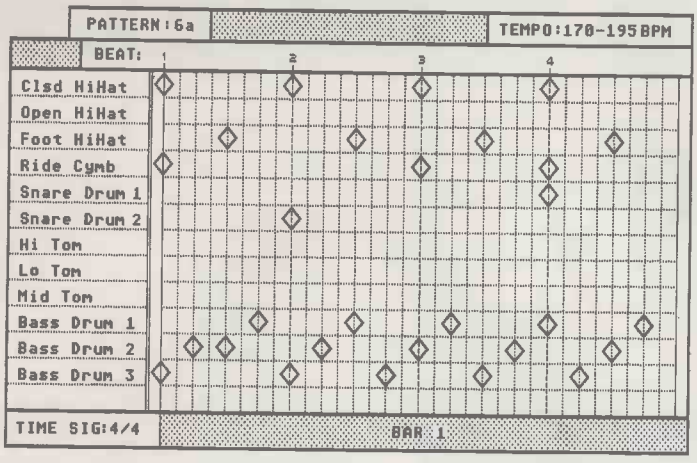
Firstly GRAPHIC ARRANGE. This radical new concept in music control allows the arrangement of musical events by combining visual access with audio control, thus giving far greater flexibility in the manipulation of complex compositions than ever before.

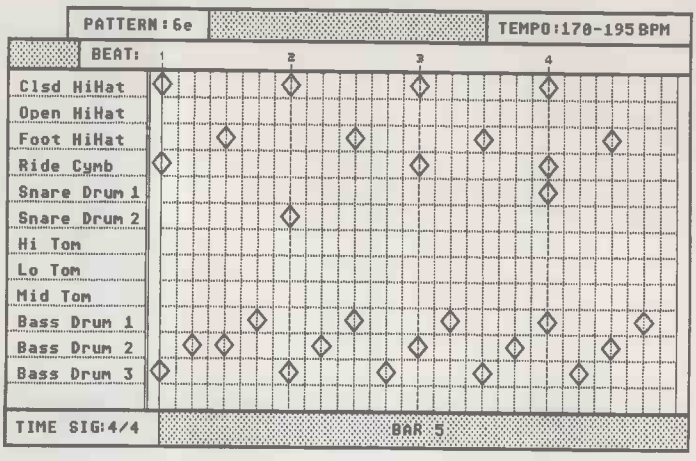
Secondly in recognition of the importance of complete integration with analogue tape based set-ups, comprehensive MIDI control of the FOSTEX R-8 is now available.

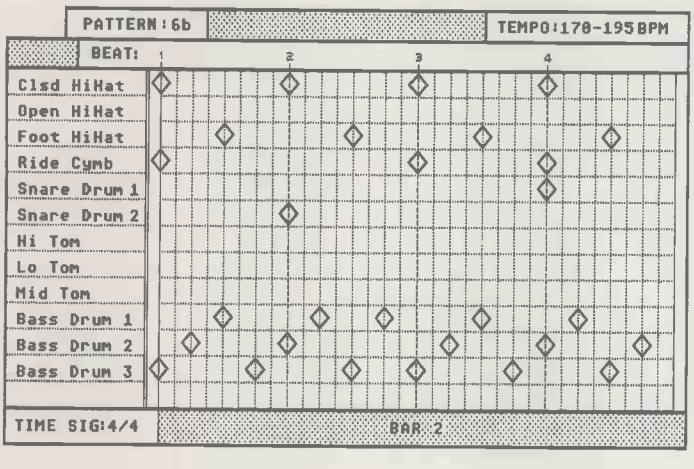
If you are a registered C-LAB user you will have automatically received full information on these and the many other new features in V 3.1 If however you have not yet registered or are new to the C-LAB Creator & Notator systems, please contact us for inclusion on the mailing list.

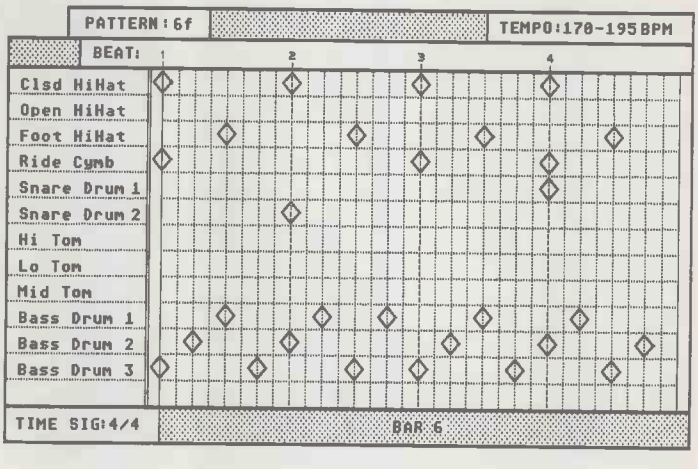
SOUND TECHNOLOGY plc

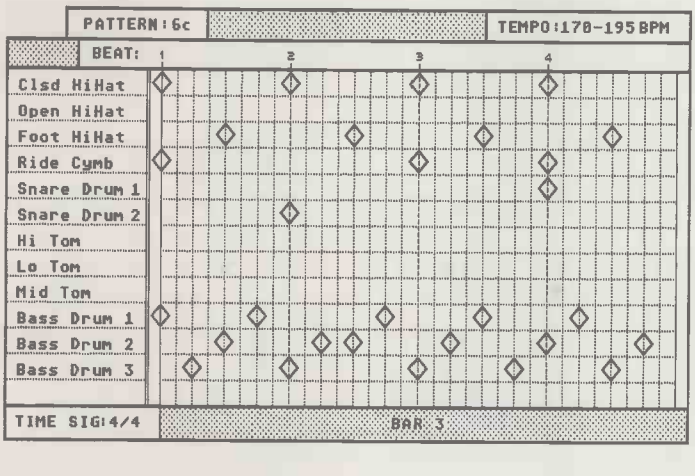
Sound Technology plc, Letchworth Point, Letchworth, Herts. SG6 1ND. Tel: 0462 480000. Fax: 0462 480800

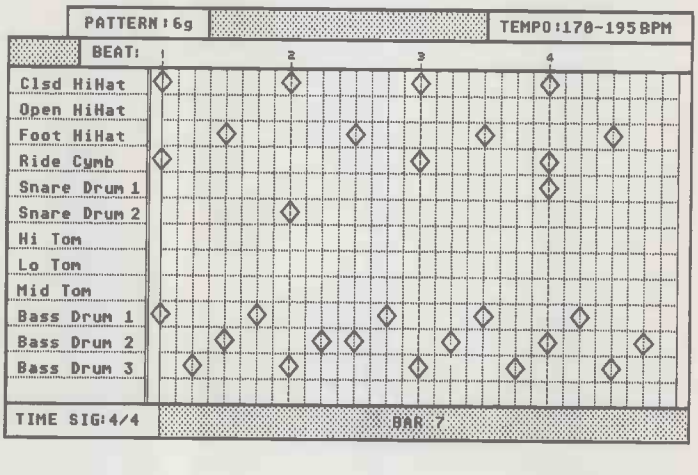

PATTERN:6a
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 1

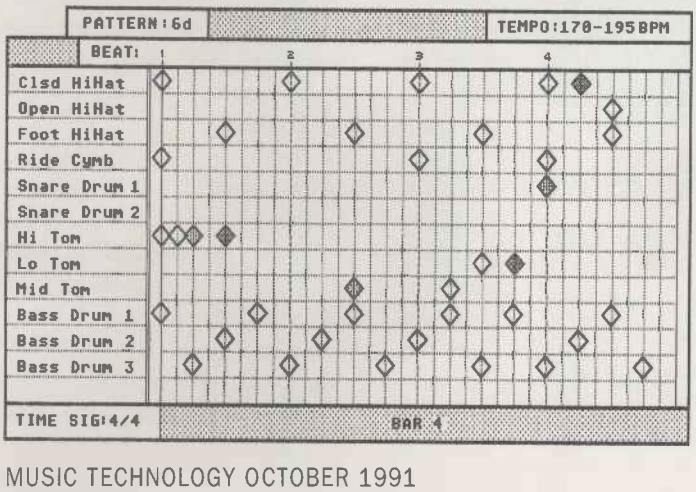

PATTERN:6e
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 5

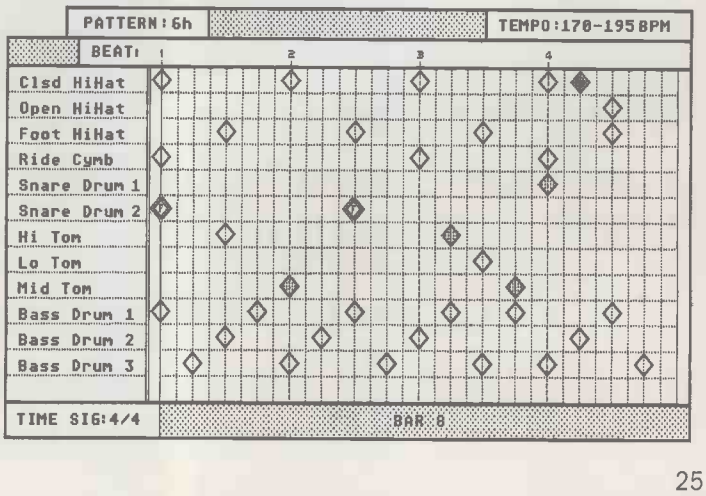

PATTERN:6b
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 2


PATTERN:6f
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 6


PATTERN:6c
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 3


PATTERN:6g
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 7


PATTERN:6d
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 4


PATTERN:6h
TEMPO:170-195BPM
BEAT:
1
2
3
4
Clsd HiHat
Open HiHat
Foot HiHat
Ride Cymb
Snare Drum 1
Snare Drum 2
Hi Tom
Lo Tom
Mid Tom
Bass Drum 1
Bass Drum 2
Bass Drum 3
TIME SIG:4/4
BAR 8

SY99

PHOTOGRAPHY: JAMES CUMPSTY

Yamaha have launched a new flagship for their SY fleet in the middle of a recession - will it ride the cruel economic tide or will it turn out to be the Titanic of the synth world? Review by Simon Trask.

THE LAST TIME Yamaha had a megasynth to their name was in 1986, when they brought out the DX5. This was essentially two DX7s in a bulky casing with much-improved (over the DX7) front-panel styling and layout, and a 76-note (E-G) attack velocity and channel aftertouch-sensitive keyboard, retailing for £2999.

The DX5's 1991 equivalent is with us now in the form of the SY99, an upmarket version of Yamaha's successor to the DX generation, the SY77 (reviewed MT, January '90). The SY99 isn't two SY77s in a box, however, and its front-panel layout and styling are exactly the same as the '77's, but it does have a 76-note (E-G) keyboard, sensitive to attack velocity and channel aftertouch, and inevitably it's a larger and heavier instrument than the '77. The SY99 looks every inch the professional's instrument, and in a world full of 61-note keyboards its 76-note keyboard should certainly help endear it to performers, as should the keyboard's nicely-balanced action. However, Yamaha's new synth has more going for it than this.

DIFFERENCES

THE SY77 AND SY99 are both 32-voice polyphonic, and the AFM/AWM synthesis architecture is essentially the same on both synths, but crucially the '99 offers far more sonic flexibility through having 267 AWM Waveforms in 8Mb of ROM compared to the SY77's 112 Waveforms in 2MB of ROM, and through having onboard sample RAM which allows you to bring any samples you want into the SY99, where they are treated like AWM Waveforms. It's worth bearing in mind that by making the AWM part of the SY99 sonically open-ended, Yamaha have made the AFM part open-ended, too - because, as SY77 owners will know, AWM samples can be used as modulation inputs to the operators in an AFM algorithm.

Yamaha's new synth comes with 0.5Meg of sample RAM fitted as standard, battery-backed so that you don't lose your samples when you switch the synth off. This memory is upgradable in half-Meg chunks (Yamaha SYEMB05 memory boards) to a maximum of 3Mb - which compares very favourably with the Peavey DPM3 SE's 64Kb and 1Mb respectively. To upgrade the memory, all you have to do is unscrew the plate on the SY99's rear panel and slot the memory boards into the five numbered ➢

Presenting the new SD▼1 from ENSONIQ.

The best way to blend sound, performance and composition since the baton.

▼ Great music is an artful balance of these three elements. And it's never been easier to achieve than with the new ENSONIQ SD-1—the next generation in integrated music production synthesizers.

▼ Great sound? The SD-1's sampled waveforms cover the gamut of instrument sounds: from orchestral to pop, solo instruments to imaginative synthesis. Then add our unique Transwaves™ for a dynamic sound that brings synthesis to life—all played back through new 16-bit state-of-the-art output circuitry that gives unsurpassed fidelity to your music (the same circuitry we use in our EPS-16 PLUS sampler!).

Our new 16-bit piano waveforms deliver the clarity and richness of a great grand piano.

▼ Performance flexibility? With the SD-1 you can combine acoustic, analog synth and exotic digital textures at the push of a button—no MIDI cables needed! And 24-bit dynamic effects, expressive Patch Select buttons, and a third generation Poly-Key™ Pressure keyboard add to performance possibilities that no other synthesizer offers.

The SD-1 already has a large library of sounds, thanks to compatibility with our VFX and VFX-SD synthesizers.

▼ Intuitive composition? The SD-1 features an incredibly easy-to-use 24-track sequencer that offers recording, editing, and mixing features that allow you to shape your music with precision and care. And only ENSONIQ sequencers allow you to audition every edit to decide which version to keep.

▼ Great sounds, unequalled performance control and a powerful 24-track sequencer to realize your musical inspirations—essential features built into a single keyboard that gives you the immediacy of a synthesizer, with the capabilities of a MIDI studio.

▼ The SD-1 Music Production Synthesizer, from ENSONIQ—the performance is happening now.

The EPS-16 PLUS Digital Sampling Workstation—*16-bit sampling with onboard 24-bit effects, sequencing, and performance features, available as a rack-mount or keyboard. The industry leader in sound and support.*

The SQ-R Synthesizer Module—*The great sound of the SQ-1 in a single-space rackmount module.*

The SQ-1 PLUS Personal Music Studio—*Advanced synthesis (including new 16-bit piano waves!), 24-bit dynamic effects, and a 16-track sequencer with mix-down capabilities. The low-cost MIDI studio with the high quality sound.*

The SQ-2 Personal Music Studio—*A 76-key synthesizer with great sounds (including new 16-bit piano waves!), 24-bit dynamic effects, 16-track sequencing, and performance features. The perfect choice when 61 keys just aren't enough.*

SOUND TECHNOLOGY plc

Letchworth Point, Letchworth, Herts, SG6 1ND
Tel 0462 480000 Fax 0462 480800

ensoniq®

THE TECHNOLOGY THAT PERFORMS

➢ Expansion Memory "bays" recessed into the body of the synth.

The greater sonic scope provided by the SY99's bigger AWM ROM sample memory soon becomes apparent when you play through the synth's Preset Voices - which, incidentally, are far better than the SY77's Preset Voices - while something which strikes you from the moment you start playing the synth is how much smoother and classier than the SY77 it sounds. This difference in sound quality is down to the SY77's somewhat rough and rugged effects processing being replaced by processing in the SPX900 class, offering superior bandwidth and a greater selection of effects with more detailed programming.

Other new features and improvements are more to do with performance flexibility and the SY99's general working environment. For instance, you can now set zoned aftertouch, allowing channel aftertouch to affect only notes played either above or below a user-programmable splitpoint. New master keyboard functions (see below) make the SY99 more effective than the '77 as a MIDI controller keyboard, as well as allowing you to play multi-Voice split and layer textures from the keyboard.

"Something which strikes you from the moment you start playing the SY99 is how much smoother and classier than the '77 it sounds."

The filters within each Element now have a Sync function as an aid to programming: turn it on and any parameter edits on one filter affect the other. The Send function which allows you to send a patch change on the keyboard transmit channel at any time now allows you to send a Bank Select message as well, while the keyboard transmit channel itself can be set without having to delve into Utility mode, by holding down the Shift button and pressing one of track buttons 1-16 - particularly useful for calling a different track/Voice onto the keyboard while a Song is playing.

A new feature called Switch Lock allows you to disable the front-panel buttons, the idea being that, once you've selected the Voice you want to play, you can lay out sheet music or a fake book on the synth's front panel without fear of accidentally changing Voice or activating the sequencer; you can unlock the buttons by simultaneously pressing the Shift and Exit buttons, or by turning the synth off and on.

Yamaha have taken advantage of the SY99's sample RAM to include a MIDI Data Recorder mode. This allows the synth to store multiple SysEx data dumps, from instruments which can initiate transfer, in a partitioned area of its sample RAM. Memory can be allocated to the MDR in 4Kb steps, from 8Kb minimum to a generous maximum of 512Kb. Once you've transferred your instruments' SysEx data into the allocated memory, you can save it to disk, then subsequently reload it and transmit it to your instruments whenever required.

The SY77's onboard 16-track sequencer remains, in many respects, unchanged on the SY99, but the memory capacity has been upped from approximately 16,000 notes to approximately 27,000 notes. The number of Songs has been upped from one to ten. There are also some extra features as a result of this: Append Song (append one Song to the end of another), Cut Song (create two Songs out of one), Copy Song and Copy Track (copy a track from one Song to another). Disk storage allows saving and loading of individual Songs as well as all sequence data, and you can choose not to load Pattern data along with sequence data.

The SY99 allows you to save your sequence data in Standard MIDI Files formats (0 and 1) so that they can be loaded into computer-based sequencers running on PC, Atari ST and Apple Mac. Equally, sequences put together on these sequencers can be run on the SY99, though there is one potential problem: the SY99 can only handle sequences recorded in one of five clock resolutions, which tends to suggest that MIDI Files transfer won't work with all sequencers (the SY99 sequencer's own maximum resolution, incidentally, is 96ppqn).

Other potential problems with MIDI Files transfer are down to the differences between sequencers. For instance, many computer-based sequencers allow multiple MIDI channels to co-exist within each track, whereas the SY99's sequencer works on the principle of one MIDI channel per track. Nonetheless, MIDI Files capability is a welcome feature on the SY99, which can only increase the synth's flexibility - and increased flexibility is what Yamaha's new synth is all about.

There have also been various changes made to the organisation of the SY99's software pages and the positioning of parameters in the page hierarchy - some brought about by the new features, some introduced purely to help streamline operation of the synth. These changes are neither extreme enough to be offputting to SY77 owners making the change, nor subtle enough to be inconsequential. If I had to describe the effect of the operational changes, I'd say that they provide a more "polished" user interface.

Moving around the SY99's many software pages has been made easier by the inclusion of multiple Marked pages: you can now Mark - and subsequently Jump to any one of - five software pages, where the SY77 only allows you to Mark one page at a time. However, I think Yamaha would have been better advised to identify Marked pages by name rather than number - for instance, the name Cut Song rather than the number 602.

AWM SAMPLES

ALL THE SY77 waveform data has been included on the '99, so the two synths aren't sonically incompatible; however, some of the samples have been "reworked" for the SY99 to improve them, and the order of the samples has been changed. ➢

MIDITECH OF LEEDS

THE COMPUTER MUSIC PEOPLE

MAIN DEALERS FOR:

ENSONIQ, YAMAHA, EVOLUTION, CHEETAH, ROLAND COMPUTER MUSIC PRODUCTS, KEYBOARDS, SYNTHS & EXPANDERS/ MODULES & RELATED SOFTWARE BY EVERYONE.

PLUS!

ATARI ST, APPLE MAC, COMMODORE AMIGA & PC COMPUTERS SYSTEMS. DRIVES, PRINTERS, MEMORY EXPANSIONS, VIDEO, D.T.P & BUSINESS SYSTEMS AND A LOT LOT MORE.

CALL US FOR ALL YOUR COMPUTER REQUIREMENTS, BETTER STILL, VISIT OUR SHOP AND FIND OUT WHY MUSICIANS AGREE WHEN IT COMES TO MIDI IT'S GOT TO BE MIDITECH.

54A (THE BALCONY)
THE MERRION CENTRE
LEEDS LS2 8NG
TEL: 0532-446520

UNADULTERATED CHOPS!

Gordon Giltrap is acclaimed as one of the finest acoustic guitarists this country has ever produced. This album is a personal selection of tracks, some previously unreleased, which over the years have proved to be firm favourites with guitar players.

From the memorable single 'Heartsong', through beautiful emotive pieces such as 'Elegy' to the sheer unadulterated chops of 'Lucifer's Cage', *Guitarist* is sheer musicianship. Available exclusively from Music Maker Records.

To listen to tracks from Guitarist (album: £6.99, CD: £11.99 inc. p&p) just dial 0898 666122.

To order, telephone 0353 665577 (office hours) or the Music Maker Hotline 0898 666199 (24 hours) and quote your credit card number.

Calls cost 36p per minute (cheap rate) and 48p per minute (at all other times)

MEGA BEATS

BEATS COLLECTION C.D

AT LAST Prosonics U.K. Present 30 classic drum machines covering over a decade in rhythm now superbly digitally mastered onto one compact disc featuring:

- CASIO RZ1
- KORG KPR77
- ROLAND TR606
- BOSS DR550
- LINN 2
- KORG DDM110
- KORG DDM220
- ROLAND TR626
- OBERHEIM DMX
- EMU DRUMULATOR
- ROLAND R8
- SIMMONS KIT
- YAMAHA RX21L
- ROLANDTR707
- ROLAND TR727
- LINN 9000
- ROLAND TR808
- AKAI XR10
- YAMAHA RX11
- SEQUENTIAL TOM
- ROLAND TR909
- YAMAHA RX5
- AKAI XE8
- KORG DDD1
- ROLAND TR505
- DR. BOHM
- BOSS DR55
- ALESIS HR16
- ROLAND CR78
- ALESIS HR16B

OVER 700 ORIGINAL DRUM MACHINE SOUNDS

AND ALL AVAILABLE FOR THE EXCLUSIVE PRICE OF JUST £29.95 (INCL)
To order your compact disc simply telephone 0424 436674 for details and credit card purchase or fill in the coupon below and send to;

PATCHWORKS

Frederick House, 211 Frederick Rd, Hastings, E.Sussex, TN35 5AU

WITH CHEQUES AND POSTAL ORDERS MADE PAYABLE TO PATCHWORKS

Please send me a 'mega beats' compact disc. I enclose a cheque / postal order for £29.95 made payable to Patchworks

Name .....

Address.....

.....

.....Post code.....

Tel No .....

Access VISA

ALL TRADE NAMES ARE THE PROPERTY OF THEIR RESPECTIVE HOLDERS
DUE TO THE NATURE OF OUR PRODUCTS, REFUNDS OR EXCHANGES ARE AT THE SOLE DISCRETION OF 'PATCHWORKS'.

➢ The SY99's AWM Waveforms have been split into two Preset banks. The Preset 1 bank contains the bulk of the original samples, covering the standard range of instruments and including some very effective analogue-type waveforms which blend well with the rich brassy sounds that AFM is able to

create, plus a greatly-expanded collection of drum and percussion samples (85) and a few "multisample" waveforms offering all the bass drums, all the snares, all the toms and all the cymbals, mapped onto different areas of the keyboard so they can be used together. There's a Drums multisample wave which combines a range of drum and percussion sounds into a kit. The SY77's 20 drum and percussion sounds were a passable collection but nothing particular to write home about, while the collection of sounds on the SY99 reflects a newfound attention to contemporary drum and percussion samples on Yamaha's part, drawing heavily, I'd say, on European - and in particular British - input.

"Unlike the effects on the SY77, the SY99 provides plenty of parameters for you to get to grips with - typically ten per effect."

Much of the SY99's extra sonic flexibility comes from the samples and waveforms in the Preset 2 bank. This is given over largely to effect samples, including atmospheric loops such as 'EleMagic' and 'Mellow' which feature plenty of movement in them, and a large collection of digitally-created waveforms. The former allow the SY99 to offer convincing impersonations of the Korg Wavestation's wave sequences, as in, for example, Preset Voice P2 B11, 'SP: Arpeggi', a rich, shimmering pad sound which uses the 'Mellow' waveform to create the sparkle and sense of movement within sustained sounds which is characteristic of the Wavestation. The large number of waveforms could also be construed as a Wavestation-like return to abstract sound synthesis, though of course the SY99 is already strong in this department courtesy of its AFM synthesis section. In fact, the sonic flexibility of AFM synthesis can be enhanced by using the new waveforms as AWM inputs to the operators in an AFM algorithm.

SAMPLE RAM

LIKE PEAVEY'S DPM3 SE synth, which also has onboard sample RAM (see review MT, August '91), the SY99 has no sampling capability of its own. However, there are three possible sources of samples for it: its onboard disk drive, MIDI sample dumps in Sample Dump Standard format, and plug-in Waveform cards.

The value of the first source depends on how well Yamaha and/or third-party developers get their act together with a disk-based sample library. Yamaha have made a start by allowing the SY99 to read TX16W disks, not exactly a move calculated to set hearts pounding - now, if they'd given it the ability to read Akai disks. . .

Another source of Yamaha samples is the SY77's library of Waveform cards, which can be read directly by the '99 as Card samples or loaded into the synth's sample RAM. This latter feature provides the ideal solution to that familiar problem of how to use samples off two cards at once when there's only one card slot. In fact, you can load in more than one card's worth of samples - though not into 512Kb of RAM.

The SY99 can't read SY77 Voice data directly off card, but it does allow you to load the data into its Internal (RAM) Voice memory and save it to disk (see later for more on SY77 compatibility). At this point you may be thinking to yourself: "if I can load the samples on my SY77 Waveform cards into an SY99 and save them to disk, and if I can do the same with the Voice data cards, I won't need the cards any more". Well, Yamaha have thought of you thinking of that, and as a result they've copy-protected the SY77 Waveform sample data. This means that you can't save it to disk and you can't dump it via MIDI. This is where battery-backed RAM really comes in useful, because you don't have to load the samples off card each time you switch the SY99 on (though loading off card is far quicker than loading off disk).

The SY99 can also read RY30 card samples and load them into its sample RAM, though you won't (or, at least, I didn't) find this fact documented in the synth's manual. Again, the samples are copy-protected, so you can't save them to disk or dump them via MIDI.

MIDI SDS sample dumps provide the most flexible option. The Sample Dump page in Utility mode allows you to request a sample via MIDI and ➢

Are you a recording musician?

Then you simply can't afford to miss out on . . .

HOME & STUDIO RECORDING
THE MAGAZINE FOR THE RECORDING MUSICIAN

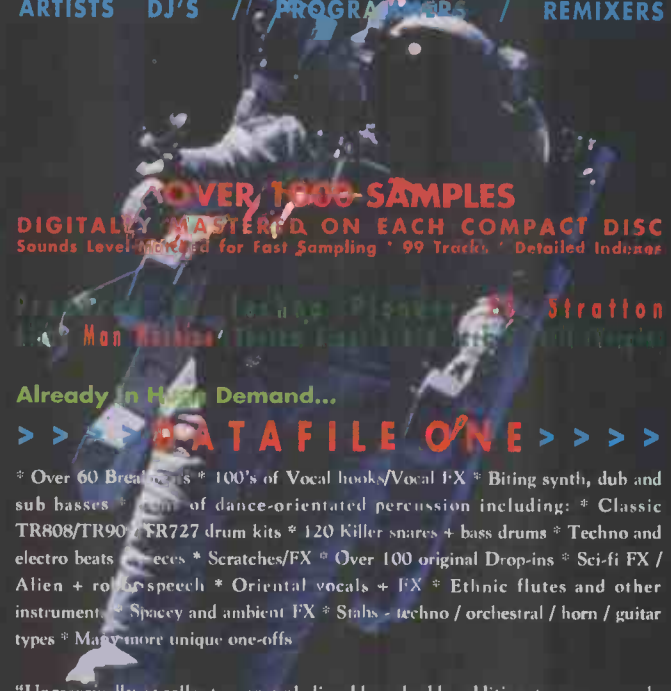
It doesn't matter if you are just setting out in four-track recording or are the owner of a state-of-the-art private recording studio, Home & Studio Recording plays a vital role in keeping you informed of the latest recording equipment, trends and techniques. What's more, it does it in plain English!

Every month, there are in-depth product reviews, practical features on all aspects of recording including MIDI sequencing and studio construction, and revealing interviews with internationally respected studio engineers and producers. On top of that, there are regular competitions, occasional features on readers' studios and constructive criticism of your demo tapes.

Whether you want to make professional sounding demos at home or you want to make recording your career, the information in each issue of H&SR gives you very real advantages; be the first to find out about future product releases, buy and sell your used equipment via our readers' ads page, and discover how those elusive sounds you hear on records are actually created. Once you've read H&SR, you'll wonder how you ever managed without it!

ZERO-G

THE SAMPLE-CD SERIES FOR DANCE PRODUCERS + ARTISTS DJ'S / PROGRAMMERS / REMIXERS



OVER 1000 SAMPLES
DIGITALLY MASTERED ON EACH COMPACT DISC
Sounds Level Matched for Fast Sampling * 99 Tracks * Detailed Indexes

Stratton
Man Machine

Already In High Demand...

> > > > DATAFILE ONE > > > >

* Over 60 Breakbeats * 100's of Vocal hooks/Vocal FX * Biting synth, dub and sub basses * [illegible] of dance-orientated percussion including: * Classic TR808/TR90 / TR727 drum kits * 120 Killer snares + bass drums * Techno and electro beats [illegible] * Scratches/FX * Over 100 original Drop-ins * Sci-fi FX / Alien + robot speech * Oriental vocals + FX * Ethnic flutes and other instruments * Spacey and ambient FX * Stabs - techno / orchestral / horn / guitar types * Many more unique one-offs

"Unreservedly excellent... an unbelievably valuable addition to your sample library... the definitive [illegible] sample CD" - MUSIC TECHNOLOGY. AUG 91 "An exceptional and extremely useful product... an invaluable tool for the professional sound technician" - DJ MAGAZINE. JULY 91. "Stratton knows his business... if the quality of Datafile One's sounds is anything to go by Volume 2 & 3 should be unmissable" - INTERNATIONAL MUSICIAN. AUG 91

And now just released, an even deadlier selection...

> > > > DATAFILE TWO > > > >

* Over 100 Breakbeats * Another arsenal of over 150 soulful Vocal hooks & ad-libs/FX * Kraftwerk-style electro percussion * 40 killer basses incl. an essential selection from Roland Juno 106 and SH 101 synths * Guitar FX + guitar rhythm breaks * Tons more Sci-fi/Techno FX/robots * Roland R8 & Alesis HR16B drum kits * Complete human beatbox * Stabs * Ambient FX includes whalesongs/birds + film atmospherics * Industrial percussion/FX * Italo-house piano * Automotive FX / horn blasts * Drop-ins * One-offs

"The vocals & FX are even more powerful... I saved plenty of my best stuff for Two and Three..." - Man Machine

Coming soon... The final chapter...

> > > > DATAFILE THREE > > > >

*More sounds to blow the b***s off a Rhino at 100 paces... All Existing Customers Will Be Sent Info/Order - Form Ahead Of Release)

ZERO-G: The result of years of sample [illegible] and creation for house/rap/soul production, never before have so [illegible] been made available on disc. At £49.95 inclusive, each ZERO-G CD retails at only around four times the price of a CD Album, while you could spend forty times that amount on breakbeat and sound FX Albums (Add 100's of hours) to get 1000 samples as effective.

If you're in to house/rap or related styles, you know how important good samples can be. Owning these CD's will make a big difference to your creative output - ask anyone who's used them, or read the reviews.

Call: 0442 870681 for Visa/Mastercard orders, or post or fax details:

To: Time And Space, P.O.Box 306, Berkhamsted, Herts. HP4 3EP England

Please send: _____ copies of ZERO-G DATAFILE ONE at £49.95 each inclusive
_____ copies of ZERO-G DATAFILE TWO at £49.95 each inclusive

(International orders: Add £5.00 for express air-mail/handling.)

I enclose a cheque/postal order to the value of £_____ made payable to "TIME AND SPACE" or:

Please debit my ACCESS____ VISA____ MASTERCARD____

Number: _____/_____/_____/_____ Expiry Date: __/__

Name (Capitals): Intials: _____ Surname: _____

Address (Capitals): _____

_____ postcode _____

Telephone orders: (0442) 870681 or Fax This To: (0442) 877266

➢ load it into any one of 99 sample locations; you can also transmit an individual sample or the entire internal sample data.

Once you have a collection of samples in the SY99's RAM, you can set about assigning them to the synth's 64 Waveforms. This involves selecting a From and a To sample for each Waveform, which means that multisamples intended for a single Waveform must be consecutively ordered; sample Delete and Copy functions can help you out if you need to do any housekeeping here. Additionally, samples and Waveforms can both be given eight-character names to identify them.

Once you've assigned samples to a Waveform, you can map them onto the keyboard by setting Low Key and High Key parameters and, if necessary, changing the Original Key for each sample. You can also give each sample its own volume level, pitch transposition (±5376), loop type (forward once, forward loop, backward once or backward loop) and loop mode (normal or alter - that is, alternately forward and backward). Your Waveform, whether it consists of one sample or ten, can be used as the basis of an AWM Element in the same way as the preset and card Waveforms - you just select Internal on the AWM Waveform Set page in place of Preset 1, Preset 2 and Card. Waveforms in the sample RAM can also be used within SY99 Drum Sets.

To make the most of the SY99's sample RAM, then, you really need an external sampling setup, not only to capture your own samples but also to manipulate them, because the SY99 has no sample manipulation facilities of its own. This brings me to the subject of Peavey's DPM SX sampling "front end" unit. When I reviewed the SX (MT, August '91) I mentioned that it should be possible to use it as a sampling add-on for the SY99, as they both use the MIDI Sample Dump Standard format. However, there's one hitch: the DPM SX expects sample looping to be done at the sample destination, while the SY99 expects it to be done at the sample source. The end result is that you can forget about using any samples that need to be looped. You can't trim samples on Yamaha's synth, either, although because you can initiate sampling on the SX manually or from an audio or MIDI trigger, and because you can Stop sampling manually on it, this needn't be such a problem. Still, it's not exactly an ideal marriage.

"The collection of drum sounds on the SY99 reflects a newfound attention to contemporary drum and percussion samples."

EFFECTS

THE NEW DIGITAL effects processing on the SY99 provides 63 effects, divided into 29 single effects, 22 cascade effects and 12 dual effects. Any one of these can be assigned to each of two effects processors, which can be configured in serial or parallel fashion or switched off. Effects settings can be programmed per Voice, of course, in Voice mode, and per Multi in Multi mode. Multis provide plenty of effects routing flexibility, with each Voice routable to group 1 and/or 2 outputs and any combination of effect sends (the number varies depending on the effect configuration).

Single effects provide reverbs (including hall, rooms, stages, plate, gated and reversed, tunnel and canyon), early reflections, stereo delays and echo, pitch changers, Aural Exciter (licensed from Aphex), flange, chorus, symphonic and phaser, rotary speaker, ring modulator and filter wah.

Cascades include serial pairings of flange, chorus, symphonic and phaser up with reverb, EQ with reverb, delay, echo, flange, chorus and phasing, and flange, chorus and phaser with stereo delay. Dual effects, meanwhile, include parallel pairings of stereo flange and chorus with stereo delay, echo and delay with reverb, and stereo flange with stereo chorus. Unlike the effects on the SY77, the SY99's effects provide plenty of parameters for you to get to grips with (typically ten per effect, - divided between the two effects per processor in the case of cascade and dual effects). To give you an idea of the programming level, White Room, Rev Tunnel, Rev Canyon and Rev Basement reverbs include width, height, depth and wall vary parameters (the latter allowing you to define the irregularity of the wall surface).

Two effect parameters per Voice or Multi can be selected for real-time modulation - one from each effects processor, or both from one or the other processor. The modulator for each parameter can be selected from a choice of MIDI controllers 1-120, aftertouch, velocity, key scale or a special effect-modulator LFO for which you can select the waveform - triangle, saw down, saw up, square, sine or sample & hold - and program speed, delay and initial phase settings. You can also fine-tune the modulation amount for each of the two selected effect parameters by defining a value range within which the selected modulator will operate. The SY99 allows many of its effect parameters to be selected for dynamic modulation, ensuring plenty of possibilities in this area.

MASTER CONTROL

THE SY99 COMES programmed with eight keyboard control setups which govern how internal and MIDI'd sounds are played from its keyboard. Once selected, a control setup is assigned to the SY99's keyboard in every mode, with the exception of Song Record mode. The default setup, selected as part of the synth's initialisation procedure on power-up, is Normal 1Voice - one Voice assigned across the entire keyboard range, with MIDI performance data being transmitted on the selected keyboard transmit channel. When you're in Multi mode, the keyboard channel defines which of the 16 available Voices you play from the keyboard - so if you want to play the ➢

Sansui MX12 - 12:6 Mixer - £199 + VAT !!

A full feature multitrack console for a fraction of the price of a similar unit. Full EQ, effects sends, metering and dozens of connections and insert points. Partner it with a Tascam 238 or Fostex R8 for a stunning budget system. And for those of you who purchased an MX12 from us a t a higher price over the last 3 months - we will refund the difference !!

Sansui MX12 - £199 +VAT !!

TCA goes MIDI !!

Our specialist MIDI department is now up and running. For details of our MIDI school as well as equipment and keyboard bargains see our TC MIDI ad. elsewhere in this issue.

New Stock

Whilst we do not pretend to carry EVERY item from EVERY manufacturer, (*as some shops seem to - ever tried putting it to the test?*), all new equipment is tested in one of our three working studios, and if we like it, our buying power can usually ensure that we have it in stock at all times (even when your local dealer might have run dry!). In addition, if we recommend an item, we will REFUND YOUR MONEY if you do not agree with us.

In fact we are the largest pro audio dealers in Britain for Alesis, Korg, Drawmer, Casio, Fostex, Seck, Yamaha, TOA, Tascam, Studiomaster, Allen & Heath, C-Lab and a good many morel (Last year we sold nearly 700 new 8 & 16 track packages and around 300 s/h machines !!). It's always worth ringing us for a quote on new equipment and if you're still unconvinced, ask yourself why we became the biggest in such a short time (or better still ask the rest!)

If you are bewildered by the vast amount of multitrack recording products currently on offer, Thatched Cottage fax packs should make the job of choosing the right equipment that much easier. There are 6 in the series; P.A. – Portastudios – 8 Track – Financial advice, MIDI and information on our recording and MIDI school. To obtain any of our fax packs just phone or write.

Tascam Self Powered Monitors - £49 +VAT

Superb bookshelf sized heavy duty monitors - half price at £49 +VAT each ! (Ideal for keyboards& home stuios)

Remote Headphones - £65 +VAT

Professional, high quality, enclosed headphones with a remote range of 50 feet ! - Ideal for foldback situations (no messy wires). Available at a fraction of the original price

£65 +VAT

TCD Stripper - £149 +VAT

Do you need a box which allows you to copy any CD or DAT to any other DAT (regardless of make), as often as you like. The Stripper is a neat device which defeats or adds copy prohibit code (so you can protect your own recordings) for the budget price of £149 +VAT

When it comes to new equipment you may have noticed that we don't say 'phone for the best deal, POA, or "lowest price guarantee" (Ha! Ha! if the prices are so great why don't they just print them and amaze us all). Our bulk buying policy can usually guarantee that a telephone call to us will not be wasted and in any case we can throw in those "hidden" extras - cables with multitracks, patchbays with desks, (By the way, next time a dealer "guarantees" the lowest price and then can't deliver, try reporting them to the local Office of Fair Trading - it will teach them not to waste your time!)To be honest though, if you spend all afternoon on the telephone, the chances are you might find someone somewhere who will undercut us by a pound or two. The difference at THATCHED COTTAGE is if your multitrack breaks down on a Sunday morning or your Drum Machine blows up on a Bank Holiday Monday you CAN ring us, we'll be here and we WILL do something about it – 365 days a year. Have you ever needed help and advice outside shop hours? If you are serious about your music you will know that it is quality of service that makes the difference and at THATCHED COTTAGE it's only a phone call away!

MULTITRACK DEALS

Fostex R8 + Soundcraft Spirit 16:8:16	£2649 + VAT
Fostex R8 + Sansui 12 into 6 mixer	£1299 + VAT
Fostex R8 + RSD Pro-line 16:4:8 with MIDI muting	£1999 + VAT
Fostex R8 + RSD Proline 16:8:16	£2199 + VAT
Fostex R8 + Mixdown 16:4:8	£2499 + VAT
Fostex R8 + S2	£2699 + VAT
Fostex G16 + Spectrum	£6499 + VAT
Tascam 288 + Sansui MX12	£950 + VAT
Tascam TSR8 + RSD Proline 16:4:8 with MIDI muting	£2599 + VAT
Tascam TSR8 + RSD Mixdown 16:4:8	£2799 + VAT
Tascam TSR8 + Soundcraft Spirit 16:8:16	£3100 + VAT
Tascam TSR8 + S2	£3100 + VAT
Tascam MSR16 + S2	£4699 + VAT
Tascam MSR 24 + Allen & Heath Saber 24:16:24	£11,500 + VAT
Tascam MSR16 + Spectrum	£5999 + VAT

THATCHED COTTAGE DIGITAL (T.C.D)

In order to cater for the increased demand for advanced multitrack systems we have a seperate division – Thatched Cottage Digital. Housed in a brand new purpose designed building, it handles 24-track analogue (including the new Tascam MSR24S, Saber, Magnum, Quartz + DDA desks) and all digital and leading edge installations (such as the new Yamaha digital Multitrack)

If you are considering any kind of professional set-up and feel that the legendary T.C.A. service and value are of interest, contact us on (0223) 208110 or ring the normal T.C.A. number for full details.

STOP PRESS – TCA TRAVEL!

In case you didn't know, our fully equipped, ABTA/IATA Thatched Cottage Travel Agency has been up & running for some time expanding our high standards of service and great value into the travel industry. Whether you are organising a tour, visiting a trade show or simply booking a holiday, just give us a call – what have you got to lose? Contact Gill Scott or Nicki Brazier on 0223 314577 (ABTA no. 89156)

SOME SECONDHAND AND EX-DEMO BARGAINS

Studiomaster Trackmix 24:12:24	£2750
Studiomaster 24:16 Mixdown	£1599
Tascam ATR20 1/2" 2-track (demo)	£1299
Tascam AQ65 (autolocate for MS16)	£399
Yamaha MV1602 desk	£475
Akai PEQ automated EQ module	£175
Studiomaster Proline 16:4:8 MIDI	£899
Allen & Heath Saber 16:16 (24 frame new)	£3650
Alesis Micro Cue - headphone amps (4-way)	£49
Sony DTC55ES R-DAT	£435
Soundtech ST200CL comp/lim	£125
Symetrix 511 single ended noise reduction	£250
Yamaha GSP100 guitar processor	£50
Tascam MSR 24	£4750
Seck 12:8:2	£499
Fostex 454 - 8:4:8 mixer	£399
Sony DTC1000 - professional R-DAT	£799
Studiomaster Mixdown 16:8:16	£1499
Alesis 16-16-2 mixer	£415
Fostex 4010 time code generator/reader	£299
Atari 1040 STE (no monitor)	£335
XRI/XRI300 SMPTE generator	£199
Allen & Heath Spectrum 16:8:16	£2599
Alesis SR16 drum machine	£195
Yamaha EMP100 multiprocessor	£149
ART Multiverb II	£189
Drawmer DL221 compressor	£299
Akai stereo single ended noise reduction	£99
Lexicon LXP5 multiprocessor	£299
Drawmer DL231 compressor/gate	£375
dbx 163x compressor/limiter	£99
Behringer Exciter Type F	£175
Fostex R8	£1050
Fostex B16 (full guarantee)	£1899
Digitech MT44 quad gate	£199
Alesis Midiverb III	£179
Alesis Quadraverb	£250
Symetrix SX204 headphone amp	£140
Tascam MM1 MIDI mixer	£499
Symetrix 501 stereo compressor/limiter	£275
Yamaha R100 reverb/echo	£120

PA OFFERS

Yamaha EMX2300 12:2 mixer amp	£750
Flight case for EMX2300	£99
JBL M Series New! in stock from	per pair £650
Celestion SRC1 controller	£185
Harrison K2000 amplifier 2x425w	£675
Ohm PS500 powered speakers	£1699
30 metre, 20 pair multicore made-up	£425
HW radio microphone, lapel version	£275

This list represents only a fraction of our current secondhand and demonstration stock. Call us for a full listing –All prices exclude VAT

SUMMER SPECIAL OFFERS (ALL NEW)

Sony TCD D3 DAT walkman	£399 + VAT
Sony DTC55 A brand new rack size DAT with 32, 44 and 48 Kilohertz with audio, digital and optical in and out	£459 + VAT
Aphex Type C Exciter	£160 + VAT
Alesis Quadraverb Plus	£260 + VAT
Casio DA7	£425 + VAT
Alesis Microverb III	£135 + VAT
Alesis Midiverb III	£185 + VAT
Alesis Micro Series (stereo - limiter, gates, EQ, headphone amps). Buy any 3 and get a free rack mount kit! All at	each £65 +VAT
Fostex 4020 event controller (autolocate SMPTE etc)	£299 + VAT
Soundtech ST200 full feature comp/lim	£139 + VAT
Studiomaster Proline 16:4:8 inc. MIDI muting	£949 + VAT
Allen & Heath Spectrum	£2850 + VAT
12u table rack stands	£25 + VAT
DAT I/O for S1000 / S1100 (IB104)	£149 + VAT

THE NEW S2 MIXING CONSOLE - £1699 + VAT

Take a brand new mixing console. Give it every feature of the stunning SOUNDCRAFT SPIRIT (ie.: Full EQ on every channel including monitors) plus a few for good measure. (Connections for 2 set of speakers & 2 tape decks).

Add the build quality of TAC,the innovation of STUDIOMASTER (fully expandable on inputs plus an optional meter bridge) and the stylish design of SOUNDTRACS.

Finally, add a full MIDI mute processor (internal sequencer plus MIDI muting on absolutely: EVERTHING).

THE PRICE - £1699 + VAT. - WOW!

For those of you who are seriously considering starting a commercial studio we've come up with three packages, each containing everything you will need for your first paying session, from the Multi-track Machine right through to DI Boxes and Cables. The price of the 8 Track System is £4,250 + VAT, the 16 Track is £7,350 + VAT and the 24 Track is £13,500+ VAT. At Thatched Cottage we proved it could be done, and we have helped many new studios to open and start making money – our experience could help you. Give me a ring and have a chat – what have you got to lose? Plus: FREE Thatched Cottage Recording School Course to package buyers!!

Education - If you represent a school, college or other educational establishment you may be eligible for our special discout scheme. Call 0223 208110 for details

TCA SERVICE

Our fully equipped service department can offer fast turnaround (sometimes while - u-wait) and very competitive prices on Fostex, Tascam + Revox tape machines, most portastudios, desks (most makes), Atari computers, Akai samplers and many other products. If you have a problem give us a call before its too late!

Thatched Cottage Audio

You only become the biggest - by being the best

Telephone (0223) 207979 Fax (0223) 207952

Access VISA TCA

Thatched Cottage Audio, North Road, Wendy, Near Royston, Herts.

➢ Voice assigned to channel 10 in the currently-selected Multi configuration, you set the keyboard transmit channel to 10. SY77 owners will be familiar with this.

However, if you select one of the seven other control setups - Normal 4Voice, Key Split, Velocity Split, Major 7 Chord, Minor 7 Chord, 7th Chord and 7sus4 Chord - this familiar situation changes somewhat, as the MIDI channel assignments of four programmable zones within each setup take over. Normal 4Voice, for instance, transmits on four MIDI channels simultaneously - which in Multi mode also means that four Voices are layered on the SY99's keyboard. Key Split provides two-channel output (and therefore two Voices in Multi mode) for each half of the keyboard, while Velocity Split switches from one pair of channel assignments/Voices to another around a central velocity value. The four Chord setups allow you to trigger a four-note chord from a single note, an effect created by transposing each zone in the setup by an appropriate amount (though why they're referred to as seventh chords I'm not sure, because they're actually ninth chords). It's a shame that the SY99 reverts to the standard single Voice and single keyboard transmit channel when you're in Song Record mode, because this means you can play but not record a musical part which uses single-note triggering of chords. The only way around this would be to play the part into an external sequencer, then record it back into a track of the SY99's sequencer (providing all the notes of the chord are on the same MIDI channel).

"Many other additions and changes also help to make the SY99 a generally more flexible and more satisfying synth than the SY77."

The real flexibility of the Master Control utility comes when you get into programming your own setups in place of those provided by Yamaha. Setups are saved to disk as part of an All Data file, so you're not limited to eight setups. For each of the four zones within a setup you can select MIDI transmit channel (1-16), velocity curve (1-4), aftertouch curve (1-4), Bank Select number (off, 1-16384), patch change number (off, 1-128), volume level (off, 0-127), MDR transmit (off, 1-99), transposition (±64), upper and lower note limits (C2-G8) and upper and lower velocity limits (1-127). It doesn't take long to realise that a tremendous variety of keyboard textures can be created using these parameters.

The MDR parameter, incidentally, allows the specified MIDI SysEx data file(s) to be loaded off disk and automatically transmitted via MIDI when the control setup is selected.

Finally, a Transmit Filter page allows you to program patch change, controllers, pitchbend, sustain pedal, aftertouch and volume transmit on/off settings for each of MIDI channels 1-16, common to all eight setups.

SY77 COMPATIBILITY

YAMAHA HAVE DONE their best to ensure compatibility between the SY77 and the SY99 - and not just in the upward-compatible direction. As well as being able to load SY77 Voice and Song data off disk into the SY99, you can optionally save SY99 data to disk in a format which can be read by the SY77. Song data must be saved to disk one Song at a time if you're using SY77 format, because, unlike the SY99, the SY77 can only hold one Song at a time in memory. SY77 Voices can't be played directly off data cards, but they can be loaded into the SY99's Internal Voice memory, and from there saved to disk. Obviously there are sonic differences between the two synths when it comes to AWM samples and effects processing. When you load SY77 Voices off disk, the '99 converts the waveform numbers to take account of the different ordering of samples on the 99, but even so, because some of the SY77's samples have been "reworked" on the '99, SY77 Voices can still sound different. More significantly, the very different quality and arrangement of the effects processing on the two synths is bound to introduce differences. In fact, if you're considering trading in your SY77 for a '99, it makes a lot of sense to try out your SY77 Voice library on the newer synth.

VERDICT

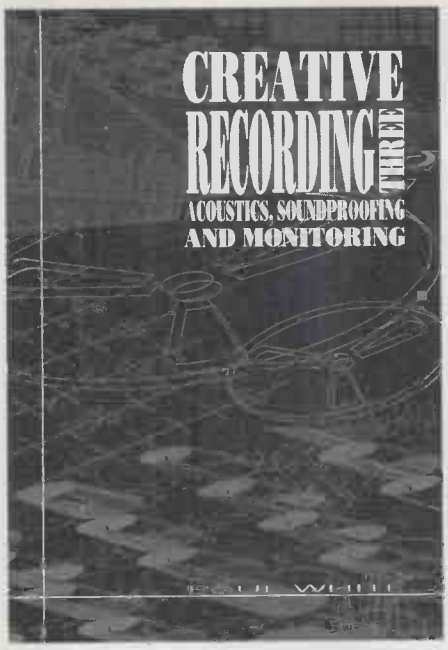
THE SY99 IS well worth the extra £500 on top of the RRP of the SY77. The extra AWM samples, the addition of onboard sample RAM and the superior flexibility of the new effects processing considerably enhance the sonic versatility of the synth, while the superior quality of the new effects processing considerably enhances its sonic quality. The many other additions and changes also help to make the SY99 a generally more flexible and more satisfying synth than the SY77. More than that, the SY99 is one of the most satisfying *workstation* synths I've ever used, providing a very well-integrated combination of synthesis, samples and sequencing.

If I was an SY77 owner I'd seriously be considering upgrading to the '99. The trouble is that in today's harsh economic climate, changing over from the '77 to the '99 is going to cost considerably more than £500. Many synths in the £1000-2000 price bracket are now selling in the shops for considerably less than their original price, which in turn has pushed secondhand prices down.

Whether the SY99 will founder on the iceberg of recession remains to be seen, but if it does it will be a sad fate for what is undoubtedly a luxury ocean-going liner of a synth. ■

Prices *SY99, £2499; SYEMB05 512Kb memory expansion boards, £249; both prices include VAT*
More from *Yamaha-Kemble Music (UK) Ltd, Sherbourne Drive. Tilbrook, Milton Keynes MK7 8BL. Tel: (0908) 366700. Fax: (0908) 368872.*

THE ULTIMATE STUDIO ACCESSORY?



CREATIVE RECORDING III

Acoustics, Soundproofing and Monitoring

This, the third volume in the Creative Recording Series, approaches the usually complex subjects of soundproofing and acoustic treatment in a down-to-earth way making it the ideal starting point for DIY studio construction. In non-technical English, it explains how sound escapes from, or leaks into, recording studios and offers remedies ranging from simple wall treatments to details of how to build your own room-within-a-room studio. Weak areas are identified with specific sections covering doors, windows and ceilings. Acoustics is often regarded as a black art, but again, creating a good listening environment is well within the scope of the DIY studio owner. Different approaches are explored with several practical techniques for improving your listening room, regardless of your space or budget limitations. Finally, the thorny subject of monitoring is demystified: What size monitors should you use in a given room size? How big an amplifier do you need to drive them? Should they be active or passive? How and where should they be mounted? Again, all these questions are answered in easy-to-understand English.

If you haven't yet bought Creative Recording I and II, you may like to know that volume I looks at the applications of studio effects units and processors while volume II shows you how to mic up just about any instrument or voice you might encounter including the normally tricky drum kit.

For less than the cost of a reel of tape, each volume of Creative Recording passes on a wealth of invaluable recording experience that could take years to accumulate by any other means.

Each volume of Creative Recording costs just £9.95 plus £1.50 p&p. Order any two books and we'll reduce the price to just £21 inclusive of p&p or buy all three for only £30 inclusive of p&p. Creative Recording is one of the best studio investments you can make, so order yours now and get serious about your recordings. Complete and return the coupon below along with your cheque or postal order, or order by phone using your Visa or Access credit card on 0353 665577 - ask for credit card orders.

Please send me ..... copies of CREATIVE RECORDING

Please send me ..... copies of CREATIVE RECORDING TWO

Please send me ..... copies of CREATIVE RECORDING THREE

at the above price, I enclose cheque/postal order for £..... made payable to Music Maker Publications. Or please debit my Access/Visa account, card number_ _ _ _ / _ _ _ _ / _ _ _ _ / _ _ _ _

Name.....

Address.....

.....

.....Postcode.....

Please allow 28 days for delivery.

Send to: Music Maker Publications, Alexander House, Forehill, Ely, Cambridgeshire, CB7 4AF.

ALL SYSTEMS GO

PHOTOGRAPHY: E

Guitarist Steve Hillage's first album in eight years sees him combining his distinctive guitar playing with contemporary dance grooves. Interview by Simon Trask.

"FOR MOST OF THE '80S, EVERYONE WAS rigidly divided into different musical styles, but since 1988 there's been a big change in musical climate, in that a lot of the barriers in music seem to have broken down. In the '70s each group had its own musical world, and to a large extent that's what's so exciting about what's happening now in the '90s. I find that stimulating artistically."

It's a warm, sunny afternoon in July and I'm sitting with guitarist and producer Steve Hillage in a private room above a restaurant in London's Ladbroke Grove. He's explaining what's prompted him to start making his own music again after a decade spent producing other peoples'. During the '70s, Hillage made his name as a guitarist with the archetypal spaced-out hippy band Gong, playing on *Radio Gnome Invisible Part 1*, *Angel's Egg* and *You*, the three albums which to this day offer the most enduring and ➢

axe mail

INSTANT DESPATCH FOR CREDIT CARD HOLDERS

Access VISA AMERICAN EXPRESS Mastercard WELCOME HERE

HOTLINE·0206·765652

PHONE US WITH YOUR CREDIT CARD NUMBER FOR IMMEDIATE DESPATCH, OR PAY MONTHLY WITH MUSICARD OR MUSICLOAN. ITS SO EASY!➤ ➤ ➤ ➤

ALL OUR PRICES INCLUDE 17.5% VAT

INSTANT CREDIT APPROVAL

	MONTHLY	PRICE
KEYBOARDS AND MODULES		
Ensoniq EPS16+	£92	£1849
Ensoniq SQ1+	£62	£1235
Ensoniq SQR	£41	£825
Ensoniq SQ2	£69	£1375
Ensoniq SD1	£100	£1995
Yamaha SY77	£71	£1429
Yamaha SY55	£34	£679
Yamaha SY22	£27	£549
Yamaha TG77	£63	£1250
Yamaha TG55	£22	£449
Yamaha TG33	£22	£449
Roland JD 800 Programmable Synth	£85	£1699
Roland JX1 Performance Synth	£24	£499
Roland SC55 Sound Canvas, Sound Module	£24	£485
Roland Studio MV30	£75	£1499
Roland D70 Super LA Synth	£64	£1299
Roland U220 Sample Playing Module	£25	£499
Roland U20 Sample Playing Keyboard	£40	£795
Roland W30 Workstation	£75	£1499
Roland E70	£61	£1199
Roland E15	£25	£499
Roland E5	£20	£390
Roland D5 Multi Timbral Linear Synth	£22	£449
Roland D10 Multi Timbral Linear Synth	£30	£599
Roland RD300S Electronic Piano	£75	£1499
Korg WS1 Wavestation	£64	£1299
Korg M1 Workstation	£49	£999
Korg T3 Total Workstation		£POA
Korg T2 Total Workstation 76 Key		£POA
Korg T1 Workstation 88 Key		£POA
Korg M1 R Rack M1	£49	£999
Korg M3 R Soundstation	£40	£799
Akai S1000 61 note Sampling keyboard	£170	£3399
Akai S950 Sampler	£65	£1299
Akai S1100 Sampler (to order)	£175	£3499
Cheetah 770 88 Key Mother Keyboard	£40	£799
Cheetah 5VA 61 Key Mother Keyboard	£14	£279
Roland PC200 Mother Keyboard	£10	£169
KEYBOARD STANDS		
Ultimate support stealth stand		£63
'X' Keyboard Stand		£25
3 Tier Keyboard Stand		£125
SOFTWARE		
ROLAND R8/R8M Library Cards		
01 Contemporary Percussion		£40.00
02 Jazz Brush		£40.00
03 Sound Effects		£40.00
04 Electronic		£40.00
05 Jazz		£40.00
06 Ethnic Percussion		£40.00
07 Mallet		£40.00
08 Dry		£40.00
09 Power Drums USA		£40.00
ROLAND U220/ U20/ D70 Library Cards		
01 Pipe Organ & Harpsichord		£40.00
02 Latin & Effects Perc		£40.00
03 Ethnic Instruments		£40.00
04 Electric Grand & Clavi		£40.00
05 Orchestral Strings		£40.00
06 Orchestral Wind		£40.00
07 Electric Guitar		£40.00
08 Synthesiser		£40.00
09 Guitar & Keyboards		£40.00
10 Rock Drums		£40.00
11 Sound Effects		£40.00
12 Trombone & Sax		£40.00
YAMAHA SY77		
CARDS Sax, Drums, Strings, House + Latin		£99 each
DISKS Best of DX, One man band Recording 77		£30 Each
YAMAHA SY55		
CARDS: Sax, Drums, House, Latin, Rock Pop		£79 Each
SY22		
RAMS: Vector project, Pop House, Dance Band		£95
ROMS		£69 each
EFFECTS		
Akai AR900 Digital Reverb	£16	£329
Zoom 9002 Multi Effects	£15	£299
Zoom 9030 Multi Effects	£25	£499
Yamaha FX500	£17	£349
Yamaha FX900	£29	£595
Yamaha EMP100	£11	£235
Yamaha R100 Reverb	£10	£179
Alesis Quadraverb	£18	£359
Alesis Midiverb 3	£12	£239
Alesis Microverb II	£10	£149
Alesis Microverb III	£10	£199
Art Multiverb LT	£10	£179

	MONTHLY	PRICE
Boss SE50 Multi FX unit	£17	£349
Boss BE5 ME programmable Multi effects	£11	£229
Boss BE5 Multi Effects	£10	£199
Boss MT2 Metal Zone pedal		£69
Boss CH1 Chorus		£59
Boss PS2 Pitch Shifter	£10	£135
Boss HM2 Heavy Metal		£49
Boss RV2 Reverb	£10	£118
Boss MZ2 Metalizer		£75
Boss SD1 Super Overdrive		£41
Boss DF2 Distortion Feedbacker		£72
Boss BF2 Flanger		£79
Boss CE2 Chorus		£51
Boss CE2B Bass Chorus		£60
Boss CES3 Compressor		£69
Boss DC3 Dimension "D"	£10	£112
Boss DD3 Digital Delay	£10	£109
Boss DS2 Turbo Distortion		£59
Boss DSD3 Digital Sampler	£10	£129
Boss GE7 Graphic Equalizer		£76
Boss HF2 High Band Flanger		£77
Boss NS2 Noise Suppressor		£69
Boss OD2 Turbo Overdrive		£63
Boss PH2 Phaser		£97
Boss OS2		£39
Boss FC50 Midi foot controller		£125
Digitech GSP21 pro	£32	£649
Digitech DSP128P	£14.95	£299
Digitech DSP16	£14	£275
Digitech GSP5	£13	£269
Digitech GSP7	£20	£395
DOD 7 band EQ		£59
DOD overdrive +		£39
DOD Classic tube		£35
DOD American Metal		£45
DOD Metal Maniac		£39
DOD Stereo Chorus		£59
DOD Stereo Flanger		£59
DOD Compressor/Sustainer		£39
DOD Analoque Delay		£89
DOD Wah Vol		£79
GUITAR SYNTHS		
Roland GR50/GK2	£45	£899
Korg Z3ZD3	£42	£849
DRUM MACHINES AND SEQUENCERS		
Yamaha QY10 sequencer/expander	£12	£249
Yamaha RY30 Drum machine	£22	£449
Boss DR550	£10	£179
Roland CR80 Human Rhythm player	£22	£449
Roland R5 Drum Machine	£15	£299
Roland R8 Drum Machine	£25	£499
Roland R8M Drum machine Rack Module	£24	£489
Roland Pad 5	£10	£139
Roland Pad 80	£23	£465
Roland SPD8 Total Percussion Pad	£20	£399
Alesis D4	£20	£399
Alesis SR16 Drum Machine	£15	£299
Alesis HR 16 Drum Machine	£13	£259
Alesis MMT8 Sequencer	£12	£239
Roland SB55 Sequencer	£21	£435
Roland MC50	£25	£499
Kawai Q80 Sequencer	£25	£499
Akai XR10 Drum Machine	£17	£339
Akai MPC60	£115	£2299
Amiga 500 Computer/Monitor + Dr T's Tiger Club + games		£POA
RECORDING		
Tascam 488 8 Track portastudio	£45	£895
Tascam 424	£23	£459
Tascam 688 8 Track Midi Studio	£95	£1899
Tascam Porta 2 Hi Speed Porta Studio	£25	£499
Tascam Porta 05 Hi Speed Porta Studio	£15	£299
Tascam Porta 03 New 4 Track	£11	£225
Tascam MM1 Mixer	£35	£699
Fostex R8	£75	£1500
Fostex X28 Multitracker	£20	£395
Fostex X26 Multi Tracker	£14	£289
Fostex 280 Porta Studio 8 Ch 4 Track	£30	£599
Yamaha MT100 II 4 Track Recorder	£17	£349
Yamaha MT3X 4 Track Recorder	£27	£549
Aiwa DAT		£POA
Sony DAT		£POA
Tascam DAT		£POA
Alesis 1622 Mixer	£35	£699
Yamaha NS10M Speakers		£129 Each

CREDIT AVAILABLE SUBJECT TO STATUS.APR 35.3 % VARIABLE ON DIRECT DEBIT WRITTEN DETAILS ON REQUEST. ★MONTHLY PAYMENTS ARE CALCULATED TO MAKE THE TERM LAST APPROXIMATELY 2 YEARS. THEY CAN BE INCREASED TO SHORTEN THE TERM BUT TO REDUCE THEM WILL LENGHTEN THE TERM.

To Get Your Goods Quickly Just Fill In the Application And Return It to Us. We Will Process It Immediately In Strictest Confidence And Get Straight Back To You. 10% Deposit Will Be Required

Goods Required.....

Forename(s).....

Surname.....

Address.....

.....

.....Postcode.....

Phone No.....

Owner ❑ Renting furnished ❑ With Parents ❑

Renting Unfurnished ❑

Have you a mortgage.....

How long have you had a mortgage.....

How long at this address.....Yrs.....Mths

If less If than 3yrs at this address, previous address

.....

.....Postcode.....

How Long there.....Yrs.....Mths

Annual Income.....

Do you have: Cheque Card ❑ Am.Ex ❑ Access ❑

Visa ❑ Diners ❑

Date of birth.....

Marital Status.....

No. of Children under 18.....

Bankers.....

Address.....

.....Phone No.....

Bank Account No❑❑❑❑❑❑❑❑

Bank Sortcode ❑❑❑❑❑❑

Occupation.....

Full time ❑ Part time ❑

Employers Address.....

.....

.....Phone No.....

How long employed there.....Yrs.....Mths

If less than 3 years, previous employers.....

.....

How long employed there.....Yrs.....Mths

Post This Coupon To Secure Any Goods Advertised Here

Send Me Immediately.....

Name.....

Address.....

MT/10/91

.....

.....Phone.....

I Enclose Cheque Payable To Axe For £.....

Please Debit My Access/ Visa/ AMEX NO

❑❑❑❑❑❑❑❑❑❑❑❑❑❑❑❑

Please Reply To:-
Axe Music
96 High Street
Colchester
Essex
CO1 1TH
0206 765652

OR

Axe Music
27 St. Johns Street
Bury St. Edmunds
Suffolk
IP33 1SN
0284 705571

➢ most endearing testimony to the band's highly individual mix of madcap mythology, eccentric songs and spacey instrumentals.

After leaving Gong in '75, Hillage went on to front his own band and release a string of albums under his own name, including *L*, *Motivation Radio* and *Green*, and culminating in 1983's *For To Next*, which saw him working with a LinnDrum in place of a human drummer. By this time he had already started producing other musicians, fulfilling an ambition he'd had since the beginning of his musical career. Tired of fronting his own band and tired of touring, he slipped out of the public gaze to concentrate instead on production, furthering the artistic careers of other musicians - most notably, Simple Minds.

Speaking in an interview in the June '83 issue of E&MM, Hillage explained his change of role: "I got a little tired of always being in the role of getting somebody else to play my ideas. If I formed a group now I'd much prefer to be just one of the band, and as a producer I get a lot of artistic relish out of getting other people's ideas to come at me". Now, eight years later, Hillage the artist has resurfaced with a project called System 7 which allows him to be both the producer *and* one of the band. Rather than being a band in the traditional sense, though, System 7 is a loose-knit collection of musicians and DJs - Hillage describes it as a "collaborative venture".

"A couple of years ago I just thought 'Hell, I want to play some guitar again, but this time on some really good dance grooves'", he explains. "I've always had an awareness of the dance music scene. In the '70s I was a big fan of Funkadelic and Parliament, Also, when the Steve Hillage band toured in the latter part of the '70s we carried the prototype Turbosound rig, and we used to have a lot of parties playing funk records at very high volume. Then when I worked with Simple Minds in the early '80s, they were a very club-orientated group. In fact, quite a few of the tracks that I did with them were club hits, like 'Love Song' and in particular 'Themes for Great Cities'. I went to clubs regularly throughout the '80s, because it's nice to go and check out the scene."

"As an artist I'm interested in starting with spontaneity and improvisation and then going on to structure what has been created out of that."

During the Summer and Autumn of 1989, Hillage regularly visited London's more happening clubs, a particular favourite being *Land of Oz* at Heaven on Monday nights, where Paul Oakenfold was playing club sounds in the main room downstairs while Orb DJ Alex Paterson was mixing ambient music and samples in the chill-out room upstairs.

One of Paterson's sound sources was *Rainbow Dome Musick*, an album of ambient music which Hillage and his long-time partner Miquette Giraudy had recorded in 1979 for the Rainbow Dome at the *Festival of Mind, Body & Spirit* using Fender Rhodes electric piano and ARP and Moog synthesisers as well as electric guitar. It turned out that the Orb DJ was a big fan of the album, and discussions led to Hillage and Giraudy collaborating with Paterson on two tracks on the double album *The Orb's Adventures Beyond The Ultraworld* (see interview in MT, June '91). Paterson and his Orb partner Thrash in turn became involved in Hillage's System 7 project.

Now System 7 the "collaborative venture" has spawned *System 7* the album, due for release on September 16th. The LP sees Hillage working with musicians as diverse as Steve Waddington of The Beloved, ex-Simple Minds keyboard player Mick McNeil, techno maestro Derrick May (as revealed exclusively in MT's November '90 issue, incidentally) and, of course, The Orb. It's a successful marriage of Hillage's distinctive guitar playing with contemporary dance grooves and modern-day sampling and sequencing technology. Remarkably, it also appeals as a coherent work while offering a richly varied collection of songs and instrumentals. Individual tracks on the album bring together different collaborators drawn from the pool of System 7 musicians and DJs, which in addition to the artists mentioned above includes singers Olu Rowe and Zoe, rapper Aniff Cousins from Chapter & The Verse, and DJ Paul Oakenfold. As co-composer, co-producer and guitarist on all the tracks, Hillage is the single common element.

In its melding of rock, dance, techno and ambience, *System 7* exemplifies the dismantling of musical barriers which Hillage advocates; the flexible collaborative process from which the album's diversity has sprung has allowed Hillage to avoid the musical straitjacket of the traditional band structure and embrace the more fluid working methods which technology has given rise to during the past ten years. The result is a benchmark album for the '90s.

Two of the tracks, 'Sunburst' and 'Miracle', have already appeared as singles, while another, 'Habibi', is scheduled for release in single form at the same time as the album. Hillage sees singles as an opportunity to expand the concept of System 7 into remixing.

"The whole principle of DJs remixing records is something I've taken fully onboard", he states. "I find it very creative. I always had this feeling that it would be nice to have a more flexible and more permutatable approach, though I didn't quite formularise it in my mind, so now this transformability of mixes is something I find quite stimulating.

"Some of the System 7 remixes I've been doing myself, but I'm quite happy to get other people to do them as well. I think that's real fun. Alex and Thrash went off and did a completely different mix of 'Miracle' for the last single, and Paul Oakenfold, who co-wrote the track with us, is planning to do his own mix of it. I'm sure he'll use a lot of different loops as well, so there'll probably just be a few little bits of guitar that are the same. I really like that - a nouveau approach.

"At the same time, we've got a certain loose team, and it's nice to let people who've worked on one track remix a track that I've worked on with someone else. I think that's really interesting chemistry."

HILLAGE'S VERSATILE GUITAR SOUND AND playing style are well suited to the diverse rhythms and textures of System 7's music, not least because his use of echo repeats - a feature of his guitar playing from the outset - has always made him conscious of rhythmic precision and timing in his playing.

"I've always been very, very hot on timing", he says. "Even when I'm trying to play something that's a very obscure triplet-y overlaying rhythm, it's got to groove. You're not playing chord pads when you're playing guitar, you're playing something that's got to interact really sweetly with the rhythm."

At the other extreme there's the famous glissando guitar technique, which also relies on echo - but this time using it to create a spacey, ambient, non-rhythmic effect. The technique was invented by Syd Barrett of Pink Floyd fame, who taught it to Gong founder Daevid Allen, who in turn passed it on to Hillage. Once very much a part of the Gong sound, according ➢

BEM BRIXTON EXCHANGE MART

NEUMAN U67 MICROPHONES - These sought after mics aquired from Russia are like U87's with a tube inside - £950 each including leads and power supplies.

ALESIS QUADRAVERB +
4 FX at once. Now with sampler and ring modulation!
OUR PRICE £319 inc. VAT.

CASIO MT-750
61 Mini size keys, 12 note polyphonic, 220 Preset sounds, 110 Auto-rhythms, Multi Accompaniment, Tone Editor Function, Real-time memory. MIDI IN/OUT/THRU. Tuning control, Built-in stereo speakers. £99.00

ROLAND Studio M
The All singing! All dancing!
Professional Studio in a box.
In Stock - best prices always.

Digitech DSP 256 XL
The latest effects processor from Digitech pure studio quality and road tough reliability See rave review in july Guitarist
Our Price £349

DIGITECH DSP 16 EFFECTS PROCESSOR
16 reverb/delay/three band eq etc. all thru 128 MIDI changeable pre-sets.
STUDIO OR LIVE £249!

KEYBOARDS ETC.

Kawai K1 (s/h)	£375
Roland EP3 Piano	In stock
Roland Sound Canvas	In stock
Roland CM32L Mod	Now £237
Roland CS1O Mntr	Now £95
Roland JD800	In stock
Roland JX1	£499
Roland E15	£499
Roland FP-8 Piano	In stock
Roland D5	In stock
Roland D10	£POA
Yamaha TX7 Mod (s/h)	£199
Siel Cruise Synth (s/h)	£125
Casio CT670	Now £225
Casio CT655	Now £128
Casio CZ1000 (s/h)	£149
Roland SHo9 (s/h)	£95
Yamaha DX100 (s/h)	£169
Casio HZ600 (s/h)	£99
Casio CT-X1 (just in)	£399
Cheetah SX16 Samplers	£599
Casio CZ101 (s/h)	£99
Emu Performance	In Stock
Proteus	(All In Stock)
Oberheim Strummer	£179
Oberheim Drummer	£179
Oberheim Matrix 1000	£399
Oberheim Navigator	£179
Akai VX90 Mod (s/h)	£175
Akai S700 Sampler (s/h)	£425
Yamaha DX7 (s/h)	£449
Yamaha DX21 (s/h)	£265
Akai X-7000 Exp. Board (s/h)	£89
Akai S950 Sampler	In stock
Akai S1020 Sampler	In stock
Akai S1100 Ex Expander	In stock
Akai Ar900 MIDI Dig Rub	In stock
Akai XR10 Drums	In stock
Roland S50 Sampler (s/h)	£699
Yamaha FB 01 Module (s/h)	£129
Roland PG1000 Programmer (s/h)	£49
MIDI -Step Bass Pedals (s/h)	£250
Korg Poly 61 (as seen)	£99
Korg Poly 61 (s/h)	£199
Yamaha Electric Piano (weighted) as seen	£99
Roland RA50 (few only)	£499
Casio CZ3000 (s/h)	£249
Casio CZ5000 (s/h)	£299
Roland MT32 (s/h)	£225
Roland CM32 P Modules (Ex Dem)	£199

Roland LAPC-1 Sound card for PC's (Ex Dem)	1/2 Price
Roland U220	In Stock
Roland U110 (s/h)	£299
Technics AX5 (s/h)	£499
Yamaha Tx416 (s/h)	£750

REC./DRUMS/FX

Yamaha QX21 Seq (s/h)	£119
Amiga 500 (s/h)	£275
Icon Pad to MIDI Convtr (s/h)	£99
Dod 4 Chann. RM Line Mixer (s/h)	£89
Yamaha RX17 Drums (s/h)	£125
Boss GE131 RM EQ (s/h)	£119
Digitech DSP16FX	£199
Alesis SR16 Drums	£249
Alesis Midiverb III	£225
Alesis 3630 Compressor	£235
Allen & Heath S6-2 production mixers (s/h)	£199
Yamaha RX7 Drums (s/h)	£259
Alesis Midiverb (s/h)	£119
Roland 727 Percussion (s/h)	£125
Vestax MR30 M/track (s/h)	£99
Korg SD2000 Delay/Samp (s/h)	£149
Roland MSQ 700 (s/h)	£149
Roland TR626 Drums (s/h)	£149
Roland R5 Drums	Now £285
Roland R8 RM	Now £425
Roland R8	Now £475
Korg DO1 Drums inc. 3 cards (s/h)	£199
MOTU Midi Timepiece	£299
Crown 75W RM pwr amp (s/h)	£199
Watkins Copy-Cat (s/h)	£99
Roland PR100 Disc/Seq (s/h)	£149
Vestax MR200 M/Trackers	£275
Vestax MR300 M/Trackers	£185
Oberheim OX Drums (s/h)	£158
Yamaha CX5 MII + KBD	£199
Digitech 4 sec RM Dig Delay	£229
Digitech DSP 128 + Multi FX	£235
EXR Exciter (s/h)	£99
Furman Rvb/Limiter (s/h)	£99
Simmons SDE Expander (s/h)	£85
Simmons MTX9 Drum Expander	£125
Fostex Patch Bay	£55
Fostex MN50 Mixer/Comp.	£55
Peavey St 10 Band EQ (s/h)	£175
Korg SQD1 Seq (s/h)	£199
Kawai R100 Drums (inc. chip)(s/h)	£189
Yamaha RX5 Drums (s/h)	£250
Great British Spring RVB (s/h)	£95
Yamaha RX15 Drums (s/h)	£125

Boss DR Pad (s/h)	£35
Boss DR550 Drums	£POA
Boss RSD-10 Sampler/Delay	£149
Boss NS-50 ST Noise Suppressor	£110
Boss BE5M Prog Multi FX	£225
Boss SE50 Multi FX	£349
Boss FC-50 Foot Cont	£125
Roland FC100 Mk II Foot Cont	£199
Roland PAD 80	£POA
Roland SPD8	£POA
EV 408 Vocal Mic (s/h)	£125
Korg A5 Prog Gtr FX	£199
Korg A5 Prog Bass FX	£215
Korg A5 Prog Vocal FX	£215
EMU Drumulator (s/h)	£49
Alesis Micro Cue amp	£85
Infra Red wireless headphones	£29
Korg DDD1 Drums (s/h)	£125
Roland TR707 Drums (s/h)	£125
Boss RCE 10 digit chorus	£75
Boss ROP-10 Overdrive (s/h)	£65
Garfield Electronics Doctor Click	£150
Advanced Midi Amiga Sampler	£40
Kahler Human Clock (s/h)	£125
Philip Rees PSP-7 Percussion Samp Player +2 cards	£125
Korg KMS 30 Midi Sync (s/h)	£99
Yamaha EMR1 Digital Drum (s/h)	£89
Yamaha R100 Dig Rvb (s/h)	£115
Cheetah Drumpads	£19
Alesis Midiverb II (s/h)	£149
Roland SBX10 Sync Box (s/h)	£195
JHS Rackmount Digital (s/h)	£119
Kawai RS0 Drums (s/h)	£135
Roland TR505 Drums (s/h)	£129
NEC CD ROM (s/h)	£225
Fostex 260 M/track	£399
Fostex X28 M/track	In stock
Fostex 280 M/track	In stock
Fostex X26 M/track	In stock
Fostex 160 M/track (s/h)	£249
Klyntrom 600w pwr amps	£355
Klynstrom 300w pwr amps	£249
Alesis RA100 amps	£299
Crown D75 pwr amp (s/h)	£195
Sennheiser ME40 mic (s/h)	£99
Sennheiser MD421 mic (s/h)	£149
AKG C1000s mic (s/h)	£139
AKG D112 (drums)	£139
AKG D955	£59
AKG D80	£33
AKG D120 (s/h)	£119
AKG D222 (s/h)	£99

AKG C567E (Lavalier) (s/h)	£99
Electrovoice PL80 (s/h)	£99
Electrovoice N/D 408 (s/h)	£125
Audio Technica ATM1R (phntm) (s/h)	£85
Audio Technica ATM10R (phntm) (s/h)	£85
Beyer M280 (inst)	£129
Beyer M180 (vocal)	£89
Beyer M88 (vocal/inst)	£239
Beyer M69 (perc/cabs)	£149
Beyer M300 (all purpose)	£69
Beyer M380 (bass drums)	£149
Beyer M700 (vocal)	£149
Beyer M201 (strings/overhead)	£159
Beyer M480 (vocals)	£149
Tascam 488 portastudio-Head De-Mag Free	
Tascam porta two	In stock
Tascam porta 05	In stock
Tascam porta 03	In stock
Dynamix 6/2 mixer	£199
Dynamix 12/2 mixer	£299
Dynamix 16/2 mixer	£399
KAT remote control for Atari	£65
EMU Procussion Drum Module	£649
New Zoom 9050	In Stock
Digitech DSP128 Plus 16 Bit Multi FX	£249
ART Multiverb III	£269
Casio DA7 DAT machines only	£489
Sennheiser MD441 Mic s/h	£149
RolandTR626 drums s/h	£139
Yamaha RX11 drums s/h	£149
Cheetah MDR16 rack drum machines	£299
Roland PM16 pad to MIDI converter(s/h)	£189
JL Cooper Midi Blender (s/h)	£45
Roland MC300 Seq with drive s/h	£299
Akai XE8 Rack drums s/h	£119
PR KUDOS Spkers (Bose style) s/h	£325
Sony Umatic VCR s/h	£349
Amptech 150w CABS (1x15' plus Horn)	£99
PR Yamaha Bins s/h	£249
Nady 101 Wireless mics	£179
Nady 201 Wireless mics	£235
Nady 101 SMS8 Wireless mics	£249
Nady 201 SMS8 Wireless mics	£299
Nady 201 Wireless mic s/h	£139
Sampson Wireless mics	£249
Shure SM58 mics (inc cable)	£99
Fostex E2(s/h)	£1400
TEAC A3340 + DBX + Trolley s/h	£449
Casio SZ1 Sequencer s/h	£89
Fostex X26 M/Track s/h	£199
Tascam Porta 05 s/h	£199
Fostex Model 80 8 track reel (new heads) s/h	£750
Fostex Model 250 Mixer s/h	£299
Fostex A Series 8 track reel s/h	£499

SOFTWARE

Soundtools for Atari	£795
C-Lab Notator	£399
C-Lab Creator	£225
C-Lab Unitor II	£299
C-Lab Export	£110
C-Lab Explorer MT32	£105
C-Lab Explorer M1	£105
C-Lab Combiner	£139
C-Lab Human Touch	£139
C-Lab Alpha Notator	£195
Mark of the Unicorn Performer	£335
Mark of the Unicorn Pro Composer	£335
Steinberg St Cubase	£399
Steinberg Mac Cubase	£399
Steinberg Avalon	£249
Steinberg Avalon 16 bit D/A board	£299
Steinberg K1 synthworks	£119
Steinberg Proteus synthworks	£149
Steinberg Cubeat	£190
Opcode Vision (s/h)	£250
Ez Vision	In stock
Opcode MIDI Translator Tiger Cub Atari/Amiga	£99
Soundquest Editor/Librarian	£49
Dr T uni system for St (ex-demo)	£80
Soundbits Multi Editor for St (ex-demo)	£65
Soundbits D50 Editor for St (ex-demo)	£35
Hybrid Arts Editrack	£180
Hybrid Arts EZ track for ST (ex-demo)	£79
Steinberg synthworks for St (ex-demo)	£45
Sound Designer S900 Mac	£130
Sound Designer Prophet Mac	£130
Sound Designer Q sheet Mac	£150
Sound Designer EMU2 Mac	£130
Sound Deigner EMAx Mac	£130
Lazergraph Mac	£80
Seventh Heaven Mac	£30
Alchemy Mac	£130
Jam Factory Mac	£80
Dr Tintro IBM	£150
Fretless IBM	£40
Passport Escort IBM	£120
Casio RC10/20/30 ROMS for CZ1 (s/h)	£33
Dr T Seq level II (s/h)	£89
Korg DDD1 cards	£29
Korg DDD5 cards	£29

Voice crystal cards for Ensoniq, Korg, Yamaha, Roland.... In stock.

CHEETAH MS6
MULTI TIMBRAL SYNTH MODULE
Analog sounds
£269 inc. VAT

CHEETAH MQ8
MIDI SEQUENCER
PERFORMANCE SYSTEM
20,000 MIDI event capacity built in FX
Only £199 inc. VAT

CHEETAH MASTER SERIES 5v
£279 inc. VAT

ENSONIQ SQ1 STUDIO/KEYBOARD
20 on board drum kits, 24-bit digital effects and 16 track sequencer
WAS £1199 NOW £799

ROLAND CM32
Designed for your computer.
Twice the memory of an MT32 ONLY £229 INC.VAT

Soundtech ST 200CL Compressor /limiter/ Noise gate £149.00

396 COLDHARBOUR LANE, BRIXTON, LONDON SW9

TEL: 071-733 6821

Poolside Drum Samples £59.00 per CD

We are open 9.30 - 6.30, 6 days a week. Please call in or phone Mail Order • Export

REMEMBER ALL OUR PRICES INCLUDE VAT.

➢ to Hillage the technique is now undergoing a renaissance.

"Glissando guitar is definitely happening in the '90s", he says. "It's become quite a big part of the Orb sound, although we didn't use it on the album. Charlie Birch of Simple Minds has done it a bit, too. Right now I use a Steinberger guitar, a little black one, which is absolutely brilliant for glissando guitar as well as for all other things. It really is the ultimate glissando guitar weapon, because the neck's very true and therefore it's in tune and resonant."

The glissando guitar effect is created by routing the guitar through echo processing for the required smooth, spacey sound and then moving a smooth metal object (Hillage has always used the handle of a surgical instrument) rapidly to and fro across the guitar strings at the relevant neck position for the required pitches in order to set up continuous oscillations in the strings. Try doing *that* with your SY77/JD800/Wavestation. The opening section of *Listen*, one of three Hillage/May tracks on the *System 7* album, provides a good example of glissando guitar in use.

The association of rhythmic echo repeats with the technology of drum machines and sequencers is not as far-fetched as it might seem, once you know the history.

"I got into drum machines originally through playing with echo", Hillage reveals. "I first got an Echoplex in 1974, and I got a very early digital stopwatch and calibrated my Echoplex in milliseconds so I could quickly change the timing for different tempos. I had the figures written in big letters onstage so I could see them.

"Some of the tracks I was doing with the Steve Hillage band were based on guitar echo loops, and I wanted to have the echoes in time with the tempo. I'd read that Parliament and Funkadelic recorded to a click track on an early Roland drum machine. Their grooves were actually based on the drum machine, and they overdubbed the bass and drums to it. I think from about '76 onwards they worked like that. I picked up on that, and quite a lot of the Steve Hillage albums, such as *L*, were done in that way. Not on all the tracks, but on quite a few of them we wanted a really consistent groove so we recorded to a drum-machine click, but we didn't use it in the mix. Then the LinnDrum came along, and I started using it on record because it was using samples and it sounded, at the time, more like a real drummer - although now if you listen to a LinnDrum it sounds really bizarre!"

Hillage is fully conversant with both the modern technology of synths, samplers, sequencers and digital audio recording and the impact that this technology has had on the roles of musician and producer, a consequence of his years spent working in studios as a producer. Today, a hi-tech gear setup which includes a Korg Wavestation, two Akai S1000s, an E-Mu Proteus and C-Lab's Creator sequencing software running on an Atari 1040ST allows him to work on ideas and put tracks together at home.

The Wavestation came into his setup via his recording sessions with Derrick May. The pair hired one in to try it out, and liked it so much that they used it prominently on the tracks they recorded for the album. Hillage liked it so much that he bought one.

"I was playing with it and I thought 'This is the one for me'", he recalls. "It's the first time with a digital synth that I've got the same feeling I used to have with analogue synths, where it makes you want to program and work on sounds. So I sat down and said 'I'm going to make the effort with this one'. It took me a while, but I've pretty completely mastered it now. In fact, you can transform sounds quite easily on it once you get fluent with it. But a lot of people, particularly people in bands, they want to go out clubbing, they don't want to sit at home in their bedroom slaving over a manual. For them it's like being at school. That's the big problem, that's why people go for preset sounds very often."

A combination of DAT machine and rented-in StudioVision digital audio package has become an important part of Hillage's working process, having a role to play at various stages in the development of System 7's material.

"Quite a lot of the guitar playing for the album I actually did at home", he reveals. "I'd have the tracks running on the C-Lab and play live without any synchronisation onto the DAT - just jam. Then when I got something good I'd transfer it across to StudioVision, synchronise it up with the C-Lab, take little bits and make an edit.

"Also, some of the music for the record I received on DAT from one of my collaborators, so I was able to transfer that across to StudioVision and sync it up to Creator, which I prefer to Vision. I particularly like the real-time track parameter editing on C-Lab; being able to change things like delay, velocity and transposition in real time is, I think, the main reason why C-Lab gets used so much for dance music.

"After we'd mixed all the tracks for the album I edited everything with Sound Tools. In fact, I spent quite a lot of time editing, trying to make it a cohesive result. Part of the original premise was to make an album that worked as an album. Some of the tracks were restructured quite radically. Obviously we had the verse bits and the chorus bits, but exactly which verse bit and which chorus bit, for how long and how they were to go from one to another, that was finally defined in the editing process."

It's clear, then, that Hillage is far from being just the guitarist of System 7. Through taking advantage of today's technology he's able to involve himself in many stages of the compositional process, and no longer has to rely on other people to play his ideas. Ironically, the one area of musical technology he hasn't embraced is that of guitar synthesis. He dabbled with the early guitar synths in the '70s but was never greatly impressed by them, preferring instead to concentrate on treating the natural guitar sound using effects processors. When I ask him what he thinks about MIDI guitars, his reply is dismissive and, for him, unusually terse: "MIDI guitar, forget it. Delay, useless, no way. Delays, gimme a break!"

Today the guitarist is just as involved in creating rhythm tracks for System 7 as he is in playing guitar for it. Hillage's S1000 sample library includes not only drum and percussion sounds but a sizeable collection of performance loops, too.

"I think Alex really stimulated me in the direction of using loops", he says. "The first track that we worked on, 'Sunburst', he came in with his pile of records and started playing them, and we recorded onto DAT all the bits that we thought we might want to use. Then we transferred them digitally into the S1000. Now I've got hundreds of loops, all kinds of things.

"Something I want to do in the future System 7 stuff is go into a studio with a good drummer and bass player and percussionist and spend a day or two jamming, specifically for the idea of making custom loops. No illusions, everyone knowing that's what we're doing. I think custom loops are a good thing. Obviously the payment situation on something like that wouldn't be the same as a straight session. I think it would have to be more of a per-track fee, and there might be some publishing involved as well. It would have to be all above board and worked out beforehand." ➢

Canvas & Brush by Roland

Sound Canvas SC-55
GS Standard MIDI Sound Source
315 sounds, 9 drum kits, 16-part multi-timbrality, 24-voice polyphony, reverb, chorus, and pan. A convenient half-rack design weighing in at only 1.5kg.

Sound Brush SB-55
MIDI File Player
CD-style Remote Control and 3.5" disk drive. Songs created on cumbersome home sequencer setups can easily be converted for live or studio use.

Whether you're sketching out a new idea or remixing an old master the Sound Canvas will allow free rein to your artistic talent. It has a palette of 315 sounds (acoustic instruments to FX and everything in between), plus 9 drumkits, reverb, chorus and pan.

The Sound Canvas adopts the GS Format, which standardises MIDI parameters for Roland equipment, and is also compatible with data prepared for MT-32 and CM-32L sound modules.

Like the Sound Brush MIDI File Player, the Sound Canvas can be operated by remote control; as a portable system the two units are ideal, at a total weight of under 3.5 kg. But most important is the sound. Suffice it to say that anyone with half an ear would go mad for this setup – and it sounds even better in stereo.

Roland

For a list of authorised dealers and a free leaflet contact:

Roland UK Ltd
Atlantic Close
Swansea Enterprise Park
Swansea
W Glamorgan SA7 9FJ
Fax 0792 310248
Tel 0792 310247

➢ **FAR FROM HAVING TO CATCH UP WITH THE** latest technology, Hillage is ahead of it - in his mind, anyway. It seems there are certain technological developments he would like to see happen.

"I've had a whole complex track coming out of my S1000s and it sounds really good. Then when you go to the studio and separate it all out onto multitrack, for a start it's quite taxing because you have to do all that separate output business, which is one of the least user-friendly aspects of the S1000, and then sometimes you just can't get the groove quite the same way. So it led me to think that eventually you'll be able to stay inside the sampler, you won't need the mixing desk or the tape.

"In fact, I see the ultimate digital mixing desk as being just a giant sampler. What I'd like to see next is a 64-voice sampler that has a separate EQ for each keygroup and separate reverb for each Program. If you've got that, it's bye bye mixing desk, particularly if you've got, say, eight channels for external inputs so you could mix in vocals and guitar coming from Sound Tools, and have everything coming out of the sampler's stereo outs direct to DAT. You could use a MIDI sequencer for mix automation, but there needs to be a MIDI control language for audio muting within the sampler. If you had that it would be bloody magic. I wouldn't like to be a studio owner in the '90s, though."

From a guitarist playing in a band to a musician who can confidently manipulate the latest technology to effectively create his own band, Hillage has come a long way in the past 20 years. How would he say that technology has changed the music-making process during this time?

"I think the main difference between then and now is the change in the role of the live band", he replies. "Back in the '70s, the onstage situation was the main generator of writing, and because you've only got one pair of hands you can only play one instrument at once. And obviously if the bass player came over to me while I was playing and started touching my fretboard I'd probably want to punch him!

"Nowadays everyone's got their Portastudios and sequencers so they write at home, and they write complete tracks with drum beats and so on. Obviously you couldn't do that 20 years ago. Samplers, DAT, Sound Tools, that sort of stuff was undreamt of when I was in Gong. I'd say the drum machine has probably been the most significant of all these developments, because everybody's to a certain extent a drummer now - probably a bad drummer, from a drummer's point of view!"

Despite the many changes that have taken place over the years, Hillage sees underlying similarities in the working processes of Gong and System 7.

"In Gong we'd do a lot of jamming and make rough tapes, and if a bit sounded good we'd extract it and work on it. We also did a lot of improvising on stage. With System 7, virtually all of the music was improvised to begin with, the only difference being that we were improvising with samplers, keyboards and record decks. A lot of the mixes were improvisations, as well. So the improvisation element hasn't changed, but the forum for improvisation has. As an artist I'm interested in starting with spontaneity and improvisation and then going on to structure and order what has been created out of that. This is the approach we've used with System 7, and I think the balance between the two factors has been very well moulded."

Talking of the role of the live band, Hillage plans to take System 7 on the road - but not to play traditional gigs.

"One of the main reasons I gave up touring was because it had no more stimulation for me at all", he explains. "Not that I've got anything against live music and gigs, but I find the basic situation and the audience/performer relationship extremely tedious. I'm much more interested in new types of live event, which is something I've been talking about particularly with Alex. We want to do a type of live event which, rather than being like a concert with the stars on stage and their adoring fans in the audience, is more like a dance event but with me playing on top of what he's doing as a DJ. I find that very exciting.

"One of the great things about the dance movement is that in a good live event you've got a crowd of people who are really enjoying each other. The DJ is setting up an ambience or an atmosphere where people can interact and enjoy themselves, 'cos basically the audience are the show, it's not like a performance with a throng gasping in awe at what the DJ's doing. I think this is really, really important. A lot of the conservative faction, the muso faction that have the horrors about dance music and rap, they really have to think seriously about this. Do they really think that the ultimate creative situation is some iconic star onstage bathed in lights, with an inferior throng clapping and cheering like it was a kind of third-division football match? Because that's basically what rock gigs are like.

"Thankfully there's a new generation of bands coming up now that have been influenced by the indie dance thing. I hesitate to call them rock bands, because it's a hybrid style of live band and DJ-oriented event. It's just a new atmosphere. The Shamen have really pioneered the new type of live event. I wouldn't do exactly what they do, but I must say I've seen them several times and they're quite an influence on me."

So what sort of live setup does Hillage have in mind?

"I think the thing is to do mixes specifically for live use, taking some of the parts out so that we can play them live, and to record these mixes onto a timecode DAT machine complete with start times so that you can have the computer synced up to the tape. Then Alex, using his DJ skills, could sync up records by ear to the tape, and switch from one to the other and overlay stuff.

"So you've got the DJ playing tapes and records, and you've got someone with keyboards and a mixer - which is what Thrash does with The Orb - and maybe in our shows Miquette might be playing some keyboards as well. Then you've got me playing guitar live, completely spontaneously, not playing the same thing twice, which adds this factor X that gels the whole thing together. In the end it's sort of a gigantic jam. I find this whole concept really stimulating. Hopefully we're going to do quite a lot of live events in the Autumn. But I don't want to go and play in the Hammersmith Odeon; I'd rather play in a warehouse in south London."

Finally, what else is on the horizon for the guitarist and producer?

"Right now, quite a lot of people are approaching me from the dance niche because of the System 7 stuff. There seems to be quite a lot of interest in combining guitars and some of the sounds of '70s progressive rock with upfront club grooves. Also I've got several possible film soundtrack jobs, which is something I'm particularly keen to develop. And assuming System 7 does reasonably well, there'll be System 7.1, System 7.2. . ."

It seems that, after a decade of keeping a low profile, Steve Hillage is on the up and up. ■

EQUIPMENT LIST

SEQUENCING
Atari 1040ST Computer
C-Lab Creator Software
C-Lab Unitor SMPTE Synchroniser

INSTRUMENTS
Akai S1000 Sampler (x2) with Syquest 45Mb Removable Hard Disk
Boss DR550 Drum Machine
EMS Synthi A Synthesiser
E-mu Proteus Sample Playback Expander
Korg Wavestation Synthesiser
Steinberger Guitar

GUITAR PROCESSING
Boss GL100 Guitar Pre-Amp (x2)
Roland GS6 Guitar Processor

soundhouse

turnkey

Authorised Dealer

We are now an Authorised Apple dealer, one of only two in the music industry.

In practice, direct supply from Apple U.K. means:

- A Full Apple range of products from Classic & Stylewriter, to FX & Laserwriter in stock at all times, to compliment all the relevant Macintosh music products, from basic sequencers & interfaces up to Digidesign's new Pro Tools system
- Apple trained personnel. Many years of Macintosh digital audio experience, now combined with support in the areas of networking, system software etc...
- On site service, factory supported warranties
- Rapid availability
- Fully equipped training room
- Modem 'Apple Link' direct to Apple U.K.
- As an authorised dealer we are not able to supply Apple computers by mail order.

SPIRIT STUDIO

Almost everyone involved in music production at some stage dreams of owning a Soundcraft console. The legendary sound quality, reliability and ease of use, means a Soundcraft equipped studio must be taken seriously.

A minor miracle has been performed, using the world's most advanced production technology, and revolutionary manufacturing techniques, to bring you Soundcraft quality at a previously unimaginable price.

SPIRIT STUDIO is designed for all types of multi-track from 8 to 24 track.

Turnkey has an unparalleled 10 years experience with the brand & as central London's exclusive dealer for SPIRIT we offer a complete sales package. From advice, finance & installation to a quality of after sales backup that stems from many years experience with the brand.

We are packaging **SPIRIT** consoles with both Fostex & Tascam multitrack, & as the U.K.'s largest supplier of MIDI equipment we are ideally placed to integrate them into the heart of your MIDI based studio.

SPIRIT...at last affordable excellence...

Affordable Soundcraft

114-116 CHARING CROSS RD., LONDON. WC2H 0DT
(Opposite Foyles Bookshop and 100 yards from Tottenham Court Rd Tube)
Tel. 071-434 1365 / 071-240-2041
071-379 5148 / Fax : 071-379 0093

Roland | AKAI | Soundcraft | FOSTEX | YAMAHA | TASCAM
Steinberg C-LAB | Studiomaster | TANNOY JBL | Beyerdynamic AKG SHURE | dbx SoundTech
KORG | ensoniq | ALESIS | SONY | ZOOM

SPECIAL OFFERS

JLCOOPER PPS100 SMPTE Sync £149

Built-in MIDI Mapping, R.R.P. £525

SANSUI WS-X1 SIX TRACK RECORDING AND MASTERING WORKSTATION

The WSX1 is the only machine to offer the built in stereo mastering cassette deck in addition to a true high-speed six-track recorder. Tape speed is the key multi-track specification: The full logic control double-speed transport means that music signals are recorded on twice as much tape, enabling more bounce-downs before the tape saturates, substantially reducing wow, flutter and noise, but most importantly giving the extra high end frequency response to make your recordings bright, clear and master-ready. Other unique features include built in studio-quality full-bandwidth digital reverb/Multi-FX by Roland, 8 channel mixer with soloing, balanced XLR inputs for microphones, 10 track upgrade option, rehearsal Punch I/O, and a custom 6-track in-line head, Dolby C, sync to MIDI and still have 5 audio tracks free. Up to 21 tracks while only bouncing each track once. We have managed to secure a limited quantity of these best-selling units at a massive reduction.

RRP £1430 **£595** EX VAT inc P+P NEW BOXED

ART MULTIVERB III exclusive £229

20kHz 4 FX at once, performance MIDI

SECK 1282/1882 8 / 16 track recording consoles

Due to increased production costs the SECK range of consoles is now too expensive to produce, and has therefore been

Each channel has a long-throw (100mm) fader, 4 auxillaries and dual inputs both of which can be used at once, giving up to 24/36 inputs.

3 band custom profiled equalisation, sweepable 20:1 mid with EQ also on four auxiliary returns. Insert jacks on each channel and on the 8 subgroups. +48v phantom powering on XLRs, comprehensive soloing including all sends & returns, multi-mode LED meters, built in talkback mic, up to six aux busses and several monitoring options. Ergonomic design and rugged noise-cancelling steel / alloy construction gives excellent hum isolation, and is uniquely light and portable with a built-in carrying handle. This exclusive offer represents the last chance to acquire one of these pro-facility desks and at an outrageous reduction

R.R.P. 1282 - £1299 1882 - £1799

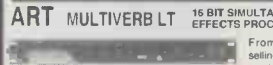
£639 12:8:2 ex VAT £10 P+P NEW BOXED

£869 18:8:2 ex VAT £10 P+P NEW BOXED

ATARI 1040 + C-LAB Creator + £590

mouse + SM-124 Monitor

ART MULTIVERB LT 16 BIT SIMULTANEOUS EFFECTS PROCESSOR



From the best selling range of U.S. made effects, this has to be the unit of 1st choice for the high quality natural sounding reverbs associated with American studio processors costing thousands rather than hundreds. (algorithms uniquely structured to eliminate the harshness and brittleness of the other budget units)

• 192 programs including 120 REVERBS from Early Reflections, Plates, Studio and Live Vocals, huge Halls (up to 25 second decays) and Rooms, all in a wide range from warm to bright, to Reverse and 20 various Gated/Companded Gated. Stereo FLANGE and CHORUS. ECHOS and MULTI-TAP DELAYS. STEREO IMAGING, PAN and SPECIAL EFFECTS. • COMBINE UP TO THREE simultaneous effects • 16 bit, full bandwidth processing, 80dB dynamic range (extremely quiet) • Great MIDI spec: MIDI PROG numbers assignable to any program, 16 MIDI channels or OMNI, compile your own patches etc. Control from kbd. or seq or use punch or MIDI footswitch for program advance or random selection respectively • 19" rack mounting

This EXCLUSIVE offer represents an unrepeatable opportunity to purchase a beautifully natural sounding commercial quality reverb at a fraction of the cost. We expect to sell out very quickly.

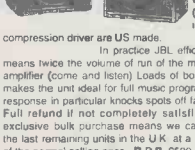
R.R.P. £345

£139 plus VAT including carriage NEW BOXED

ATARI 1040 + C-LAB Notator + £715

mouse + SM-124 Monitor

JBL G-734 FULL-RANGE DIRECT-RADIATOR STAGE-SPEAKER SYSTEM



A two-way 15-inch cabinet designed to deliver extremely wide bandwidth and high sound pressure levels. The G-734 utilises the new G135A-8 15 inch low frequency driver in a compact bass reflex enclosure which delivers up to 400W RMS (not peak). All components including long throw horn and compression driver are US made.

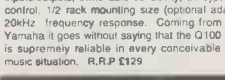
In practice JBL efficiency and frequency response means twice the volume of run of the mill English Cabs from the same amplifier (come and listen). Loads of bottom end and CD quality highs makes the unit ideal for full music program PA, keyboards etc ...Bass response in particular knocks spots off famous-name compact systems. Full refund if not completely satisfied. An exclusive bulk purchase means we can offer the last remaining units in the U.K. at a fraction of the normal selling price R.R.P. £599

£279 EX VAT Add £9 carriage each NEW BOXED

ATARI 1040 + Steinberg Cubase £699

+ mouse + SM-124 Monitor

YAMAHA Q100 STEREO 7 BAND GRAPHIC EQUALISER



The Yamaha Q100 is actually two 7-band graphic equalisers, each with separate controls, allowing separate processing for two independent signals as well as true stereo operation. Features include both phono and jack inputs/outputs, switchable sensitivity, all bypass switch, overall level control. 1/2 rack mounting size (optional adapter available). 20Hz-20kHz frequency response. Coming from Yamaha it goes without saying that the Q100 is supremely reliable in every conceivable music situation. R.R.P £129

£49 EX VAT Add £6 carriage NEW BOXED

KORG M3R Synth / Drum expander £499

with best of M1/T1 sounds and 33 FX

CLASSIFIED

40% OFF • SECOND HAND & EX DEMO • END OF LINE CLEARANCE • FREE ACCESSORIES & SOFTWARE • INSTANT CREDIT/FINANCE* • CASH REBATE • UP TO

SYNTHESIZERS

Cheetah MS6	£212
Ensoniq VFX2	£699
Ensoniq VFX-SD	£899
Ensoniq SQ-1+	£765
Ensoniq SQR	£449
EVS1 + editor	£159
Kawai K1Mk2	£339
Kawai K1R	£219
Kawai K4 NEW	£429
Kawai K4R NEW	£339
Kawai Spectra NEW	£299
Korg M1	£650
Steinberg Midex Plus	£299
C-LAB Creator	£169
C-LAB Notator	£299
MOTU Performer	£283
MOTU TimePiece	£299
Atari Mega 4 + Mon	£525
Atari 1040STE + Mon + mouse + Pro24 VIII	£449
+ C-LAB Creator	£590
+ C-LAB Notator	£715
+ Steinberg Cubase	£699
+ Steinberg Cubeat	£549

Yamaha Q100 7 band stereo graphic - £49!

Yamaha Deals

SY77	NEW	£1445
SY55	NEW	£680
SY22	NEW	£552
TG55	NEW	£424
Korg M3R		£450
Korg T2ex		£1600
Korg T3 s/h		£1295
M1Rex (T3 rack)		£899
Korg Wavestation		£750
Roland D5 s/h		£339
ROLAND D5 NEW		£359

EFFECTS

Art tEQ Midi EQ	£249
AlesisQuadraverb	£199
Alesis Gate	£86
Alesis Limiter	£86

B.B.E. Sonic Maximizers SPECIAL OFFER PRICES 411 / 322 / 422A / 822A

Alesis MEQ230	
Alesis microverb II	£86
Alesis microverb liobll	£129
Alesis microcomp	£75

8 Meg boards for S1000 / S1100 - only £399

Roland D110 s/h	£295
Roland D70 s/h	£880
Roland D10	£410
Roland D20 NEW	£595
Waldorf MicroWave	£500
Yamaha SY77	£1100
Yamaha SY55	£509
Yamaha SY22	£426
Yamaha TG77	£799
Yamaha TG55	£299
Yamaha TG33	£325
Alesis MIDIVerbIII	£169
ART Multiverb3	£229
ART SGE II	£385
Aphex type C s/h	£143
Boss SE50 lowest UK price	
Lexicon LXP1/5	£295
Symmetrix 511	£159
Yamaha SPX900..	£413
Yamaha SPX1000	£599
Yamaha FX500 s/h	£212
Yamaha R100	£99
Yamaha GSP100	£50
Yam GC2020B NEW	£ 50

SAMPLERS/PLAYERS

SyQuest R45 H/Disk	£449

JBL G734 15h 400W cab £259

Akai S900 s/h	£599
Akai S950 ex hire	£899
S950 750k card	£115
S1000 + SyQuest	£2299
S1000KB	£1850
S1100 E.D.	£2605
S1000 HD	£1899
S1000 2M cards s/h	£134
S1000 8 meg card	£399
E-mu Proteus/1	£425
E-mu Proteus/1XR	£559
E-mu Proteus/2	£630
E-mu Proteus/2XR	£750
Ensoniq EPS-16+	£1050

PORTA STUDIOS

All Portastudios o/w FREE mic, hphones, tapes, cables, demag, cleaner, tutorial, psu etc...

Tascam 488 8 trk	£639
Tascam 688	£1399
Tascam 644	£676
Tascam Porta 05	£249
Tascam Porta 03	£169
Tascam 424	£373
Fostex X26 ex dem	£169

Studiomaster MA36 MIDI Analyzer - £19

Ensoniq EPS-16R	£1099
Roland W30 NEW	£1020
Roland W30 used	£850
Roland U20 demo	£575
Rhodes 660 NEW	£506
Rhodes 760	£581
Roland U110	£339
Roland U220 used	£382
Fostex 280	£399
Sansui MR6	£299
Sansui WSX1	£ 5
Yamaha MT3X NEW	£349
Yamaha MT100 II	£275

MOTHER KBDS

Roland PC200	£112
Akai MX76	£869
Roland A80 NEW	£999
Roland A50 NEW	£680

8/16/24 TRACK

A&Health Spectrum	£2850
AKAI ADAM	£75
Fost R8 Seck1282	£1599
Fost R8 P.Line1648	£1899
TSR8 Seck1882	£2399
TSR8 P.Line 16/4/8	£2499

ART Multiverb III FX - NEW - £289

Yamaha KX88	£913
Cheetah Master 7P	£575
Cheetah Master 5V	£237
Studiomaster Desks:	
Mixdown 16/4/8	£999
Mixdown 16/8/16	£1299
Proline 16/8/16	£1250
Proline 16/4/8	£
Fostex R8	£1099
Tascam TSR8	£1495
TASCAM MSR24 NEW	£4
Fostex B16	£1750
Fost'x E16 GoldSeal	£2499
Fostex G16	£3 50
Tascam MSR16	£2750

PIANO KBD/MODS

Rhodes MK60	£510
Rhodes MK80	£999
Roland RD300S	£865
RolandRD250Snew	£650
Yamaha PF85	£639
Emu Proformance/1	£249
Emu Proformance/1+	£289

DRUM MACHINES

Roland U220s here at last - £425 NEW

Akai MPC60	£1249
Alesis HR16	£149
Alesis HR16B	£150
Alesis SR16	£189
KORG S-3 new	£525
Boss DR550	£126
Roland R8 s/h	£299
Roland R8M	£330
Roland R5	£199
Roland SPD8	£251
Roland PAD80 Mk2	£212
SimmonsTrixerNew	£499

OTHER MIXERS

Tascam MM1 20/2	£475
Fostex 2016 16/2	£195
Fostex 454	£399
Fostex 812	
Alesis 16/2/2	£399
Sansui MX12	£ 99
Seck 1282	£599
Seck 1882	£799

SEQUENCERS

Akai ASQ10	£599

MASTERING / DAT

Sony DTC1000	£799
Sony DTC55	£459
Sony TCD D3 NEW	£490

Alesis MMT-8 Sequencer NEW £169

Alesis MMT8 used	£152
MMT8 NEW	£169
Alesis Datadisk	£199
Kawai Q80	£375
Roland MC50	£370
Roland MV30	£899
Cheetah MQ8 demo	£79
Tascam DA30	£899
CASIO DA7 NEW	£425
Fostex E2 timo/code	£1999
Tascam 103 3-head	£175
ReVox B77MkII	£699

COMPUTERS & SOFTWARE

Big Noise Cadenza	£136
OPCODE VISION	£239
OpCode EZ Vision	£85
Opcode Finale Mac/PC	£450

SYNCHRONISERS

XRI 300	£159
Tascam Midizer	£899
Fostex 4010	£299
Fostex 4020	£299
Fostex 4030 *3 left*	£399
Fostex 4050	£210
Sansui MDR7	£69

Yamaha SY-55 Synth & Sequencer - £575

Total Range of IBM PC compatible products IN STOCK Full demos offered

OpCode Mac/MIDI I/F	£47
Macintosh Classic FD	
+ I/F + EZ Vision	£659
Macintosh Classic 2+ I/F +Vision or Performer	£1199
Stberg Cubase New	£285
Steinberg Cubeat	£89
Steinberg Pro24 viii	£60
Fostex MTC-1	

MONITORS

Yamaha NS10M pr	£149
JBL Control 1 s/h	£129
Yamaha A100 amp	£125
JBL Control 5 s/h	£149
JBL Control 10 e.d.	£519

D.J. PRODUCER

Numark 1975 s/h	£799
Technics SL1200	£POA

40% OFF • SECOND HAND & EX DEMO • END OF LINE CLEARANCE • FREE ACCESSORIES & SOFTWARE • INSTANT CREDIT/FINANCE* • CASH REBATE • UP TO

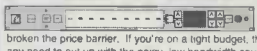
ALL PRICES EXCLUDE VAT

SPECIAL OFFERS

ALESIS QUADRAVERB + £249

Simultaneous multi effects processor

EVOLUTION EVS1 16-BIT SYNTH AND DRUM MODULE



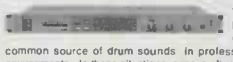
At last, a 16 bit module has broken the price barrier. If you're on a tight budget, there's no longer any need to put up with the noisy, low bandwidth sounds which other budget modules offer. The EVS-1 generates all its sounds with CD clarity (16 bit 44.1 kHz). The EVS-1 is several different synths in one. A sample-player, a fat analog synth (subtractive), and various additive synthesizers. (Phase Modulation like the VZ-1, Ring Mod like the D-50, FM and WM - All types of synthesis can be used simultaneously). A single EVS-1 can replace a whole rack full of different modules anything from lush analog strings, raw-power basslines, exotic digital timbres etc... Features include : 8 part multi-timbrality • never less than 16 notes poly • power-drum kit including Latin sounds as well as conventional kits • FREE editor/librarian software which runs as a desk-accessory on Atari ST computers, allowing quick and easy tweaking of sounds as you write the music. 19" rackmount. Unrepeatable opportunity to purchase very expensive sound quality with the multi-channel spec for sequencing at a ridiculous price. Strictly limited quantity. R.R.P. £299

£169 EXCLUSIVE OFFER EX VAT +£3 P&P NEW BOXED

RHODES MK60 weighted piano £510

great acoustic & electric piano sounds

AKAI XE-8 16 BIT DRUM SAMPLE PLAYER WITH 9 SEPARATE OUTPUTS



The Akai S1000 and MPC60 are by a long way the most common source of drum sounds in professional live/recording environments. In these situations, price is often of little concern. We can now offer every writer/player these sounds at around one tenth of the cost. The Akai XE-8 1 Meg int memory of 16 16bit samples + 2 FREE one Meg ROMs (16 sounds each) • kits, percussion, orchestral blasts etc • use two cards simultaneously (2 slots) • Store any 16 samples in one of 32 programs • assignable key note 0-127: play melodies, cymbals become gongs etc • tailor sounds to your requirements : variable hold and decay times (eg Gates), reverse, variable sweep. Bright punchy drum sounds are the foundation of every mix and time and again the average drum machine just doesn't cut it in the studio. The XE-8 gives you customisable 16 bit drum samples to turn up to 32 tracks of your Atari/C-LAB/sequencer setup into a super-flexible, state-of-the-art drum machine. Alternatively, use it to expand your drum machine or trigger from drum-pads/Octapad/velocity sensitive keyboard etc

Hurry, we have a small quantity. Package includes 2 FREE ROMs & C-LAB drum-pattern disk. Great package price with C-LAB sequencers

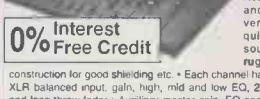
R.R.P. £499

£129 PACKAGE PRICE EX VAT Add £6 carriage NEW BOXED

ROLAND D-20 LA workstation £595

Drums, Synth, Effects, 3.5" Disk Drive

STUDIO RESEARCH KEYBOARD / LIVE RECORDING MIXERS



0% Interest Free Credit

Remarkable range of professional stereo (in to 2) consoles. Available in 6, 12 and 16 channel versions. Very quiet, great sounding EQ, rugged steel construction for good shielding etc. • Each channel has : 1/4" line and XLR balanced input, gain, high, mid and low EQ, 2 auxiliaries, pan and long-throw fader • Auxiliary master gain, EQ and pan, Bar graph metering, headphone monitoring The range of applications for stereo mixers is growing fast, eg Multi-timbral synth/sampler/drum-machine mixing • Live/Main submixing (12 channel 700W PA systems complete for under £900) • Mix your Atari/synth arrangements direct to DAT for CD quality demos. Available at a fraction of the list price. Exclusive, Ltd stocks includes FREE monitoring headphones and 24hr carriage

PACKAGE PRICES

6:2 **£169** EX VAT

12:2 **£259** EX VAT

16:2 **£319** EX VAT NEW BOXED

SONY DTC55ES Bitstream £470

Mastering DAT Recorder NEW

EMU 16 BIT 32 CHANNEL STEREO SAMPLER WITH THE LEGENDARY EMULATOR SOUND

EMAX II EXCLUSIVE MEGADEAL

32 audio channels • 16 note poly in stereo • 18-bit DA convertors • unique digital filtering. (EIII sound quality) • 4 stereo pairs of separate outputs • 3 stereo effects-loops • SCSI and RS422 interfaces as standard, giving access to our vast EIII libraries available in store on floppy, SyQuest and CD-ROM and at a remarkable £1.99 per disk from our 24 hr mail-order copying service • The RS-422 allows instant sample dump into Alchemy™ or Sound Designer™ • 3 distinct types of synthesis: subtractive, additive and transform multiplication. Any one of these gives more sonic-potential than most top-of-the-range synths. For all those *Emax* owners, the EmaxII will convert all your old disks!

This offer represents a unique opportunity to get the legendary E-mu sounds at a fraction of the normal price. Hurry, these will sell out very quickly

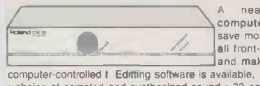
EXCLUSIVE OFFER

£1349 EX VAT NEW BOXED

ROLAND D110 LA synth expander £339

8 sep outs, 63 drums, 32 partial, 9 parts

ROLAND CM-32 COMPUTER CONTROLLED SYNTHESIZER MODULE



A neat way for computer owners to save money - Eliminate all front-panel controls and make the module computer-controlled ! Editing software is available, Built-in Reverb • choice of sampled and synthesized sound • 32 partials available. Partials are used up 3 or 4 to a note, so you never have less than 8 note polyphony, and usually have over 10! Unique companding techniques mean that the samples sound much cleaner and brighter than their 8-bit resolution implies.

PACKAGE PRICE

£139 EX. VAT +£6 P&P

* 0% interest free credit is available on selected items, (interest bearing credit is available on all items) both subject to status. Soho Soundhouse is a licensed Credit Broker under the Consumer Credit Act 1974.

MAIL ORDER DEPARTMENT

VISA ACCESS AM-EX

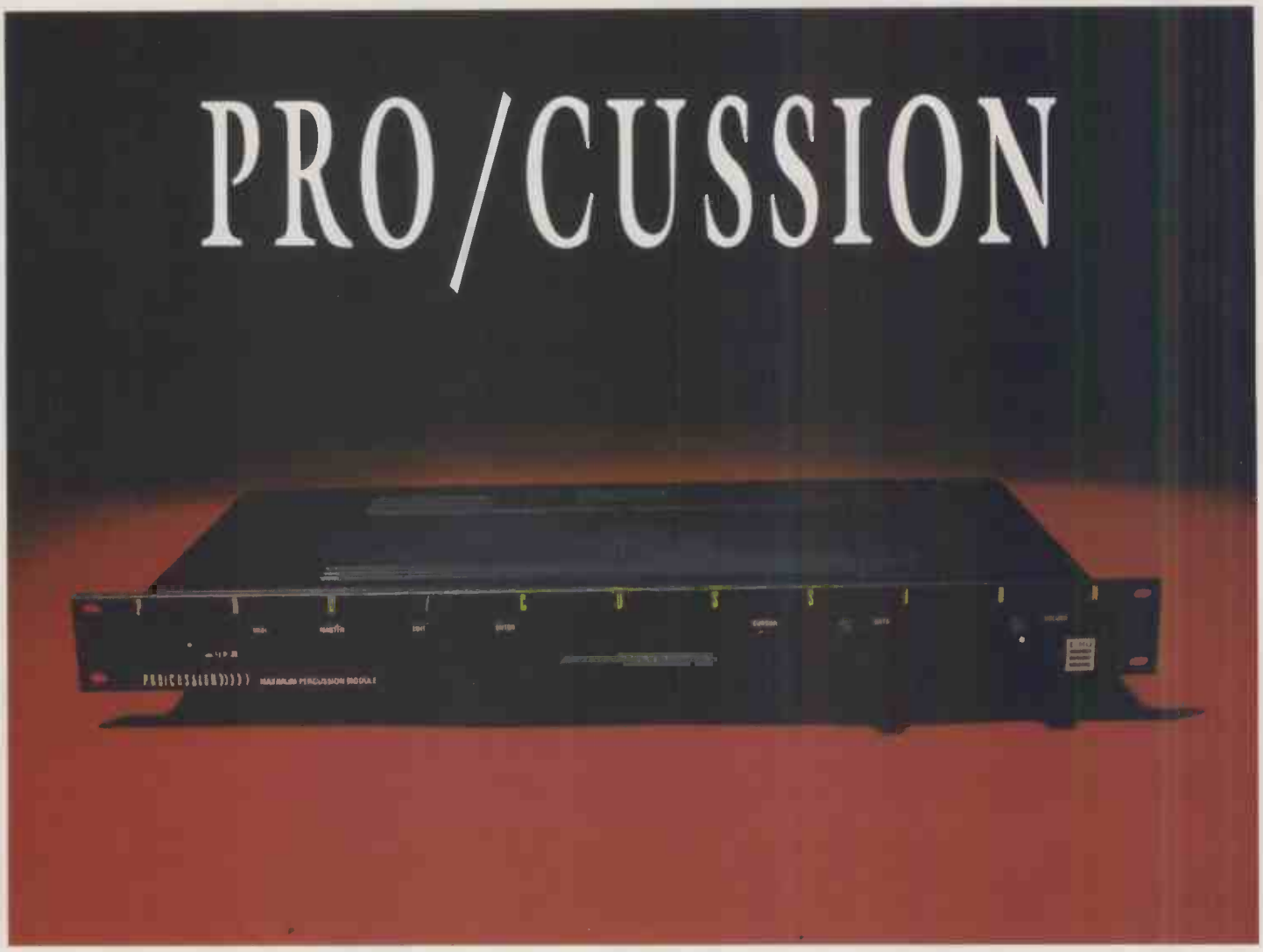
Our long established mail order department documents your order from receipt to despatch. Send cheques (postal orders, Access or Visa orders, Bankers draft, Building Society cheques, Cash in reg. Env) to SOHO SOUNDHOUSE / TURNKEY 114 - 116 CHARING CROSS ROAD LONDON WC2H 0DT. (10 day clearance for personal cheques). All other forms of payments - 24 hr despatch. Telephone Orders Welcome.

NAME & ADDRESS

GOODS REQUIRED

CREDIT CARD NO. | | | | | | | | | | | | | | | | TOTAL £

PRO/CUSSION



PHOTOGRAPHY: JON SHRIMPTON

Can a dedicated drum expander compete with the sonic flexibility of a sampler? The man from E-mu, he say yes. Review by Simon Trask.

During the '80s, the high price of E-mu Systems' samplers meant that they were largely owned by pro musicians, pro studios and BCCI account holders. The asking price of an Emulator may have been merely stratospheric compared to the out-of-this-world cost of a Fairlight or a Synclavier, but it was still high enough to bring most musicians down to earth with a bump once they'd finished flying high in their dreams - rather apt for a company named after a flightless bird.

But with the ushering in of a new decade, E-mu have at last started producing instruments for musicians who bank with the Midland. The 1U-high, 19" Proteus module set the tone in 1989 by making samples from the company's sizeable and well-regarded EIII sample library available in a playback-only format. The success of that module has encouraged E-mu to develop the sample playback concept into a line of instruments, first of all with last year's Proformance half-rack piano modules, now with the 1U-high, 19" Pro/cussion module, which as its name suggests, is a unit dedicated to matters percussive.

Describing Pro/cussion simply as a sample playback unit doesn't do justice to its capabilities, however. In an effort to compete with the sonic flexibility of the sampler, E-mu have given their dedicated expander a sizeable built-in library of drum and percussion samples, but there's a lot more to Pro/cussion than lots of sounds dropped into a box with a MIDI socket fitted to it. One advantage a dedicated unit has over a general-purpose sampler is that it can be optimised for a particular musical role, and, to judge from the way Pro/cussion has turned out, I'd say that this fact was the starting point for its designers. As a result, Pro/cussion is an instrument with plenty of bells and whistles - and I'm not talking about its samples. Included are features designed to make it as sonically flexible as possible, and plenty designed to make it as musically responsive as possible. So have E-mu come up with the ultimate instrument for the rhythm programmer?

BEGINNINGS

THE LEVEL OF organisation that you encounter first on Pro/cussion is the Kit. This is basically a collection of up to 24 sounds which are mapped across the MIDI note range in a multisplit texture. Pro/cussion contains 128 Kits, 64 of which are user-programmable. ➢

PASCAL GABRIEL

Featuring 3D RSS Samples!

DANCE SAMPLES CD

OVER 1000 DANCE SAMPLES ON ONE CD!!

Your record collection is probably packed with tracks written, produced or arranged by Pascal Gabriel, 'Theme from S-Express', 'Beat Dis' or 'I Believe' for example. Now you have the chance to add his personal sample library to your own. This CD boasts well over a 1000 of his best samples and represents an awesome weapon if you want your music to make an impact on the dancefloor. In the past a library like this would take years to build-up and a huge amount of work and skill to achieve. Now it can be yours in days for only £49!

FEATURING

- *Loads of Drum & Percussion*
- *Loops & Breaks*
- *Guitar Hooks and FX*
- *Vocal Riffs & Effects*
- *Hits, Scratches & Drop-Ins*
- *Countless Snares and Kicks*
- *Synth FX &Basses*
- *Brass & String Hits, FX and Runs!*
- *Film & Media Snatches*
- *Orchestral Effects*
- *And Much, Much, Much More!*

ALL NEW! 100% Lean & Mean!

RSS Roland Sound Space

Happy Sampling!

PASCAL

HITSOUND PRODUCER SERIES VOLUME ONE
FURTHER VOLUMES COMING SOON - DRUMS AND PERCUSSION

Valhala®

The Best Synth Sounds Ask anyone with ears!

Valhala Review Extracts!

"The last time you heard sounds of this quality emanating from a single keyboard you were probably listening to an Emulator or a Fairlight...these sounds will tempt you to make an M1 the major keyboard in your rig. If they don't I honestly don't know what will." - *M1 Card Review, MT Aug 1990.*

"...there's no company currently making a better name for itself than Valhala...I admit it, I'm impressed...a number of absolute gems - the overall impression is one that firmly lives up to Valhala's excellent reputation for quality...quality plus value - what more do you want?" - *D50 Card Review, MT Nov 1990.*

Korg M1 - 3 International Gold Cards plus Top 40, Rock, Orch and New Age - £50 each
Korg M3R - 2 International Gold Cards plus Top 40, Rock, Orch and New Age - £50 each
Korg WaveStation - Just an International Gold Card at present - more coming soon - £50 each
Korg T-Series - Five disks (100c/200P) - IG, Top 40, Rock, New Age and Orch - £45 each
Roland D50 - 2 International Gold Series, Studio Series and 4 Organ Cards - £45 each
Roland D10/20/5 - 2 International Gold Cards, Studio Series and an Organ Card - £45 each
Roland D110 - 2 International Gold Cards and full Studio Series - £45 each
The Valhala STUDIO SERIES incorporates the following 7 categories - Top 40, Orch, New Age, PCM, Digital, Analog and Effects.
Yamaha SY77 - 1 International Gold Card plus Top 40 and Orch Cards - £65 each
Yamaha SY55 - 2 International Gold Cards plus Top 40 and Orch Cards - £60 each
Yamaha SY22 - 1 International Gold Card plus Top 40 and Orch Cards - £60 each
Kawai K4 - 2 International Gold Cards plus Top 40 and Orch Cards - £55 (ROM), £60 (RAM)
Kawai K1 - 2 International Gold Cards plus Top 40 and Orch Cards - £45 (ROM), £50 (RAM)

RAM Cards

M256 - For all Roland equipment - Roland's price is £95 - Valhala's price is just £55
MCR-03 - For all Korg equipment - Korg's price is £89 - Valhala's price is just £65
Yamaha MCD32 RAM Cards just £59 MCD64 RAM Cards just £79
Kawai: DC8 RAMs for K1, etc. - £35 DC16 RAMs for K4, etc. - £45

HitSound CDs

SPECIAL
BUY TWO GET ONE FREE
See Foot of page for details!

"Subjectively, the sounds are fabulous." - *Sound On Sound, Sept. '91.*

Volume One - Pure Gold Synth

"...assorted pad and atmosphere sounds include some stunning textures, and these are complemented by a superb range of bass sounds and some quite surprising, quirky sounds dotted around...All in all, a good mix of high-class bread and butter sounds with a hefty dose of sonic icing on top."

490 of the best samples in Valhala's International Gold Series from WaveStation, T-Series, D70, M1, VFX, SY77, SY55, D50 and More!

Volume Two - Old Gold Synth

"This volume is a (Gold)mine of glorious sounds that, whilst certainly biased towards dance music, should be useful to anyone with a sampler and a little imagination."

A huge collection of classic synths - ARP2600, Moogs, MC202, Octave Cat, MKS70, Xpander and many more! Superb synths, superb sounds all on one £35 CD ready to sample! 721 Samples, 63:44 minutes

Volume Three - Guitar

"...instantly useable...perfect for creating a basic 'instant rock guitarist' on your sampler...Things get even better...It's really just like having a good selection of records from which to sample useful snatches of guitar, but without all the other music happening on top."

Chords, Bends, Solos, Licks and Effects from Electric, Wah Wah, Acoustic and 12 String Guitars - Clean and dirty versions! 605 Samples, 63:18 minutes - Just £35.

"Altogether or individually, the HitSound CDs offer good value for money...an excellent start in bringing a great selection of expensive-sounding and highly usable instrument sounds to anyone with access to a sampler."

Each volume costs £35, or select all three for just £90.
See Limited SPECIAL OFFER for even better value.
All quotes taken from SOS Review, Sept. 91.

STOP PRESS - NEW PRODUCTS

UNI-MAN - The most comprehensive generic editor/Librarian, edit everything and anything!
ARRANGER - The most powerful auto-accompaniment program on the market!
CALL FOR FURTHER DETAILS
MORE NEW PRODUCTS COMING SOON!

The Denny Jaeger Master Violin Library

The ultimate sample library is available now for the Emulator 3 and Akai S1000/1100 - Call for full deatils. **Demo CD available for just £6**

NEWS

EMC JX1 Interactive Editor - Available Now!
EMC SY22/TG33 and D70 Editors - Coming Very Soon!
MasterBits Climax Collection Volume 3 - Guitar Available Soon.

SPECIAL OFFER

To take advantage of our special '3 for the price of 2' offer on the three HitSound CDs (Pure/Old Gold, Guitar) simply clip the coupon on the top of the page and send it, along with you cheque/PO for £70 to our usual address. Offer only valid until 30/9/91.

Please send cheques or postal orders and although orders are usually completed within 7 days, allow 28 days for delivery. Or order by phone using:

All tradenames are the property of their respective holders. Because of the copyable nature of most of our products all refunds/exchanges are at the discretion of AMG. Any person found using pirated versions of any of our products will be pursued to the fullest extent of the law. 'Norman' is a tradename of AMG. All prices and specifications are subject to change without prior notification. © AMG 1991.

AMERICAN EXPRESS | Access | VISA

AMG

The Advanced Media Group

✆ 073088 383

O Samples O Synth Sounds O Software O Hardware

Hurst Lane Privett Nr. Alton
Hants GU34 3PL
Fax 073088 390

➢ If you set Pro/cussion to Omni receive mode, the currently-selected Kit in the main (Play mode) LCD page can be played via any MIDI channel. Poly mode is available if you want Pro/cussion to receive on one MIDI channel (1-16); in this case, both the MIDI receive channel and the Kit are set on the main page.

Alternatively, with multitimbral MIDI reception selected you can trigger up to 16 of Pro/cussion's Kits at once, one on each MIDI channel. Any channels which you don't want Pro/cussion to respond on can be set to "Off". Voice Assignment mode offers you an unusual degree of control over how the expander's 32 voices are assigned across the MIDI channels and within individual Kits; however, to begin with it's probably best if you stick to Poly (32) - simple dynamic allocation of all 32 voices across the active MIDI channels.

"There's a lot more to Pro/cussion than lots of sounds dropped into a box with a MIDI socket fitted to the back of it."

Kits can be selected via MIDI independently for each channel using patch change commands, allowing you to automate kit changes within your MIDI sequencer. For added flexibility, Pro/cussion allows you to create a patch-to-kit map, so that you can link any MIDI patch change to any Kit.

By allowing you to trigger sounds from more than one Kit at the same time, multitimbral reception can lessen the need for you to create your own custom combinations of sounds within a Kit. For instance, instead of bringing hip hop kick and snare drums and hi-hats together with congas and some sound effects in your own kit, you could assign Pro/cussion's Hip Hop, Latin Drums and Sound FX Kits to three different MIDI channels.

Creating your own Kits on Pro/cussion is a matter of defining MIDI note ranges for up to 24 Zones and assigning a Stack to each Zone. Setting up the Zones can be a bit tedious, although you're helped by being able to play in the lower and upper notes for each Zone from a MIDI controller. Not that you have to start from scratch every time. For one thing, you can edit existing Kits if all you want to do is make a few changes. For another, you can start from a blank "template", where the Zone mapping has already been done and all you have to do is select the Stacks. A third option is provided by two User Zone Maps: if you've decided on a standard Zone mapping of your own, program it into a User Zone Map and then set a MIDI channel to User 1 or User 2 instead of Kit in Master Mode; your Zone mapping will then override that of each Kit which you call up on that channel.

You could use the User Zone Maps as a convenient means of mapping Pro/cussion's samples onto rhythm sequences previously recorded using another machine - if Zone one always has a kick drum sample assigned to it, map Zone one to the note in your existing sequences which was used to trigger a kick drum. This is presumably the line E-mu were thinking along, because they've provided several pre-programmed Zone Maps which match selected factory-programmed kits on some well-known drum machines and percussion controllers (Alesis, Roland R5 and R8, the Roland Octapad series and E-mu's own SP12).

By now you're probably wondering what a Stack is. Well, here we start to get into the deeper side of Pro/cussion. A Stack is essentially a layer or velocity-split configuration of up to four Instrument Layers, and an Instrument Layer consists of an Instrument (one of Pro/cussion's samples or waveforms) routed first through a DCA with an optional Volume Envelope modulator, then through a pan module to Pro/cussion's audio outputs. Within each Instrument there are 11 modulation destinations, each of which can be modulated by any one of ten sources. Also, each Stack has its own LFO which can be used to modulate the pitch and/or the volume of one or all of the four Instrument Layers, while the rate and amount parameters of the LFO can themselves be modulated by one of the ten mod sources.

"But all I want to do is trigger some drum samples", you protest. Well, E-mu have included a massive 548 factory-preset Stacks in ROM, so it's quite possible that you'll find more than enough sounds to keep you happy without ever needing to create your own Stacks. There again, if your attitude is that you only want to use sounds that are unique to you, delving into Stack creation will prove to be rewarding, because, as I pointed out earlier, there's a lot more to Pro/cussion than sample playback - Stack parameters provide plenty of scope for creating new sounds.

You can always break yourself into Stack programming gently by tweaking parameters on an existing Stack. The way the programmable Stack locations work is that each user Kit has eight Stack memories which you can program yourself. You can then assign them to Zones alongside preset Stacks (obviously, no Kit of more than eight Zones can consist solely of your own Stacks).

OPERATION

GETTING TO GRIPS with the detail and depth of Pro/cussion may take a bit of effort, but finding your way around the expander's software pages and editing its parameters is easy to pick up. This is partly because Pro/cussion keeps things simple by effectively putting every parameter on the same operational level rather than forcing you to delve into multiple hierarchical levels and remember which branch takes you where. It's also because the expander minimises the number of physical operations required to program it. There are just two mode buttons, Master and Edit; pressing either one of them takes you into the relevant mode, while pressing the same button again takes you back to the Play level, which consists of just one LCD page. This displays a MIDI channel number, the number and name of the Kit assigned to the channel, and master volume level and pan position settings for the channel. Pan position can be "K" (individual Instrument Layer settings apply) or a value in the range ±7 (all Instrument Layers are forced to the indicated position).

Successive presses of the Cursor button cycle the cursor around the LCD page's parameters; alternatively, if you hold down the Cursor button, you can use the stepped, infinite-rotary Data knob to

move the cursor in either direction. Turning the Data knob on its own edits the value in the selected parameter field. In Master and Edit modes, turning the Data knob when the cursor is on the parameter name steps you through the LCD pages; turning it while the cursor is on a value field edits the value.

It's all straightforward enough, and I found that with a little familiarisation I was charging around the LCD pages and getting to where I wanted to be very quickly. Having said that, operation is a little fiddly; I would have preferred to see the Data knob dedicated to editing parameter values and an extra knob dedicated to stepping you through the LCD pages.

ROUND THE BACK

THERE'S NOT TOO much to see on the unit's rear panel. MIDI In, Out and Thru sockets provide one kind of link with the outside world, three pairs of stereo audio outs provide another. Additionally there's the power input socket; apparently, Pro/cussion automatically switches itself for 110 or 220 volt operation.

The MIDI Out socket, in case you're wondering, is included to allow SysEx dumping of Pro/cussion's data. You can send out Master settings, the MIDI patch-to-Kit map, User Zone Maps, Factory Kits, User Kits and One Kit. SysEx is also used to enable remote editing of individual parameters within the currently-selected Kit.

The three stereo pairs are labelled Main, Sub 1 and Sub 2, with the main pair having the usual mono/stereo option. There's no separate headphones socket, but the Left socket of the main pair can be used as a stereo headphones output.

As on Proteus, the Sub pairs can optionally be used as effects sends and returns. Using stereo jacks, the tip serves as the send and the ring as the return, with the returns on the Left sockets going to the left buss and the returns on the Right sockets going to the right buss; these signals are then summed with the Procussion output at the Main stereo outs.

Pro/cussion sounds are routed to outputs via a Submix Group section. This contains 16 Submix Groups, each one named after an instrument type (kick, snare and so on). Each Zone within a Kit can be assigned to one of these Groups, while each Group can in turn be globally assigned to one of eight output options: Main, Sub1, Sub1L, Sub1R, Sub2, Sub2L, Sub2R, or Layer; if the latter is selected for a Group, each Instrument Layer in the Stack(s) being routed via that Group will be assigned to a separate output jack.

The idea is that if you route all snare drums, say, to the snare Group, they'll automatically appear at the same output. Because you can change the output routing at any time, you could route whatever snare you're using out of the Main pair while putting a rhythm together, then reroute it to a separate out for recording purposes. Also, any of the Groups can be turned off at any time, giving you an easy way of removing instruments from a stereo mix.

INSTRUMENTS

AT THE HEART of Pro/cussion, of course, are the source sounds which form the raw material for its Instruments, Stacks, Zones and Kits. Pro/cussion has 140 sampled sounds and 80 single-cycle waveforms stored in 4Mb of ROM (with room, apparently, for another 4Mb to be added at a later date, as on Proteus), and uses 16-bit-linear data encoding and a 39kHz playback rate. The sampled sounds consist of 12 bass drums and 26 snares, six toms, ten hi-hats (open, closed and various stages in between), several crash and ride cymbals, a selection of more off-the-wall percussive samples ('Big Hammer', 'Metal Stack', 'Lazer Hit', 'Rap Scratch', 'Pipe' and 'Clank') and a good number and variety of Latin percussion samples, including cabasa, guiro, shekere, timbale, tumba, quinto and hembra. E-mu have included the sounds produced by these percussion instruments when they're struck in different ways - quinto slap open, slap closed, tip and heel - allowing you to create more authentic-sounding percussion parts if you're so inclined.

While these samples take you towards authenticity, the four samples labelled 'Kick Space', 'DarkK-Space', 'Snare Space' and 'DarkSnSpace' take you into a more unusual realm. Basically, E-mu have used the Transform Multiplication function on their Emax II sampler to create four reverb "tail" samples which can be manipulated in the same way as the instrument samples, which includes being able to shape the reverb decay using an amplitude envelope. You can then layer one of these samples with various instrument samples to give the impression of reverb on selected instruments. You can also do weirder things like reverse the reverb, modulate it with a pitch envelope and tune it up or down. Finally on the sample front, E-mu have included a few punchy synthbass samples. A number of the Kits have a bass sound assigned to a couple of octaves above the drum and percussion sounds, making it very easy to quickly try out a bassline while you're working on a rhythm track.

The waveforms are divided into three categories: synth classics (sine, triangle, square and sawtooth), 22 harmonic waveforms (variously providing odd and/or even harmonics within different octaves) and 54 digital waveforms (lots of offbeat metallic sounds). A very effective way of customising the drum and percussion samples is to mix in some of these waveforms - which of course is what the Stacks are all about.

STACKS

PRO/CUSSION'S FACTORY STACKS give you a massive library of sounds to draw on, and show off very effectively just how much you can "expand on" the source samples. For instance, there are some 60-70 kick-drum Stacks and around 100 snare-drum Stacks, providing a far wider variety of kick- and snare-type sounds than you get from the samples alone. Fortunately you can copy factory Stacks into RAM custom Stack locations, as taking these Stacks ➢

"If rhythm is an important feature of your music, you should check out Pro/cussion - we're talking powerhouse stuff."

COME AND GET IT !

FOR SERIOUS DEALS PHONE :
0202 395135 EXT. 125

SYNTHESISERS / KEYBOARDS.		
YAMAHA SY77	ONE ONLY	£1199
YAMAHA SY55	NEW LOW PRICE	£675
YAMAHA SY22		£549
YAMAHA TG77	EXPANDER	£999
YAMAHA TG55	EXPANDER (USED)	£399
YAMAHA PF85	DIGITAL PIANO	£749
YAMAHA TG33	IN STOCK	P.O.A.
ROLAND D10 DEMO		£449
ROLAND JD800, JX1		P.O.A.
ROLAND D70		P.O.A.
ROLAND D5		£429
ROLAND E15 E35 E70		IN STOCK
ROLAND U20	IN STOCK	£749
CASIO VZ8M	EXPANDER (USED)	£149
KORG M1 USED		£849
ROLAND SC55 EXPANDER		P.O.A.
ROLAND MV30	IN STOCK	P.O.A.
ROLAND FP8 DIGITAL PIANO		P.O.A.
KAWAI K1 MK11		£479
KAWAI K4R	EXPANDER	£369
KAWAI SPECTRA		£325
KORG DW8000 USED		£325
KORG T1, T2, T3		P.O.A.
KORG EX8000 USED		£325
ENSONIQ SQ2		P.O.A.
ENSONIQ SQ1 +		P.O.A.
ENSONIQ SD1		P.O.A.
PEAVEY DPM3	EX HIRE	£1100
EMU PROTEUS 11	SHOP SOILED	£725
EMU PROTEUS 1	SHOP SOILED	£525
EMU PROTEUS II XR		£899
RHODES MODEL 660 EX DEMO		£625

SAMPLERS		
ROLAND S50	(USED)	£699
AKAI S950		P.O.A.
AKAI S1000, S1100	ALL IN STOCK	P.O.A.
AKAI S1000 HD		£2230
ENSONIQ EPS-16 PLUS, EX HIRE		£1399
ROLAND W30	IN STOCK	£1199

SEQUENCERS		
SEIKO MR 1000 (5000 NOTE SEQUENCER)		£49
ROLAND MC50	(USED)	£429
KAWAI Q80	(USED)	£349
YAMAHA QY 10 SEQUENCER	IN STOCK	P.O.A.
ATARI 1040STE + MONITOR		P.O.A.
C-LAB NOTATOR STEINBERG CUBASE, CUBEAT		£99
ROLAND MC500	(USED)	£349

DRUMS		
YAMAHA RX8		£199
YAMAHA RY30		P.O.A.
ALESIS SR16	EX HIRE	£220
ALESIS HR16, HR16B		£189 each
ROLAND R8 DEMO		£399
ROLAND R8, R5	NEW LOW PRICE	P.O.A.
ROLAND PAD 80		£399
ROLAND SPD 8		£299
KORG S3		£399
SIMMONS TRIXER	(USED)	£499
EMU PROCUSSION		P.O.A.

RECORDING EQUIPMENT	
SANSUI WSX1 SIX TRACK WORKSTATION	£699
SANSUI MX 12, 12 - 6 -2 MIXER	£275
YAMAHA MT3X	£389
TASCAM 246 (USED)	£399
TASCAM PORTA 05HS	£299
TASCAM 424, 488	ALL AVAILABLE
BOSS RV1000 REVERB	£115
ALESIS QUADRAVERB	BEST EVER PRICE
SOUNDTECH ST200 CC COMP / LIM	£149
YAMAHA DTR2 DAT RECORDER	POA
YAMAHA FX500 USED	£219
ART MULTIVERB LT	£169
ART MULTIVERB 111	£249
ART SGE MU 11	£449
FOSTEX R8 + SANSUI MX 12	£1525
FOSTEX R8 + FOSTEX 812 MIXER	£2200
FOSTEX R8 + RSD PROLINE GOLD 16-4-8	£2345
FOSTEX R8 + RSD PROLINE GOLD 16-8-16	£2425
FOSTEX R8 + MIXDOWN GOLD 16-4-8	£2760
TASCAM TSR8 + RSD PROLINE GOLD 16-8-16	£3100
CASIO DA7 DAT RECORDER	£469

SANSUI WS-X1

COMPLETE 6-TRACK RECORDING STUDIO
- 6-CHANNEL MULTI TRACK RECORDER
- 8-CHANNEL STEREO MIXER
- 2-CHANNEL MASTER STEREO RECORDER
- BUILT-IN DIGITAL REVERB

ORIG. RRP £1199
£699

KAWAI K4

DIGITAL SYNTHESISER
- 61 NOTE VELOCITY & PRESSURE SENSITIVE KEYBOARD
- 256 16 BIT PCM & DIGITAL CYCLIC WAVEFORMS
- 16 DIGITAL EFFECTS
- 61 PCM DRUM SOUNDS
- 64 SINGLE PATCHES/64 MULTI-PATCHES/32 EFFECTS PATCHES
- 16 NOTE POLYPHONIC
- 8 CHANNEL MULTI-TIMBRAL

ORIG. RRP £895
£469

KAWAI K1R

DIGITAL SYNTHESISER
- RACKMOUNT K1 SYNTHESIZER
- 8 CHANNEL/16 NOTE POLY VIA MIDI
- 64 INTERNAL PATCHES
- 32 MULTIPATCHES
- RAM AND ROM CARD FACILITY

ORIG. RRP £449
£259

RHODES MK 60

DIGITAL PIANO

- 64 NOTE KEYBOARD AND OCTAVE SHIFT
- FULLY WIEGHTED ACTION
- 8 HIGH QUALITY DIGITAL SOUNDS INCLUDING - VIBRAPHONE, CLAVICHORD, ELECTRIC PIANO, ACCOUSTIC PIANO.
- BUILT IN FX
- BUILT IN EQ

ORIG. RRP £1299
£499

EXCLUSIVE OFFERS

ALL ITEMS ARE NEW, USED OR EX-DEMONSTRATION

KORG M1 WORKSTATION	£899
ROLAND PAD80 MK II MIDI PADS	£349
YAMAHA TQ5 SEQUENCER/EXPANDER	£225
YAMAHA TG55 EXPANDER	£399
ROLAND U220 EXPANDER	£439
YAMAHA SY77 WORKSTATION	£1199

ALL PRICES ARE INCLUSIVE OF V.A.T.

Access VISA

(0202) 395135 EXT. 125

EDDIE MOORS MUSIC LTD.

THE SOUND INVESTMENT

679 Christchurch Road, Bournemouth BH7 6AE

THE LARGEST MUSIC SHOP ON THE SOUTH COAST

NOTHING CAN TOUCH A KURZWEIL

NOW IT'S WITHIN YOUR REACH

Our synths, expanders and digital pianos were once hte exclusive property of mega groups. Now those legendary sampled sounds can be all yours.

The best sounds you will ever hear for far less than you think.

For further information call
Acrobat Music Ltd on **071 267 9229**

KURZWEIL™
Music Systems

➢ apart is an ideal way to learn how to program your own. In this connection, a Stack function called Audition Layer very helpfully allows you to isolate individual Instrument Layers by "soloing" them.

It's now time to take the plunge and look at Stack parameters in more detail. There are five parameters associated with each Instrument within an Instrument Layer: Reverse, Delay, Pitch, Tone (basic filtering) and Sample Start. If you enable Reverse, the Instrument is played backwards. Delay time determines how soon the Instrument will start playing after the Stack has been triggered; this can be set on a scale of 0-63, which covers a time span of 0-13 seconds! One obvious use for Delay is to create echo effects by assigning progressively bigger time delays across the four Instrument Layers. There are plenty of tricks you can get up to here, such as having a different sound, and/or changing the pitch of the sound, on each "repeat". As Pro/cussion allows you to assign two Zones to the same MIDI note range and so layer up to two Stacks, you can create echo effects with up to seven "repeats".

As its name suggests, the Sample Start parameter allows you to define a playback start point other than the beginning of the sample. Using a combination of the Sample Start and Delay time parameters and layering two or more Instruments, you can combine the attack of one Instrument with the decay of another. What's more, Sample Start is a modulatable parameter, so for instance you could control the attack characteristics of a Stack from velocity.

Other modulatable parameters within an Instrument Layer (or across all four Layers) are Instrument pitch and tone, DCA accent and level, and pan position. As mentioned earlier, you can modulate the DCA using a volume envelope. This envelope's three stages - Attack, Hold and Decay - can themselves be modulated. Modulation sources are: velocity, MIDI note number, Trigger Tempo, Random, MIDI Control A/B/C/D (any four MIDI continuous controllers), aftertouch, pitchbend wheel and LFO. Within a Stack, up to four modulation patches can be programmed, a patch consisting of a mod source, a mod destination and a mod amount (which can be + or -). The destination parameter in each case can be in all four Layers or an individual Layer.

The simplest Stack configuration is layering, but Pro/cussion also provides various options for dynamically-controlled switching or crossfading between different Instrument Layers within a Stack (in response to velocity or a MIDI controller, say).

One of the most striking features of Pro/cussion is Trigger Tempo. You may have noticed that this is one of the mod sources listed earlier. Basically, you can program a tempo of between 20-260bpm, and when you play two or more notes within the time defined by the tempo (so 0.5 seconds at 120bpm) Pro/cussion generates a control signal which is routed to whatever mod destination Trigger Tempo is assigned to. You can do some strange things here, like have a rapid repeat which changes in pitch, brightens or darkens in tone, or triggers from a completely different point in the sample - and you can make the change as subtle or as extreme as you want.

VERDICT

IF RHYTHM IS an important feature of your music and you like your drum and percussion sounds adventurous, contemporary, beefy and punchy, with plenty of oomph where it's needed and bags of attitude, Pro/cussion should definitely be on your list of Things I Should Check Out. We're talking powerhouse stuff, here.

There's a great deal of depth and a great deal of attention to detail in Pro/cussion. The sonic versatility provided by its samples and waveforms coupled with its layering abilities, the plentiful editing options provided by the synth-style architecture of its Instrument Layers and the tremendous sonic flexibility of its dynamic modulation features ensure that there's ample scope for the creative sound programmer.

At the same time, these very features have allowed E-mu to provide you with a large and versatile factory-programmed sound library, so you can work at the straightforward Kit level without needing to get your hands dirty at the deeper programming level, if programming isn't really your thing.

Shortcomings? Well, I would have liked to have had more than 24 Stacks per Kit; admittedly, because you can use Pro/cussion in a MIDI multitimbral fashion, you can easily trigger different Kits simultaneously, but personally I would still have liked more sounds within a Kit. I would also have liked more than eight custom Stacks per Kit - once you start getting into programming in a big way, and uncover the real versatility of Pro/cussion, eight can seem a bit limiting.

Talking of sound programming, filtering on Pro/cussion is basic to say the least. The filter cutoff point can only be set by a dynamic modulation source, which makes it hard to fine-tune the timbre of a sample or waveform, you only get low-pass filtering and there's no resonance. Also, the filter didn't allow me to roll off as much top end from some of the bass drums as I wanted to.

What about Pro/cussion's lack of a ROM card slot or two for plugging in further samples? Well, I reckon the expander's ability to "transcend" the sonic range of its built-in samples so effectively makes this much less of a problem than it might be on a unit which allows you to do relatively little to its samples. Having said that, the prospect of an extra 4Mb of sample ROM is not one to be sniffed at.

Ultimately, Pro/cussion can't replace the particular sonic open-endedness of a sampler, but I'd say it has quite enough going for it to make it an essential instrument wherever contemporary rhythm tracks are being programmed.

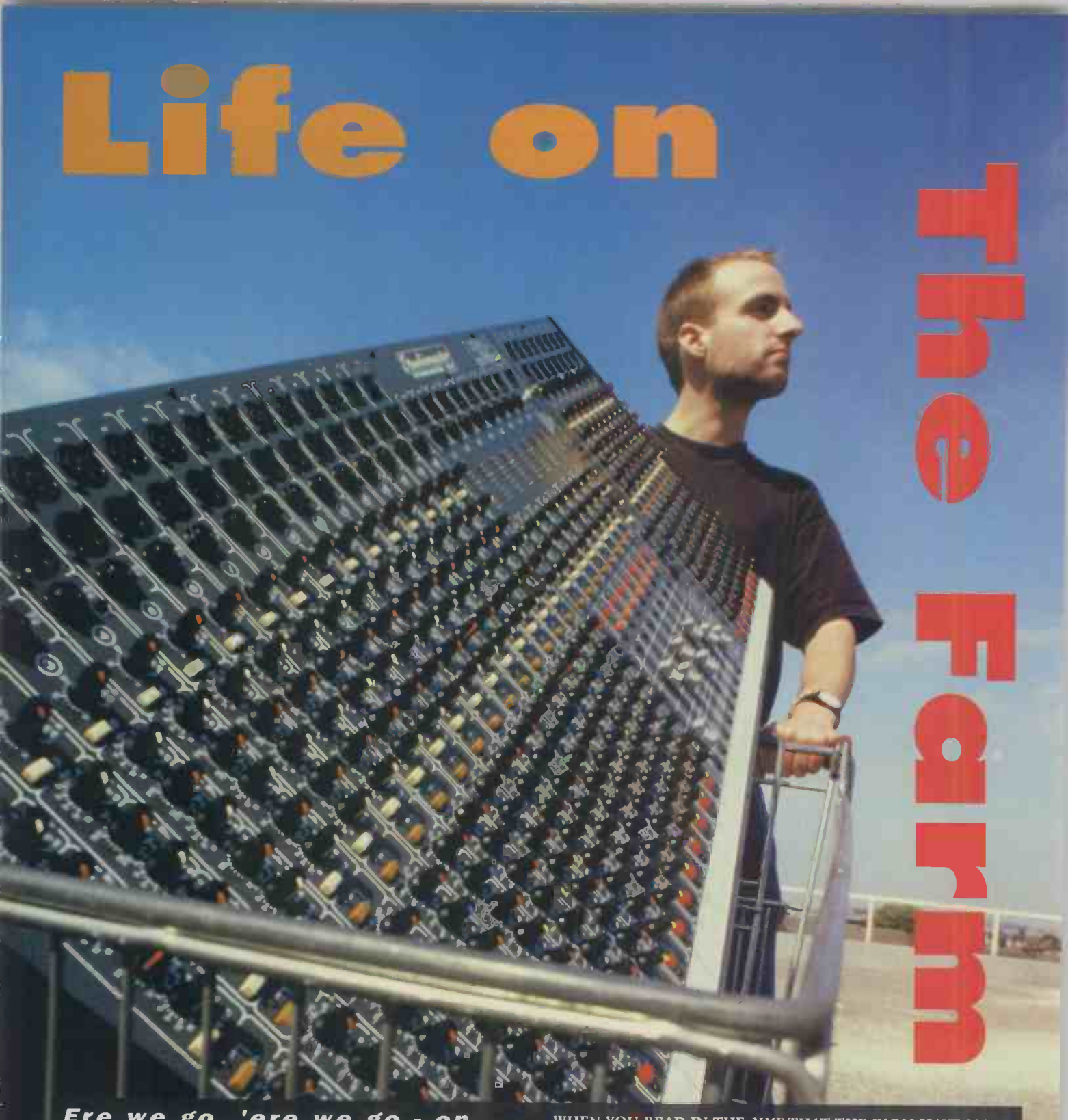
Now you too can be a Pro. ■

Thanks to The Synthesiser Company for providing the review model.

Price *£749 including VAT*
More from *E-Mu UK, PO Box 1, Prestonpans, East Lothian EH32 0TT. Tel: (0875) 813330.*

"You can do some strange things here - rapid repeats which change in pitch, or trigger from a different point in the sample."

Life on The Farm



Ere we go, 'ere we go - on the crest of a Mexican wave, The Farm are about to take their music and football terrace humour to America. But what's it got to do with MIDI? Interview by Tim "You Wot" Goodyer.

WHEN YOU READ IN THE *NME* THAT THE FARM HAVE MADE a pre-season transfer bid of £1.5m for Happy Mondays dancer Bez (and that the offer has been rejected by a straight-faced Shaun Ryder) it does little to change the impression that they're a bunch of scally football fans making a comfortable few quid out of music - let alone convince you that they might be even passingly conversant with MIDI technology. Yet my recent meeting with Farm keyboardsman Ben Leach revealed that of the group's remaining five members, no less than three have home MIDI setups - including the drummer. Clearly, there's more to Liverpudlian football fans than I'd expected.

When you get down to it, there are many unexpected aspects to The Farm - that they've been making music since around 1982, that they've worked their way through no less than two brass sections and that they once took part in a ska revival tour (which got them booed off stage - "they found us out"). More widely known is the fact that they have their own football fanzine (The End), their own record label (Produce), that they're managed by ex-Madness frontsman Suggs and

PHOTOGRAPHY: TIM GOODYER

READERS SPECIAL OFFER

Have you got MIDI problems?

Solve your MIDI problems with Music Technology Special readers offer, the MA36 36 function MIDI analyser.

The MA36 is a neat battery powered MIDI analyser which uses 36 red LEDs to tell you everything from the number of MIDI channels in use to what kind of information is going down it.

only £29.99 inc VAT and P&P

You can check for:

Active Sensing	Channel Pressure
System Reset	Pitch Wheel
Errors and Interrupts	System Exclusive
Note On/Off	Song Position Pointer
All Notes Off	Song Select
Poly Pressure	Tune Request
Control Change	End Exclusive
Program Change	Midi Clock
	Start/Continue/Stop

The MA 36, previously sold elsewhere for £49.95, is available exclusively to Music Technology readers at a special price of only £29.99 inc VAT and P&P.

To order your MA 36, phone our 24 hour credit card hotline on 0898 100749* or clip the coupon below.

Please send me ..... MA 36 (s).

I enclose a cheque/PO for £..... made out to:

Music Technology, MA 36 Offer, Alexander House,

Forehill, Ely, Cambs CB7 4AF.

Please include your full postcode and allow 28 days for delivery.

*Calls cost 34p per minute cheap rate and 45p per minute at all other times.

Name .....

Address .....

.....

.....

Postcode ..... Tel: .....

MT'9

➢ that their recent debut LP, *Spartacus*, went straight into the Gallup charts at No 1. Not bad for a bunch of scallies.

"No 1 - I'd say that was fuckin' great, never mind not bad", explodes Leach, sounding like the entire male cast of *Brookside*. I suppose he's got a point.

In fact, the track record of the group's recent singles gives some indication of their rise to commercial success. A track called 'Hearts and Minds' featured breaks lifted from Snap, and put The Farm on the national map. A cover of The Monkees' 'Stepping Stone' followed in April last year and made it into the Gallup 50s. While The Farm have been ably assisted in their pursuit by Terry Farley - a London DJ who has been responsible for producing dance versions of certain of the songs for consumption by the capital's clubland - it was 'Groovy Train' that saw them well into the Top Ten and assured the success of *Spartacus*.

"The local following's been big for years and years", comments Leach, "but we started to get a national following with the first single. With 'Groovy Train' it were just getting bigger and bigger so we hoped the album would do pretty good, but we never expected No 1. A party was had. I think we were on tour when we found out. I can't remember where we were. Some mad town - Leicester or somewhere."

With another stint in the recording studio imminent, Leach explains that last night he was celebrating the Last Wednesday Before Going Into The Studio. Tonight he's intending to celebrate the Last Thursday Before Going Into The Studio. The Farm, it seems, like to party.

Turning our attention to Leach's involvement with The Farm, it transpires that he was the trumpet player with the group's second brass section.

"That went down the pan about May '89 and that was when I started doing all the keyboards and programming and stuff", he recalls.

"When I joined I'd say the direction of the group was very different to what it is now. At the time they got the brass section in it was going through a ska phase which was. . . interesting. No, it was good. We weren't a ska band though, the only reason we were doing it was to get on a tour in this ska revival thing getting 500 quid a gig - but we got booed off. It was a good laugh though."

Leach can lay legitimate claim to having trained as a classical trumpet player, his second instrument being the bass. His keyboard training, however, began much earlier in his life.

"Me mum's a piano player, so when I was about four years old it was 'sit at that piano and practice your scales'. I had all that when I was a kid but then I packed it in. I knew me way round the keyboard though, I knew me chords and everythin', it was just playing them one after another that was the hard bit."

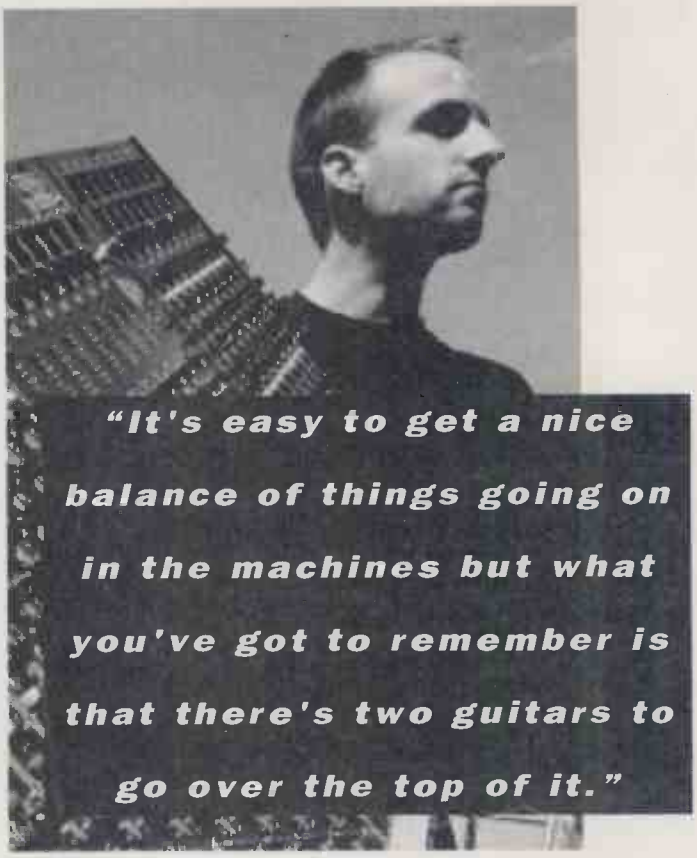
The lineup that settled after Leach's change of role was as it is now - vocalist Peter Hooton, guitarists Steve Grimes and Jah Love (Keith Mullen), bass player Carl Hunter and drummer Roy Boulter. Along with playing the keyboard parts required by the music in its various forms, Leach also walked into the job of resident Farm programmer.

"I liked working on the album because there was quite a bit of programming on it so I was quite heavily involved", he recalls. "I don't do any of the writing, I come in when the production starts although I do help arrange the stuff. The way The Farm works is that someone will come in with an idea for a basic song and then we'll all play around jamming with it. It all starts off with guitar but it's only when we've got an actual structure there that I'll start programming percussion parts and string pads to go over it.

"Peter's got this sad old mono tape recorder called a Mono which he's had for years and it does the best rehearsal tapes I've ever heard. So we get everyone playing and jam the song through so that I've got an idea of the structure of it - and I work from that. What I do may change what the others do. I might come up with a new middle eight or a synth melody that affects the vocal melody or what Keith's doing with his guitar. For instance, if I come up with a melody Keith may copy that, otherwise I'll copy his melodies over onto the synths. Or I might do something completely different to give some interesting variations.

"Once we've got the idea for a song I throw loads and loads of stuff on it and then start stripping things away again. I layer about 12 different pads and synth bits and stuff, and have it all going on together. Then I'll start taking things out and replacing things and bringing some of the old things back until I find a balance. I like putting everything I can down because I can always take it away, but if it's not there in the first place you don't know what you might be missing.

"It's really easy to get a nice balance of things going on in the machines but the thing you've got to remember is that there's also two guitars that have got to go over the top of it. And there's a real bass player and a real drummer who've got to play with it. For example, with sync'd basslines the idea is to do something that an electric bass can't do, like going really low - it's pointless just to copy it.



"I do most of the computer pre-production in the rehearsal room and then take all me stuff into the studio so, like, most of the hard work is done already and it's just a matter of fine-tuning it. Once we're in the studio I'm there all the time. I really enjoy it; I'd rather be in the studio than anywhere else - unless it's a party."

THE EQUIPMENT BEHIND THIS UN-CHARACTERISTICALLY civilised method of working is as impressive as that associated with many more obviously hi-tech projects. At the heart of the system is an Atari Mega4 ST running Steinberg's Cubase sequencing program - but it's come on a long way from the old Roland sequencer which first experienced life on the Farm.

"To start with I was getting all my stuff out of my own money", explains Leach. "Then we set the record company up and I could get money from there to get the stuff I needed.

"I started off very small with an Ensoniq Mirage and a little drum machine. Then I updated and updated it and now it's getting ridiculous. It was a case of the expectations of the rest of the band - they would be saying 'I want to do this' and 'why can't it do that?'. If you've got

somebody saying to you 'I want you to do this' and the piece of equipment you've got can't do it, obviously you need some more equipment. So it just sort of grew because of that.

"I got an S950 and within about two weeks I'd outgrown it. The memory just wasn't big enough. I then got an S1000 with two Meg of memory in it and I grew out of that. Then I got the extra boards in it and I grew out of that. Now I'm using a DAC 44Meg hard drive as well. At the same time all that was going on, I was using an old Roland sequencer - it was shite but it did the job for a while. Then I got an Atari 1040 and that soon wasn't big enough so I got a Mega4. I'm running Cubase on that with an SMP24 synchroniser on it. I'm also using a D50, E-mu piano module and a K1m - I used to have the keyboard, but I swapped it for a rack unit. God knows how many MIDI channels I'm running of the 64 I've got available. The latest thing I've had to get is the Studiomaster desk. The PA company we use suggested that there was this desk that would be ideal for my setup. At the moment I've got so much shit going on that the monitor guy is run off his feet trying to keep me happy - then he's got the rest of the band to take care of.

"What I've got is two rack DI boxes taking 16 inputs each straight into the monitor desk and from there to the main desk. What we're going to do is put it through the Stagemaster so that I can control my own monitor mix and split that straight off into the monitor desk so that everyone else can have what they want. But I can do what I want cos I'm a fussy bastard. Last time I spent most of the gigs on the headset saying 'turn that down, turn this up. . .' This way I can look after myself and leave the monitor guy for the rest of the band, which is a pretty big job in itself.

"The other thing is that we can use it as a rehearsal desk - at the moment we hire stuff off Concert Systems but for the money we spend hiring one we could buy it in a couple of weeks."

If it's something of a culture shock to discover that The Farm have a technically and musically literate keyboard player, it's even more ridiculous to be asked to believe that there are three more MIDI-aware members within their ranks.

"Everyone is really into all this gear", affirms Leach. "It's not like they were a band and then the keyboard player came along with loads of computers and stuff. Steve, for example, has been playing around with technology for years. He even did a MIDI course a couple of years ago. He comes out with some really weird shit.

"When we're working it's not a case of me 'going away' to work on the stuff because it's all done in the rehearsal room. They're free to come in any time they want to - it's just that they usually sit in the pub next door. No, I leave the computer on all the time and any of them can go in and mess with any of the gear.

"Four of us have got MIDI setups at home - Carl, the bass player, has just bought an Ensoniq SQ80 and he's already got a Tascam four-track; Roy's got an S900 and a Simmons Portakit; Steve's got a Casio keyboard and a four-track. . . I think Carl's going to get an Atari and Cubase, we should get everyone one really - then we could work over the telephone when we're not talking to each other in ten years' time! This is the way forward, I think: modems."

Moving away from the gear itself and on to the sounds it's used to produce, we discover that while Leach doesn't belong to the Richard Barbieri school of programming, where he might spend hours locked away from humanity creating unique synth sounds. Instead he relies quite heavily on custom edits of commercially-available sounds and isn't above resorting to lifts from other artists' records.

"I use mostly factory percussion sounds", he confirms, "and make loops up out of them as well as using other peoples'. We do lift 'certain things' off record but everybody does that. Only one person's ever spotted anything we've sampled and he was flattered by it (Leach won't identify it). The thing is that when you sample stuff off record, half the time it's been sampled before. You can trace it back generations. Another thing we do is get two records and mix them together with one going backwards just to make something interesting to loop. On one track off the last album there's a loop that you couldn't possibly recognise or make any other way.

"I also use the sampler for bass sounds - I've got some really fat powerful bass sounds - and Mellotron sounds and some spacey Micro Wave-type things. These are all completely legal and come out of the Akai sample library. I do edit all the sounds myself though, so there's nothing like off the shelf. I've got the best edited D50 string pad around. It's brilliant, I've used it on almost every Farm song. It's a fat pad sound that just sits in the background and fills the sound out without overpowering anything."

As the next Farm single, 'Mind' is released in the UK to certain commercial success, the group are about to undertake a major tour of the United States supporting Big Audio Dynamite. In anticipation of this, they've just had a storming dance remix of 'Groovy Train' completed by US production/remix team Musto & Bones. Sadly it doesn't look as if the remix will become available this side of the Atlantic; instead we'll have to settle for the Sound Tools re-edit of 'Stepping Stone' on the flip side of 'Mind'. But the Musto and Bones remix raises the question of the apparent schizophrenic nature of the Farm's music - one minute it's beer boys' sing-along pop, the next it's a dancefloor showstopper. Leach reveals what he believes to be The Farm's greatest asset.

"Fuckin' good tunes", he declares. "It doesn't matter what you tart it up with, whether you tart it up with a brass section, a ska rhythm or a load of computers and synths, what really matters is a good melody. Know what I mean? I think there's a big difference between a good groove and a song. Grooves are great in a nightclub - you don't listen to the tune then anyway. But if you're talking about a mass market appeal you've got to have a song there. And that's what I feel The Farm's got: fuckin' good songs. It doesn't matter if you just play them with an acoustic guitar and a vocal, they're still good songs.

"I like the beepy house stuff and I listen to it myself but there's a time and a place for everything and that sort of stuff is for when you're completely off your face in some dingy nightclub. It's not what you want to listen to when you're doing the washing up or driving down the motorway. I think that you can listen to the music of The Farm in a nightclub or when you're having your dinner or when you're out in the garden."

It certainly makes intellectual sense and would go a long way to explaining the huge commercial success the group are enjoying. There's still one matter I can't resolve, however. . .

"How do I match up all the hi-tech stuff with the fact that we're a bunch of lads going out for a piss up? I don't know. We just have a laugh and enjoy ourselves", says Leach in their defence. Days later the group apologise publicly for throwing monitors off the stage at Feile '91 after being described as taking to the stage "singing football songs and acting pissed". In spite of the appliance of science to their music making, it seems that the public image of The Farm as football hooligans still has quite a while to run. ■

EQUIPMENT LIST

Akai S1000 (8 Meg) with DAC 44Meg hard drive
Atari Mega4 ST
E-mu Systems Proformance Piano Module
Kawai K4m Synth Expander
Roland D50 Synth
Steinberg Cubase Sequencing Software
Steinberg SMP24 Sync Interface
Studiomaster Stagemaster 24:8 Monitor Desk
Yamaha KX88 MIDI Master Keyboard

A5 MULTI-FX/GUITAR

PHOTOGRAPHY: JAMES CUMPSTY

Korg's new budget multi-effects processor chains five effects together in a floor-standing unit optimised for live use. Review by Simon Trask.

WHERE MOST EFFECTS units fit neatly into a 19" rack and don't take kindly to being stomped on, Korg's new budget multi-effects processor has been designed for floor-level use and positively invites you to put the boot in. And where most effects units include MIDI sockets and allow their patches to be selected remotely from a sequencer or from the front panel of a MIDI instrument, the A5 forgoes MIDI communication and puts effects patch selection not at your fingertips but at the soles of your feet. Whether it's a unit to be looked down on, however, is a matter of perspective - so let's consider the different angles.

ANGLE ONE

THE A5 IS a multi-effects unit providing five digital effects organised in a single effect chain - the Multi-FX version is so called because it's intended to be used as a multi-purpose effects unit, whereas the Guitar version has been optimised for a specific instrument. Well, that's the intention, but if technology was only ever used in the way the manufacturers intended it to be used, we'd all be poorer for it (and that includes the manufacturers, too - sampler manufacturers, for instance, have benefited greatly in sales terms from their instruments being used to lift breaks off records, surely an application which they never envisaged). ➢

MUSIC CONNECTIONS

Now we have changed our name from Future Music Chelsea to Music Connections Chelsea.
We are the same great store with all the best gear.
Now with our new store in Chelmsford our buying power is even greater. So you can be sure of getting what you want, when you want it and at the price you want.
071 731 5993

Chelmsford

GREAT NEW STORE!
LATE NIGHT SHOPPING THURSDAY
10 mins from M25 ! 15 mins from M11 ! 30 mins from A1M !
LOADS OF FREE PARKING 30 mins by train-Liverpool St.
Massive hi-tech selection. Treat yourself to a new experience – visit music Connections at Chelmsford. So easy to get to !
0245 354777

RECORDING PACKAGES

Fostex R8 + 812	£1697	Tascam TSR8 + Tascam 2516	£2995
Fostex R8 + RSD Proline 16-4-8 gold	£1898	Fostex R8 ex-demo	£989
Fostex R8 + RSD Proline 16-8-16 gold	£2059	Tascam TSR8	£1649
Fostex R8 + Tascam 2516	£2320	Tascam MSR16 + Mixdown 16-8-16	£4754
Fostex R8 + RSD Proline 8-4R	£1659	Tascam MSR16 + Proline 16-8-16 gold	£4315
Fostex R8 +RSD Mixdown 16-8-16 Gold	£2548	Tascam MSR16 + Tascam 2516	£4576.51
Tascam TSR8 + RSD Proline 16-4-8	£2499	Tascam MSR16 + RSD series 2 16-16-2	£5880
Tascam TSR8 + Fostex 812	£2395	Fostex G16S EITHER ON ITS OWN OR IN A PACKAGE, GREAT DEALS AVAILABLE !!!!	
Tascam TSR8 + RSD Proline 16-8-16 Gold	£2747		

Chelsea

MUSIC CONNECTIONS
202 NEW KING'S ROAD LONDON SW6 4NF
TEL: 071 731 5993/071 736 4771
FAX: 071 731 2600

SCOOP!
Rhodes 660 keyboard equivalent of Roland U20
RRP £995 **Our Scoop price £510 + VAT**

SMPTE GENERATORS

Steinberg Midex plus	£Good
C-Lab Unitor 2	£POA
XRI300	£165
JL Cooper sync link	£POA

★ STOP PRESS ★
NEW KORG 01W ON SHOW
YOU MUST HEAR IT
★ STOP PRESS ★

NEW FROM YAMAHA
In stock & on show .The fabulous SY99 keyboard all SY series keyboards in stock. New QY10 sequencer in stock + the fabulous New RY30 drum machine on show, you must hear it!! Want to try a YAMAHA sound effects unit, well just come in they're here and waiting for you.

NEW PRODUCTS NOW IN
Roland S750 Sampler, New Korg 01W Synth, Roland FP8 Piano
Alesis 3630 Compressor

SEQUENCERS

Alesis Datadisk	£POA	Alesis MMT8	£POA
Roland MC50	£399	Yamaha QY10	£Phone

COMPUTERS & SOFTWARE

1040 + MON + MOUSE + C-LAB NOTATOR V3.1	£phone	NOTATOR 3.1	£299
1040 + MON + MOUSE + C-LAB CREATOR V3.1	£Phone	MOTU PERFORMER	£283
1040 + MON + MOUSE + STEINBERG CUBASE V2	£715	MOTU COMPOSER	£283
1040 + MON + MOUSE + STEINBERG CUBEAT MRP £898	our price £695	MOTU MIDI TIME PIECE	£POA
CUBEAT	£160	MOTU VIDEO TIME PIECE	£POA
CUBASE	£299	OPCODE VISION	£PHONE
PRO 24	£60	These are just some of the fantistic computer deals available. Everything from Apple...Ateri...Opcode...C Lab...Steinberg...MOTU...Digidesign	

DRUM MACHINES

Boss DR550	£126	EMU Procussion	£449
Alesis SR16	£Phone	Roland R8 used	£299
Roland R8M	£325	SPD8	£289

SIGNAL PROCESSORS

Boss CL50	£84.25	Multiverb 3	£254
Yamaha FX500	£199	EMP100	£189
ART LT	£125	SPX900	£399
Microverb 3	£POA	XR! 300 SMPTE	£159
Quadraverb Pius	£Phone	KORG A1 ON DEMO YOU MUST HEAR IT	

THIS IS JUST A SELECTION OF THE EFFECTS WE HAVE IN STOCK

MOTHER KEYBOARDS

Roland PC200	£112
Roland A80	£995
Yamaha KX88	£POA

PIANOS

EMU Proformance	£263
Korg SG1X	£Great
Roland FP8	£POA
Rhodes MK80	£Phone

PORTASTUDIOS

Porta 03	£199	Tascam 424	£369
Ex-demo MT1X	£211	Tascam 488	£POA
Fostex X26	£219	Tascam 644	£729
Fostex X28	£Phone	Tascam 688	£Phone
Fostex 280	£399	Yamaha MT100 Mk 2	£275

SAMPLERS

Akai S950	£899	Ensoniq EPS16+	£Great
Akai S1000 Keyboard	£1697.87	Ensoniq EPS Keyboard	£Phone
Akai S1000	£POA	Akai S900 used	£595
Akai S1100	£Phone		

Accessories & boards in stock for most machines

KEYBOARDS & RACKS

EMU Proteus 1	£425	Yamaha TG33	£Phone
EMU Proteus 2	£630	TG77	£POA
Roland U220	£424	Matrix 1000	£349
Roland SC55	£424	Ensoniq SQ1+, SQ2	£phone
Korg M3R	£POA	Ensoniq SD1	£phone
Korg M1	£799	Ensoniq EPS 16 +	£Phone
Korg WS1 Ex	£995		
Roland D110	£339	ALL YAMAHA SY SERIES KEYBOARDS	
Roland D10	£449	IN STOCK AND ON SHOW	

USED & EX-DEMO BARGAINS

Roland MU30 Immaculate	£895
Akai S900 VGC	£695
Prophet 2000 with library	£495
Roland D20 as new	£695
Ensoniq Mirage inc library	£495
Alesis Quadraverb VGC	£250
Roland TR505 VGC	£135
Roland MC 300 sequencer	£299
Yamaha DD10 drum box	£30
Korg DDD5 Drums	£99
Ensoniq VFX - SDII good condition	£1395

All 2nd hand prices include VAT

ALL PRICES EXCLUDE VAT
24 HOUR DELIVERY
MON-SAT 10-6PM
EASY FINANCE SUBJECT TO STATUS

AMERICAN EXPRESS · DINERS CLUB INTERNATIONAL · VISA · Access

Chelmsford

MUSIC CONNECTIONS
CHELFORD COURT, 37c ROBJOHN'S ROAD,
CHELMSFORD CM1 3AG
TEL. 0245 354 777 FAX 0245 355 007

... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ...

K4R
RACK MOUNTED VERSION
WITH SEPERATE OUTPUTS
£339

KAWAI K4
- 8 CHANNEL MULTITIMBRAL• 128 16 BIT VOICES
- DIGITAL FX• 61 DRUM PROGS• SAMPLED WAVEFORMS
- 32 MULTI-PATCHES• 64 PROGRAMMES•

Never before has such a versatile synthesizer been available at such an incredibly low price. A fabulous combination of rich analogue and authentic sampled sounds (including 61 drum samples), enhanced by stereo digital effects.

THE MUSIC CORPORATION (UK) LTD
RRP £869
£399

MULTIVERB LT

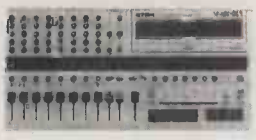
At this price the multiverb provides professional processing power to the most modest of set-ups, without compromising the quality. Its combinations of chorus, delays, reverbs, flanges, tap delays, gated reverbs, reverse reverbs & panning effects make it the most versatile unit at such an incredible price.

£135

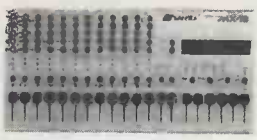
KAWAI K1R WAS £390 NOW £219

19" RACKMOUNT SYNTH MODULE — 64 PROGRAMMES
32 MULTI-PATCHES — SAMPLED WAVEFORMS
61 DRUM SAMPLES — 8 CHANNEL MULTI-TIMBRAL
THE BEST LOW COST MODULE CURRENTLY AVAILABLE

SANSUI SPECIAL OFFERS



WSX-1
8 CHANNEL MIXER
6TRACK MULTI-TRACK
2 TRACK MASTERING
DIGITAL FX
THE MUSIC CORPORATION (UK) LTD £599



MX-12
12 CHANNEL MIXER
6 SUBGROUPS
2 AUXILIARIES
RRP £599
THE MUSIC CORPORATION (UK) LTD £225

NEW AND USED EQUIPMENT

AKAI S1000HD	£1899	YAMAHA SY77 EX-DEMO	£1100	MOTU 7SMIXER	£360
AKAI S1000	£1599	YAMAHA SY55 WORKSTATION EX-DEMO	£499	MOTU PERFORMER	£249
AKAI S950	£899	YAMAHA SY22 WORKSTATION EX-DEMO	£425	YAMAHA MT3X 4-TRACK	£339
KORG T3 EX	£1499	ROLAND D10	£469	YAMAHA MT100 MKII 4-TRACK	£265
KORG M1 S/H	£699	ROLAND U220	£375	ENSONIQ EPS 16+	£1099
KORG S3	£399	ROLAND W30 SAMPLER	£999	ENSONIQ EPS 16+ RACKMOUNT	£1099
ROLAND R5	£199	ROLAND TR626 DRUM MACHINE	£149	ENSONIQ VFX SD	£1099
ROLAND U20	£575	YAMAHA QX7 SEQUENCER	£149	ENSONIQ SQ1+	£699
ROLAND MV 30	£849	YAMAHA PF85 PIANO	£639	ENSONIQ SQR	£499
KORG M3R	£499	YAMAHA RX7 DRUM COMPUTER	£249	AKAI ME35T MIDI DRUM TRIGGER	£199
ROLAND RD250S	£680	RHODES MODEL 760	£649	ATARI 1040STE + MON	£425
EMU PROTEUS	£465	TASCAM 424 4-TRACK	£325	STEINBERG CUBEAT	£89
EMU PROTEUS IIXR	£799	AKAI ASQ10 SEQUENCER	£599	FOSTEX X26 4-TRACK	£219
ROLAND 707	£89	TASCAM PORTA05 4-TRACK	£349	FOSTEX 280 4-TRACK	£425
EMU PROFORMANCE+	£279	YAMAHA YS200	£275	TASCAM DA 30 DAT	£799
YAMAHA PSR6700	£1275	ROLAND MIDI PEDAL BOARD	£199	KORG DW 8000	£249
ALESIS MEQ230 2*31 BAND GRAPHIC	£165	SOUNDTECH STEREO 31 BAND GRAPHIC	£159	KORG EX8000 EXPANDER	£250
ALESIS DATADISC SQ	£249	YAMAHA QC2020B COMPULIM	£169	KAWAI Q80 SEQUENCER	£375
ALESIS QUADRAVERB+	£249	KORG T2 WORKSTATION	£1600	ZOOM 9002 GTR FX PROCESSOR	£199
ALESIS SR16	£199	YAMAHA SPX90 II	£249	KAWAI K4	£399
CASIO DA7 DAT	£399			N.B. ALL PRICES ARE EXCLUSIVE OF V.A.T.	

THE MUSIC CORPORATION

OVERNIGHT DELIVERY
90 MINS FROM LONDON
VISA · Access

LINK MALL DOLPHIN CENTRE POOLE DORSET TEL: (0202) 684560 (ALL PRICES ARE EX-VAT)

... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ...

THE MUSIC CORPORATION ... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ... THE MUSIC CORPORATION ...

➢ And so it is that the A5 Guitar unit's inclusion of distortion and overdrive effects needn't preclude it from being used with synths, samplers and drum machines.

In fact, the only differences between the two versions, aside from the cosmetic one of colour-coding to enable ready identification (red stripe for Guitar, blue for Multi-FX), are that the Multi-FX version has an exciter effect while the Guitar version has distortion and overdrive and the two versions have different sets of ROM preset effects patches reflecting their different applications. I say "only" differences, but of course these aren't minor in practice.

ANGLE TWO

THE FIRST, FOURTH and fifth effects in the A5's effect chain are compressor, chorus/flanger and reverb/delay respectively. The other effect common to both versions, three-band EQ, is placed in the position that best suits its application in each case - on the Multi-FX version second (before the exciter), and on the Guitar version third (after the distortion/overdrive).

Of the six footswitches which run across the lower half of the A5's front panel, the rightmost is dedicated to switching the unit between effect select and effect edit modes, while the two pinpoint LEDs located above it indicate which of the two modes is active. Depending on which mode is selected, the remaining five footswitches allow you to call up one of five effects patches or turn individual effects within the currently-selected patch on or off. Pinpoint LEDs located above these footswitches allow you to tell at a glance which effects patch is selected or which effects are enabled and which disabled within the selected patch. The A5 switches from one effects patch to another smoothly and all but instantaneously.

Like footswitches 1-5, the six-position slider located in the upper half of the A5's front panel has one function in patch select mode and another in patch edit mode - respectively, selecting a patch Bank and selecting an effect or Utility mode within the current patch for editing. The A5 has a total of 30 effects patches stored in six Banks; five of these (Bank one) are user-programmable, while the remaining 25 are preset in ROM. The ROM presets on each A5 version offer a well-implemented range of effects suited to each unit's intended uses.

In patch select mode, the A5's two-digit LED display indicates which Bank is currently selected and whether or not the active patch is within that Bank (a dot lights up in the lower right-hand corner of the display if it is).

Effect and Utility parameters together with their value ranges are listed in a matrix format next to the six-position slider. Once you've selected which effect you want to edit, turning one of the knobs located at the base of the matrix columns both selects and edits the relevant parameter. The knobs aren't of the infinite rotary type, so turning one selects the value determined by its absolute position. This value is displayed in the two-digit LED, while the dot mentioned earlier lights up whenever the stored value for the selected parameter is displayed (a feature born of necessity, but one which manufacturers might usefully consider adopting more widely). Korg have got maximum mileage out of this little dot, also using it in patch edit mode to indicate whether or not the on/off states of the five effects correspond to the stored on/off states for the current patch.

The only other features of the A5's front panel are an input level knob with associated peak-indicator pinpoint LED, an output level knob, a Write button and an (effects) Bypass button. Any of the unit's 30 effects patches, edited or not, can be Written into the five user-programmable patch locations in an operation which can take a mere two seconds.

The A5's rear panel contains the power on/off button and a DC 9V power input jack (the unit comes supplied with an AC adaptor), a mono audio jack input, L/Mono and R audio jack outputs, a stereo headphones mini-jack output and a volume pedal jack input (intended for use with a Korg KVP001 footpedal, and allowing footpedal control of the overall signal level - one use being to produce effect "swells"). Signal level to the headphones is governed by the A5's main output level control, the volume footpedal, and the master output level Utility parameter (which is programmable per patch - or pre-programmed by Korg in the case of the ROM patches, most of which are set at or near the maximum of 15). If you like your headphone signal loud, you won't be disappointed by the A5 - it comes through loud and clear even when the main input/output levels are set quite low (depending on the strength of the input signal to the unit, obviously).

ANGLE THREE

PROCESSING OF INPUT signals is via 16-bit A/D conversion with 64 times oversampling and a 44.1kHz sampling frequency, with 16-bit D/A conversion taking the effected signal back out into the analogue world again. Background hiss in the output signal can be dealt with by utilising the unit's built-in digital noise-reduction, for which a threshold level (0-15) can be set per RAM patch to determine the extent of the reduction.

The first effect in the chain, compression, is used to reduce the dynamic range of the input signal. The A5's compressor has three parameters, governing the degree of compression, the compressor's response time, and the output level of the effected sound. For a compressor to do its job properly, it needs to be in-line with the signal to be compressed. In the A5's case this means either plugging an instrument directly into it or else using it on the insert point of a desk channel. However, if you want to use the A5 within an aux send/return loop on a mixer - which is quite reasonable given the other effects in its effects chain - you should think of the compressor more as a creative effect than a utilitarian signal processor. In other words, by changing the compressor settings you can change the character of the effected signal which appears at the audio outputs - and in fact the A5's compressor can make quite a difference. ➢

"What I had in mind was using distortion or overdrive on drum and percussion sounds as a means of 'roughing up' the sound of a rhythm track."

SOLO

by Phil Hilborne

A real guitarist's delight this one, for all aspiring widdlers both young and old. Over the years, thousands of guitarists in countless playing styles have made their name through soloing.

Until now, no single book has offered the cream of historic rock solos transcribed, explained and ready for the average musician to play at home.

Solo changes all of that with every-thing from Jimi Hendrix' 'Purple Haze' to The Edge's 'Sunday Bloody Sunday'.

Fifty of the finest guitar solos ever played have been painstakingly transcribed by regular *Guitarist* contributor Phil Hilborne. The result is the most comprehensive collection of guitar solos ever published – an educational aid and an invaluable reference work that will never be out of date. And all for a mere £12.95 (plus p&p), it's a bargain.

Please send me ..... copies of Solo at £14.45 (inc. p&p)

I enclose cheque/postal order for £..... made payable to Music Maker Books

Name.....

Address.....

.....

.....Postcode.....

Please include your full postcode and allow 28 days for delivery

Send to: Mail Order Dept., Music Maker Books, Alexander House, Forehill, Ely, Cambs CB7 4AF.

*To order complete and return this form to the address shown; or to order using your credit card telephone 0353 665577 during office hours, or call the Music Maker Hotline *0898 666199(24 hours)*

Also available in all good music shops. Distributed to the music retail trade by IMP.

**A call costs 36p per minute cheap rate and 48p per minute at all other times.*

GEOFF WHO?

In these days of all too often mindless fretboard frenzy, Geoff Whitehorn is a rare commodity – a player of supreme touch and taste. Although no slowcoach when it comes to technique, Whitehorn is revered by his peers for an ability to milk absolute feel from every note. Combine this with perfect tone and a sense of harmony which draws from blues, rock and the best of British pop and you'll be surprised that they're asking "Geoff Who?"

Available through Music Maker Records on both LP and Compact Disc.

To order, telephone 0353 665577 (office hours) or the Music Maker Hotline 0898 666199 (24 hours) and quote your credit card number.

A call costs 36p per minute cheap rate and 48p per minute at all other times.

Caling all Musicians, Producers, Remixers, DJ's and Programmers!

SAMPLE IT! *the sampling library where Quality meets Quantity, Analog meets Digital. This is the ultimate collection of sounds from rare old analog synths and beatboxes. Digitally edited and mastered. All sounds are specially programmed for SAMPLE IT!*

CLASSIC SYNTHS & BEATBOXES 1 & 2: Classic analog Synths & Beatboxes for sheer power and beauty. Machines of the 60's, 70's and 80's for musicians of the 90's. **Roland TR 808, TR 909, Jupiter 8, MiniMoog, Prophet 5...** We've made a systematic coverage of each machine and you'll find: Basses, Drum & Percussion Samples, Sequencer Sounds, Bleeps & Blips, Pads, Strings, Atmospherics, Solo & Lead Sounds, Synth Brass and Sound Effects. Vol 1= **822** Samples, **237** of these are from beatboxes. Vol 2= **955/424** samples.

BREAKS, GROOVES & RHYTHMS 1: Instant breaks. Just pour these into your sampler and shake. Groove factor: 11 out of a possible 10. **80** different breaks each with **4** different parts, all with tempo indications in Beats Per Minute. House, Techno, HipHop etc. Just Do It!

FX'S & BIZARRE SAMPLES 1: 277 Sound Fx's ranging from a fly to a Howitzer Cannon. Selected and groomed especially for effectiveness in music. **244** Bizzare samples to brutalise even further. Create atmospheres, make songs with a twist and a sting. Dynamic Dynamite!

SAMPLE WAVE SOUNDS & TEXTURES 1: Swirling, foggy, warped, doped, floating and blurred, so beautiful it hurts, so brutal it hurts even more. Included are loads of Vocoder and Prophet VS samples. **599** Succulent Samples. For use in Music and Alchemy.

Write or call us for a FREE booklet on the Sample It! Sampling library

AUDIOQUEST

Price: £ 39 each, any 3 = £ 35 each inc. P&P.(+ local sales tax where applicable). All major Credit cards, bankcheques and int. money orders are accepted. Phone Int+46- 8-618 21 42. 24 Hrs. Fax: Int+46-8-618 43 60. Address: AudioQuest, Lagerlöfsgatan 8-10, 112 60 STOCKHOLM, SWEDEN.

Card ..... # .....

Exp Date ..... Signature .....

Name .....

Address .....

Post address .....

Country .....

Classic 1 ☐ Classic 2 ☐ Breaks 1 ☐ FX's 1 ☐ Textures 1 ☐

Free Sample It! Booklet ☐

➢ The A5's three-band EQ allows you to cut and boost bass (100Hz), mid (one of eight programmable frequencies ranging from 200Hz - 5kHz) and treble (3kHz) frequencies. The amount of cut or boost is set on a numeric scale (±7) which tells you nothing about the *actual* value (dBs) being employed. However, you only need a pair of ears to tell you that cut and boost at maximum settings can be quite severe. This plus the swept mid-frequency's wide range makes the A5's EQ very flexible. There's also a Trim parameter which allows you to set the amount of gain for the input signal (0-15).

As mentioned earlier, on the Guitar version the three-band EQ is preceded by distortion and overdrive, well-described in the manual as high-gain fuzz-type and mild saturation-type effects respectively. You can select one or the other effect, set the amount of distortion or gain (0-15) depending on the effect, set the tone (0-15) and set the output level of the effected sound. Once again, this is no half-hearted effect - you can get some pretty extreme results out of it.

I mentioned earlier that distortion and overdrive needn't be limited to guitarists. Obviously, keyboard players deal with a wide range of sounds nowadays, and distortion is becoming an increasingly common effect on today's synths. However, the A5 Guitar could be a useful, and relatively inexpensive, addition to a sampler, an older synth, or a more recent synth which has dry outputs in addition to its effected outs. What I particularly had in mind, though, was using distortion or overdrive on drum and percussion sounds (collectively or selectively) as a means of "roughing up" the sound of a rhythm track. This is very much a play-it-by-ear scenario, as the same parameter settings can produce very different results on different patterns and different drum and percussion sounds, whereas of course passing a guitar straight into a distortion/overdrive processor gives a stable sound input. Overdrive is often the better suited of the two effects, but distortion can work well, too. The scope of these effects makes them satisfactorily versatile in this percussive context, but nonetheless the best results are achieved by using distortion/overdrive in combination with the other effects, which allow you to "fine-tune" the distortion or overdrive effect.

This sort of "rough treatment" of rhythm tracks may not appeal to everyone, but if drums and percussion play an important role in your music and you're not into playing things straight all the time, I'd recommend you give it a go.

There is one consideration to bear in mind, however: as most of the effects patches are preset, and obviously the Guitar unit's are not preset to take account of drum machines, you may find yourself focussing on the five RAM patch memories. There again, if the idea of live effects edits sounds interesting to you, that may not matter (see Angle Four).

The Multi-FX unit's alternative to distortion/overdrive, an exciter, is also good at making rhythm parts stand out, though in this instance through giving added clarity, definition and presence to the

Computer MUSIC Systems Ltd

MUSIC APPLICATIONS FOR IBM PCs

Call our sales hotline on 071-482 5224 or Fax us on 071-485 9302 !

Voyetra Sequencer Plus Version 4

Are you fed up with PC Starter Packs ?
Do you want a 'professional' sequencer ?
Voyetra Sequencer Plus is arguably the industry standard sequencer for IBM machines. First developed in 1984, it is used in commercial recording studios worldwide by many professional musicians. Sequencer Plus has full SMPTE/MTC sync options - direct to the new V24s multiple-port interface supporting up to 64 MIDI channels. A full upgrade path for Sequencer Plus software and interfaces is available.

*'**an extraordinary sequencer**...maintaining an admirable balance between editing power and straightforward operation.'*
PC Magazine

*'**One of the best American sequencing programs**...is Sequencer Plus...**it hasn't crashed once**. How many other programs can you say that about ?'*
Sound on Sound

Voyetra Sequencer Plus Packages

SPClassic & V22 : 32 channel MIDI interface	£229.00
SPClassic & V4000 : MPU compatible MIDI interface	£279.00
SPClassic & V24s : 64 channel SMPTE/MIDI interface	£399.00
SPGold & V22 : 32 channel MIDI interface	£359.00
SPGold & V4000 : MPU compatible MIDI interface	£409.00
SPGold & V24s : 64 channel SMPTE/MIDI interface	£529.00

NEW THIS MONTH !

Hard Disk Recording
ON AN IBM AT ?

We are proud to announce The CardD - a breakthrough in IBM-based hard disk recording. The CardD interface is designed to be used with the IBM PC/AT and compatibles. As a system, The CardD and The EdDitor allow quick and effective real-time digital editing and mastering. A menu driven interface makes using the system both intuitive and easily mastered. This power is now within reach of everyone.

16 bit, 32/44.1/48kHz Sampling Rates (user selectable).
20Hz-20kHz Frequency response & 92dB Signal to Noise ratio - CD quality.
Transfers audio data to/from hard disk in real time.
Supports S/PDIF Digital inputs/outputs (with the optional I/O CardD)
Stereo multiple waveform editing program available (The EdDitor)

DAL 'The CardD' : Hard Disk Recording board	575.00
DAL 'The EdDitor' : soundfile editing software	184.00
DAL 'The I/O CardD' : Digital i/o for The CardD	395.00
DAL Developer'sToolkit for The CardD	475.00

MIDI Fader Automation Special !

We have a few RECITAL 16-channel MIDI Fader Automation systems left to clear. Formerly on sale at £939 inc VAT, we are now offering them at £799 inc VAT. For more information please contact us.

Computer MUSIC Systems Ltd

No-one knows PC music better !

5-7 Buck Street,
London NW1 8NJ.
Tel 071-482 5224

If you want to make music with your PC, talk to us. We have been in the field of computer music for six years, and our staff are fully able to advise you on your music requirements. We have products to suit all tastes at prices to match. Give us a call today !

input signal. You can set the centre frequency and the depth of effect (-2/+12); again, rather than being expressed in terms which mean something (Hz and kHz), the frequency is set on a scale of 1-16.

The chorus/flanger effect allows you to select a mode (flanger 1 or 2, chorus 1 or 2, or slapback - created using different delay times), the speed of modulation, the depth of modulation, the feedback amount, and the mix level (the balance between the direct and effected sound); values for the last four range from 0-15. The character of these effects is more hard metallic than soft warm, and like most of the other effects on the A5 you can push them to extremes.

Finally, there's reverb/delay. Here the limited number of parameters Korg have provided for the A5's effects is most disappointing. You can select one of seven effect types: hall, ensemble, room, plate and live stage reverbs, echoverb (a combination of delay and reverb) and delay. The reverb types present a reasonably flexible range of reverbs, but there's no getting around the disappointment that the only other parameter you can set is the balance of dry and reverbed sound; you can't even change the reverb time, let alone high-frequency damping or early reflections. The quality is reasonable, but don't expect any kind of finesse. There again, the A5 is not really intended for situations which require finesse.

There are three further parameters you can set for echoverb and delay: delay time (0-3 for the echoverb, 0-4 for the delay, in 100ms steps), delay fine time (0-9 in 10ms steps) and feedback amount (0-15), the latter, as usual, increasing the number of repeats. Note that we're not talking stereo delay here. Again, the flexibility is really not there (not there, not. . .).

A peak LED on the output level would have been a useful indicator to have, as the signal level can be boosted quite considerably as it moves through the effects chain.

Helpfully, each version of the A5 comes with a booklet which lists the parameter settings for its 25 ROM effects together with names which indicate the suggested use for each effect. A page at the back of the booklet provides two blank patch charts which you can photocopy and use to note down the settings of your own effects - necessary given the absence of MIDI, and not burdensome given the relatively small number of parameters and the ease of programming on the A5.

ANGLE FOUR

REAL-TIME EFFECTS EDITING is not a possibility which springs to mind when confronted with a typical rack-mounted effects unit. However, when confronted with an A5 it's a possibility which readily springs to mind - in fact, before you know it you're doing it. For a start, you can switch individual effects in and out with the mere shake of a leg - simple, but it adds a whole new layer of flexibility to the A5's processing.

If you want to get into editing individual effect parameters then you really need to get the unit off the floor and up to hand level. The MT review model started out on the floor, but after a while I moved it to a board straddling the extensions on an X-stand, sitting comfortably next to a Yamaha RY30 drum machine, and there it stayed. The amount of resistance in the footswitches is enough to give you a feeling of substance when stabbing at them with your foot, but not so much as to make operating them with your hands feel uncomfortable or cumbersome.

With multiple knobs in place of centralised digital parameter access, you can edit more than one parameter at once (within an effect), though the close proximity of the knobs can make simultaneous editing of adjacent parameters awkward. Knob-twiddling isn't entirely crackle-free (as in digital distortion rather than dirty pot, as the A5 tries to make the necessary real-time adjustments), but it's minor and something you only really pick up on if you're listening to a clean sound in isolation. Hiccup-free Writing of effects settings into memory makes it feasible to store an edited patch "on the fly" during live edits, while if you switch to patch select mode you can twiddle the knobs without affecting the effect parameters - useful in the case of some parameters for setting the knob position "next to" the value you want to select. Also useful is being able to edit an effect while it's switched out of the effect chain, so that if you know what parameter settings you need you can quickly set them up and then switch the effect in - if you don't, well, life is full of surprises.

It's all so easy - not to mention addictive - once you get into it. The problem is that the more you get into live edits the more you lament the A5's omission of MIDI, which could have allowed all these edits to be sequenced.

VERDICT

THE A5 IS an uncomplicated yet reasonably versatile multi-effects processor at an accessible price. Compromises obviously have to be made on a budget unit, and clearly there's a significant reduction in flexibility compared to more expensive effects processors. There again, more expensive units have become so sophisticated these days that even a scaled-down version is still a powerful and versatile unit. Personally I liked the character of the effects processing, which I'd characterise as sharp, incisive and powerful. Of the two versions, the Multi-FX is the more generally useful through its incorporation of the exciter effect, but the Guitar version is well worth investigating if you're taken with some of the uses outlined earlier.

What really sets the A5 apart is the front-panel accessibility of its parameters, which makes programming easy and opens up the possibility of real-time effects edits - though if you want to automate effect changes and record live parameter edits using a MIDI sequencer, clearly the A5 isn't going to be of much use to you. ■

Prices *A5 Multi-FX and Guitar, £235 each; KVP001 Volume Pedal, £45.98; all prices include VAT.*
More from *Korg (UK), 8-9 The Crystal Centre, Elmgrove Road, Harrow, Middlesex HA1 2YR. Tel: 081-427 3397. Fax: 081-861 3595.*

"What really sets the A5 apart is the front-panel accessibility of its parameters, which makes programming easy and opens up the possibility of real-time effects edits."

SCREEN WITH A VIEW

ILLUSTRATION: TOBY GOODYER

LONG DERIDED BY THE MUSICAL FRATERNITY, THE PC IS ABOUT TO ACQUIRE AN INTERFACE WHICH MIGHT MAKE IT "MUSICIAN FRIENDLY" FOR THE FIRST TIME. TEXT BY ADRIAN SUTTON.

IT'S USUALLY CONSIDERED rude to mention the words 'PC compatible' in the company of music technology (small m, small t) people. I know because I once made the mistake during a group discussion I was having; I won't bore you with the details other than to say that some people reacted as if they'd been grossly insulted. But let's try to talk "PC" for a while.

Before we do, let's get a few things straight: I'm a dedicated ST music software user and music software developer. I have ST MIDI software on the market, and my job involves, amongst other things, teaching music technology using ST computers. Perhaps my own prejudice is the reason for the paranoid introduction to this article. I have a terrible habit of assuming that, because I say I also develop software for Windows running on PCs, people are going to think that I'm screeching militant polemic through a megaphone on a PC's behalf. (I must see my psychiatrist. . .) I too used to loathe PCs with a vengeance, but not any more - at least, not as much.

The news is that the PC is now poised to shed its image as the poor man of technological music-making. The reason is Microsoft's Multimedia Windows. For those of you unfamiliar with all this, Microsoft Windows is a bit like the PC equivalent of the ST's GEM - the mouse, the windows, the menus - except streets ahead in looks, performance and facilities. Multimedia Windows, or the MPC Multimedia Extensions to Windows, to give it its proper name, represents a quantum leap in musicians' terms; firstly because it gives Windows an established standard MIDI support for the first time, and secondly because it is the first operating environment to support digital audio and CD-ROM directly, as part of its structure. The first fact alone is probably going to be responsible for an explosion in MIDI software running under Windows. At present the only Windows sequencer I'm aware of is Mastertracks Pro, but this situation is likely to alter soon. The support for digital audio and CD-ROM is remarkable, and may well precipitate a host of cheap yet musically-professional sampling boards specifically designed for use in conjunction with Windows software. So what is Multimedia Windows, and why has it come about?

The history of PCs in general and MS-Windows in particular has, until recently, been rather boring. Being based originally around a miserable processor capable of addressing only 1Mb of memory (which, to be fair, was quite a lot in those days), the PC sowed its own seeds of discontent at the very outset. The now all-pervasive DOS (Disk Operating System) allowed only 640K of this 1Mb memory to be used for actual programs, since the other 384K was taken up by the system itself. Things improved slightly with the introduction of expanded memory and the 80286 and 80386 processors, but the extra power of the new processors (the latter of which, incidentally, can address up to four gigabytes of memory) wasn't tapped because DOS still reigned supreme, and all the old DOS programs still had to have things run their way, so to speak. Around 1985, Microsoft introduced Windows and subsequently Windows 2.0 which, although a Graphical User Interface (GUI) like the ST's GEM, still suffered from the memory limitation because it was itself being run as a DOS program.

To us musicians, the three big limitations of the PC so far have been threefold: the cost of the add-on MIDI cards, lack of usable memory and the awful DOS user interface. Now I know this last point is a matter of opinion, but popularity of the GUIs on the Mac, ST and Amiga have borne it out. All these effects have in turn resulted in a dearth of good music software for the PC. There are some exceptions, however, and it's worth noting that PCs are used far more widely for music in the States than they are in Europe. But how many studios do you know of that are using Voyetra Plus or similar as their standard sequencer?

A MIDI card typically used to cost in the £150-200 range; it has now fallen below

£100 in some cases but it's still an additional purchase, as it is for the Mac and the Amiga. The 640K memory limitation and the consequent difficulty in running more than one application (such as a sequencer and an editor) at the same time have left the Macintosh user laughing and the ST user (who has Desk Accessories and switcher programs like C-Lab's SoftLink) with at least a smile. The DOS TSR (Terminate and Stay Resident) utility is not in the running in this regard.

ENTER WINDOWS 3.0. Windows 3.0, apart from looking much sexier than its predecessor (it's a very serious Mac basher on the "look and feel" front alone), was a major breakthrough for the PC - arguably the most important development in the field since the introduction of the PC itself in 1981. Its arrival on the scene was crucial since, for the first time, it truly unleashed the power of the 80286 and '386 chips and all the memory they could use, whilst relegating DOS to a corner. It loads from DOS, but having done so, tells DOS to go and play with its toys.

Hence, I'm currently writing this article on my four megabyte 386 PC clone, and sitting just behind the word processor on the screen are a large painting/bitmap editing application, a hypertext application, a C compiler and a Windows application development system. And there's still some memory left. Now, if this means that I can expect, as a result of Multimedia Windows, to be able to run a powerful sequencer, a couple of synth editors, a sample editor and a patch librarian, all on the same screen, on my machine (which, incidentally, has an 800 by 600 resolution colour screen and a 100Mb hard disk), for a "today's-total" hardware cost of about £1500 including a MIDI interface, where does that leave my ST, let alone a Mac? And at the rate PC prices fall, how much lower is this cost going to be in a year's time? Of course, the Mac is a mature machine and there's a lot of terrific hardware and software for it. It's just that money talks, you know what I mean? And to all intents and musical purposes any differences in capability between a '386 PC running Multimedia Windows and a Mac are eventually going to become vanishingly small. Because there are so many millions of PCs the world over, the cost of memory, co-processors, hard drives, add-on modem cards/fax cards/Goblin Teasmade cards has long ago dropped through what you might think is the civilised ST or Mac floor for such prices. These considerations are becoming increasingly important in today's environments of big sequencers, direct-to-disk recording and so on.

Before you get too excited, Multimedia Windows has not yet (July) been officially released. But Passport Music Software, for example, is already preparing applications for it. Let's take a look at what all the fuss is about.

Multimedia Windows is really intended as the operating platform for a new type of PC called the "MPC", or Multimedia Personal Computer (see sidebar for an explanation of multimedia). The MPC is not a physically new type of PC but rather a sort of minimum specification that you must have in order to run Multimedia software. This typically consists, amongst other things, of the following:

At least a 80286 processor
At least 2Mb RAM
At least a 30Mb hard disk
MIDI ports (In and Out)
A built-in CD-ROM drive
An eight-bit digital audio sampling/playback card (monophonic)

The last three items can be treated as optional, but the idea is that multimedia software would need at least one or two of them to run. Hence there are millions of PCs the world over that, in terms of processor/memory/hard disk, already conform to the MPC standard because of the 80286/2Mb/30Mb HD minimum requirement.

MULTIMEDIA

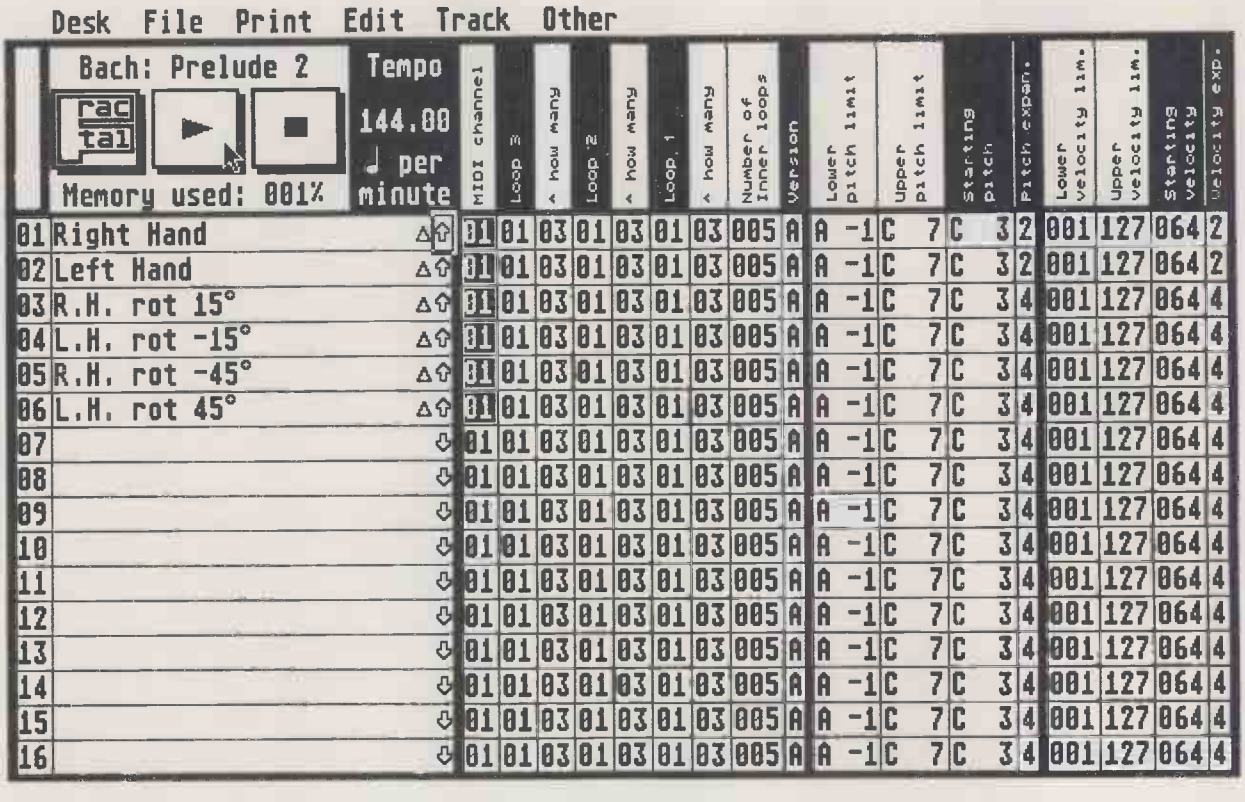
Multimedia is a buzzword that's very fashionable at the moment. It refers to the type of computing where more than one of our senses (sight *and* sound for example) are addressed by the machine. Nearly all computers presently interact only through the screen. Multimedia brings sound effects, voice recognition, animation/moving video, music and other elements into play. It has enormous potential in the field of education, where, for example, students studying music can not only read about a particular piece but also see the score on screen, change the score manually and hear the results over MIDI, hear the CD of the piece, study background material and so on - with all these hardware elements being controlled intelligently by the machine.■

Note that these are the *minimum* required. An 80486 processor with 16Mb RAM, 610Mb hard disk, dual CD-ROM, eight-port MIDI card, a Proteus 2XR card and a 32-voice 16-bit sampling card (the last three don't yet exist) would still be an MPC machine, and would do me rather nicely, thank you. Perhaps surprisingly, all this high-level support for hardware, which also includes moving colour video/television in a window, was not designed for musicians (the market is far too small). Although it clearly suits professional musical purposes down to the ground, the MPC standard is really geared towards turning PCs into Multimedia super-performers for the purposes of business presentations with fancy graphics, sound effects, educational courseware and so on. The smart computer money of the 1990s is supposed to be moving into the area of multimedia, and the MPC, which is being backed by at least 12 of the world's biggest computer corporations, is its first big bet.

There is a slight catch, however (there's always at least one). Initially, Microsoft are not going to be marketing the Multimedia Extensions to Windows as a separate item like Windows 3.0 itself; it will *not* be available as an upgrade to Windows 3.0. It will only be available, to start with, as something that comes with hardware (such as a digital audio card or a CD-ROM drive). This is because the hardware manufacturers are going to be licensing the Extensions from Microsoft to pass on with their hardware. Hopefully therefore, we will quickly and painlessly get to the situation where PC MIDI card manufacturers, such as Roland and Voyetra, will license and supply the Extensions with their equipment. I also know however, that Microsoft are going to be prepared to license the Extensions to independent software vendors as well, so that should help. Don't expect to get very far if you walk into your PC dealer and ask for Multimedia Windows, though.

So what is it going to do for you and me, the musician? Hopefully, like all the best machines, a talent for hiding itself (becoming transparent) as you're working with it. It seems to me, as I'm sure it does to any other self-respecting musician, that anybody who is interested in technology for the technology's sake alone is missing the point. Besides, all this talk is just hot air until we see some real, powerful applications that musicians can use. At the start of this article I covered myself by specifically making the point that I'm not spreading PC gospel; any sane musician will choose to ignore the wailing and gnashing of teeth that is always going on between the various machine "camps". I'm simply bringing tidings. The Mac isn't going to die. Neither is the ST. My guess is that, because of Multimedia Windows, the PC is about to become as serious and professional a music machine as these two, but at a price differential that's going to clout *either* of them, not just the Mac.■

FRACTAL MUSIC



Recently we introduced you to the concept of using fractal maths to create music - Fractal Music is one of the first commercial programs allowing you to try it. Review by Ian Waugh.

IN JULY'S ISSUE of your favourite hi-tech monthly, Steve Wright introduced "The Sound of Chaos" - fractal maths and the way it can be used to compose music. Music has always had strong links with mathematics and many composers have experimented with the creation of music based on mathematic principles. It seems natural, therefore, that the relatively new science of fractals (born in the late-'70s) and its fascinating combination of seemingly contradictory elements of repetitive form and randomness should also be pressed into service, too.

Fractal Music (review v2.3) was devised and written by Chris Sansom and Laurence Glazier. Chris is a composer and has had several works published and performed. Laurence provided much of the input during the development of the program.

It will run in hi or medium resolution and with 0.5Meg of RAM, but that leaves little workspace so 1Meg is recommended. The licensing agreement seems pretty horrendous and states that Fractal Music software and manual remains the property of Datamusic although you are allowed to make a backup. The disk comes with your own User ID encoded in a file. Tamper with this and the program won't run.

After the formalities, you can boot up. The manual begins with a short tutorial which runs through the basic operating procedure. While it does allow you to plug in and go, it doesn't take you very far into the program - that's left to the rest of the manual and a little judicious experimentation.

LAYOUT PLAYOUT

FRACTAL MUSIC HAS one main screen. Some features will be familiar to sequencer users - the track list down the left (there are 16 tracks), the Play and Stop buttons and tempo indicator above it. Actually, the Stop button is just for show as the mouse is disabled during playback for improved timing. You stop playback by pressing Return.

To the left of the Play button is the Fractate button, (more of which in a moment) and the rest of the screen is filled with horrendous-looking columns of numbers. Unfortunately, the headings of the columns are on their side so you have to tilt your head to read them. However, they aren't as cryptic as they first appear.

You can name tracks by clicking with both mouse buttons on the track name (why not a double click?).

You can mute and solo tracks and a triangle appears on the right of a track to show when it contains data. Numbers appear here on playback to show how many notes are playing. Parameter values are decremented with a left click and incremented with a right one.

GOING LOOPY

THE MIDI CHANNEL'S purpose is obvious - I hope. The next six columns are grouped in three pairs - Loops 1 to 3 and How Many. The manual uses the analogy of a three-dimensional graph to describe these but I'm not sure this makes the concept any easier to understand.

The loops act rather like nested loops in a computer program (stay with it). Loop 1 is the innermost loop and you put a value in the How Many column to determine how many times it will loop or Fractate. If you give it a value of three, for example, it will Fractate three times (Fractation coming up).

Now, if you put a value in the How Many column belonging to Loop 2 (say five), it will cause Loop 1 to do its stuff five times which will produce 15 (5 x 3) Fractations. You can probably guess what the How Many column in Loop 3 does. It causes the other two loops to, er, loop according to the Loop 3 How Many value. If it was set to four we would get 60 (4 x 5 x 3) Fractations.

Each How Many column can take a value 1-99 so the total number of combinations is 99 x 99 x 99 or 970,299. The values in the Loop columns themselves determine the shape of the music - different numbers produce different Fractations - the number of variations is immense.

The manual explains that the three Loops were originally labelled Velocity, Pitch and Time as these are the parameters which are related to the result of a Fractation, but it adds that this isn't generally perceptible to the user so Loops won the day.

There's another column related to the Loops called Number Of Inner Loops, and this determines the number of times the inner loop, Loop 1, is repeated. This is actually the "iteration" process so essential to fractal construction (see MT, July '91). It's not the same as increasing the How Many value of Loop 1 - all to do with the maths of the thing. This column can take a value up to 999.

LIKE A VERSION

THERE'S ONE MORE concept to grasp: Version. You'll be pleased to hear that this is pretty easy. If we go back to the concept of a 3D graph and think of Time on the x axis, Pitch on the y axis and Velocity on the z axis (the one which runs at you out of the page) then we can see that any value can be positive or negative. Pitches and velocities can change in either direction (above or below the previous value). Time, as the manual points out, can only go forward. So the program cheats a bit. If a negative number is generated it's turned into a positive number and the note turned into a rest.

If Version is set to A, negative values become rests. If it's set to B the process is reversed - negative values are notes and positive values are rests. Version C turns all values into notes.

PITCHING IN

THAT'S THE MATHS out of the way. The rest is relatively straightforward. The Lower and Upper Pitch Limits are used to restrict the output to a certain pitch range. If a note is generated which would step over the limit it's reflected back into it. You can also set the starting pitch of the Fractation. Two tracks with identical sets of parameters but different starting notes will produce parallel harmonies - very effective.

Most of the numbers generated by the program tend to be less than one and have to be multiplied up to produce values which are meaningful to MIDI. The Pitch Expansion column can take values from zero to nine and determines the size of the multiplication.

A value of zero produces a single pitch (but with varying velocity values) which could be used to generate a drum line, for example. A setting of nine produces pitches which leap about from one end of the note limit to the other.

The four rightmost columns do for velocity what the previous four did for pitch. These are Lower Velocity Limit, Upper Velocity Limit, Starting Velocity and Velocity Expansion. As well as their "random" contribution to the music you can use them to create *ppp* or *fff* passages.

FRACTATION

LET'S PUT TOGETHER the things we have so far and see what happens. Fractation is the process of generating the music. When you activate Fractation, each time the program "turns a loop" a note (or rest) is produced. You can Fractate any number of tracks simultaneously.

With exactly the same settings, exactly the same piece of music will be produced during each Fractation - the generation process isn't random, remember. Initially, it's probably a good idea to set the Loops 2 and 3 columns to one and experiment only with the parameters in Loop 1. Although the manual doesn't explain exactly what is happening you can figure it out with a little ear work.

Set the How Many value of Loop 1 to one and set the Number Of Inner Loops to one and the program will produce one or two notes or rests (the program actually produces one more event than the number of loops, but we won't let that throw us). Increase the Number Of Inner Loops to two, three, four and so on and the program will add an event (note or rest) for each addition to the loop.

Now, if you increase How Many to two you'll get the set of notes you've just heard followed by a second set of different notes as Loop 1 does another loop. This much is (relatively) easy to understand - especially if you try it - but if you work the other way round something different happens.

Set the Number Of Inner Loops to one and the How Many value of Loop 1 to one and you'll get the same two-event riff as before. Increasing the How Many value ➢

"Fractal Music's authors suggest that the program may give rise to copyright issues which are not covered by existing law - food for thought."

➢ adds more events to the list although it will produce a different set of events to the previous ones.

If you increase the Number Of Inner Loops you'll get the same first couple of events but the following ones will be different. In fact, each time you add to the Number Of Inner Loops, the previously-generated events change. You may spot similarities in the rhythm and the directions in which the pitch moves but I wouldn't bet more than a pint on it, even after a couple of iterations.

So far we've only been experimenting with Loop 1. Add Loops 2 and 3 into the equation and you can imagine how complex the whole procedure can become. But there's more.

Some of the column headings are highlighted - Loops 1 to 3, Version, Start Pitch and Velocity, and Pitch and Velocity Expansion. These parameters can be randomised either manually by clicking on them with both mouse buttons or by the program by highlighting them. If they are highlighted, the program randomises them before Fractation.

SOUNDS OF CHAOS

IF YOU'RE STILL with me you'll be wondering what the output sounds like. We're not talking *TOTP* or any kind of mainstream here. It can sound very like modern classical music - *avant garde* some would call it. As much music of this ilk is composed using mathematical processes, perhaps it's not surprising.

To other listeners it may well sound like a collection of random pitches - but it's not. It can lack the harmonic and rhythmic structure our Western ears recognise but it does have a discernable form if you're sensible with the settings - Fractate all 16 tracks using different parameters and you guarantee chaos.

A Check Passes function shows the nested loops and how many times each track Fractates. Set all values to their maximum and at 120bpm the program would produce just under two month's worth of music. Theoretically, that is - you'd need far more RAM than the ST can support, and very understanding listeners. However, a more modest maximum of 50,000 passes (which requires 1Meg of RAM) generates about 80 minutes of monophonic music. Scale according to required polyphony.

TRACK SUIT

FRACTAL MUSIC CAN handle MIDI files so you can export your Fractations to a conventional sequencer for further work. It can also load MIDI Files and this is where things really start to get interesting.

In the Edit menu you'll see the following functions: Quantise, Stretch/Move, Invert, Retrograde, Retrograde/Invert, Other Reflections and Rotate. You can apply these to "conventional" music - and to fractated music, too.

Relative quantisation lets you quantise by note values - 1/8 is a quaver, 1/16 is a semiquaver. You can also quantise to values in between by setting the denominator to any value 2-96 - 1/7, 1/13, 1/87 and ➢

DON'T SHUT THE DOOR ON SAMPLING

"Every Akai should have one."

"Make that sample library work for YOU."

When you can SLAM IT

SLAM Akai Version – The Atari ST Sample Librarian And Manager

- Catalogues your Akai sample library.
- Reads Akai Data over MIDI & DD disks directly in the ST.
- Lets you add comments to every sample and program.
- Prints disk labels & hard reference copy.
- Also use SLAM to catalogue sample CDs, Multitrack tapes & Atari song disks, etc.

Only £89. Demo Version £7.

IF sounds are an important part of your sampler – then expand your options with our sample library. Ask for our list and receive a FREE sample disk.

This Months specials .....

Atari Trackball ST version. £27.
ST monitor switch – switch between high & medium res monitors. £17.
30cm twin mouse extension. £4.
ST ICD DMA/SCSI interface + clock. £DOA.
Mouse Mat – red. £3. Mouse cover. £7.
Disk Box – 10 way. £4. 80 way lockable. £9.
Amiga MIDI interface. £35.
Tape – 3M Dat 90. £8. Ampex 457 7". £9.
2MB memory upgrade for Akai S1000. £115.
600MB optical cartridge. £185.
PATCHBASE from Audio Integer – FIND & USE all the sounds in your system. ST desk accessory provides MIDI patch selection through your entire system by name or sound familly. Only £49.
MPLAN24 – ST desk accessory providing a 24 track tracksheet. £19.
PC128 – ST desk accessory providing a MIDI patch changer selected by sound name and saves song setups to disk. £19.
Dr Tiricc – Inspiration & fun program for creating lyrics, drum patterns and melody / bass lines. Exports MIDI & ASCII files. £25.

"Making Music Easier"

from DIGITAL SOLUTIONS to ANALOGUE ANSWERS.

IF CHECK OUT our MIDI control series, Digital & Analogue Audio & Video products, Hard disk recording, Hard drives, SCSI, DMA & printer cables, Sampling CDs, C20 tapes. MixIT 4 / 1 mixer £36 or 4 / 2 Stereo £69. Ten Branded 3M DSDD disks £10. DSHD £21

FOR THE FULL STORY ←

INTRINSIC TECHNOLOGY
4 Auckland Court, London SE27 9PE.
(0) 81 – 761 – 0178
VISA MasterCard

Andertons MUSIC CO.
making you sound great!

Now in Stock THE HAMMOND XB2 PRO KEYBOARD

All the sounds and more of the famous Hammond. Leslie effect/reverb.

Plus The Yamaha SY99 Now on interest free credit.

Available now on interest free credit.

LIMITED QUANTITIES BIG PRICE REDUCTIONS

We're moving late October (more news later) to larger premises. So we need to move some stock now in limited numbers.

1 x Alesis MMT8 S/H	£229	2 x Roland W30's	£1099 Each
1 x Alesis HR16 S/H	£159	2 x Roland RD300's	£919 Each
1 x Akai EX75N Noise Rd	£49	2 x Roland D10's	£599 Each
2 x Alesis SR16	£269 Each	2 x Roland U20's	£699 Each
1 x Boss DR500 S/H	£149	1 x Roland R8	£425
1 x Cheetah MK5V S/H	£95	2 x Roland JX1's	£399 Each
1 x Ensoniq Mirage S/H	£399	2 x Roland U220's	£495 Each
Ensoniq at amazing deals.		2 x Yamaha SY22's	£579 Each
1 x Kawai MM16 Mixer	£259	2 x Yamaha SY55's	£699 Each
1 x Korg MIR Rack S/H	£849	1 x Yamaha SY77	£1489
1 x Korg T3 Ex	£1895	2 x Yamaha QY10's	£229 Each
1 x Kawai R100 Rhythm S/H	£149	1 x Yamaha DX7 S/H	£399
1 x Roland MC50 + GK2 S/H	£549	2 x Yamaha TG33	£419 Each
1 x Roland Octapad	£399	1 x Yamaha RX17 S/H	£85

ALL PRICES INCLUDE VAT

It's here the KORG 01/W + 01/W FD.

Limited quantities available. So advanced you've got to hear it.

Available now on interest free credit.

PRICE MATCH

ANDERTONS MUSIC CO
HAYDON PLACE · GUILDFORD
SURREY GU1 4LR
TEL: (0483) 38212
FAX: (0483) 38211

1984 27 YEARS 1991

Now that you've read this issue of

Music Technology

THE WORLD'S PREMIER HI-TECH MUSIC MAGAZINE

from cover to cover why not take out a subscription to ensure the next issue is delivered directly to your door?

Turn to page 19 for details.

NEWTRONIC

SOUND DESIGN & MIDI SOFTWARE LTD

International Mail Order Service

Visa/Access Welcome

POP/ROCK – TOP FORTY – JAZZ/SWING – CLASSIC
DRUM PATTERNS – SOUNDTRACKS – GUITAR LICKS

£9.90 per title. Minimum order 3 titles. Make cheques payable to NEWTRONIC. You can also use our 24 hour credit card hot line. Please state song number, your computer and software type. Most orders are complete within 10 days, but allow 28 days for delivery in cases beyond our control.

New Songs

#1160 I Do it for You - Brian Adams **#1192 More Than Words** - Extreme **#1068 Shiny Happy People** - REM **#1214 What's Love Got To Do.....**- Tina Turner **#1101 Jealousy** - Pet Shop Boys **#903 Cry for Help** - Rick Astley **#1119 Faith** - George Michael **#1181 People Are Still Having Sex** - La Tour **#908 Let There Be Love** - Simple Minds **#1173 Brothers in Arms** - Dire Straits **#1147 The Motown Song** - Rod Stewart **#1146 Chorus** - Erasure **#1057 Shocked** - Kylie Monogue **#1094 Thank You For The Music** - Abba **#992 Future Love Paradise** - Seal **#982 Gypsy Woman** - Chrystal Waters **#1001 Rhapsody In Blue** - George Gershwin **#1115 Gloria** - Laura Branigan

We also have lots of Madonna, Phil Collins, Beatles, Stones, Hip-Hop, Michael Jackson, Prince, Bruce Springsteen, Elvis, Frank Sinatra, Stevie Wonder and many others.

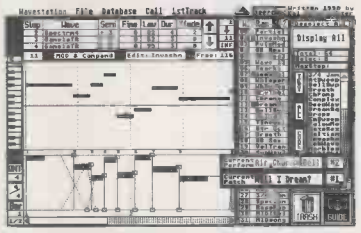
Send S.A.E. or Ring 081 691 1087 for new song list with over 1100 titles

midisystems Geerdes

SOFTWORKSTATIONS

(1 Mbyte ATARI ST & Hi-res Monitor

We are proud to offer you a range of the most sophisticated software packages from Germany. We supply demo disks for all programs.



Softworkstations are powerful Editor/Librarian packages with integrated sequencer for multitasking on a 1 Mbyte ST. Demo disks are available for only £5

Microwave ★ Wavestation ★ MKS80 ★ SY/TG77 ★ V50 ★ D5/10/110D70 ★ D50 ★ K1(II)r ★ K4/r ★ U20/110/220 ★ Prophet VS ★ VZ1/10m M1/R/EX ★ M3/r ★ TX802 ★ YS100/200 ★ Dx1/5/7/711/9/21/27/100TX81z ★ DS55 ★ MT32

Editors & Managers for:

Matrix 6/R/1000 ★ FB01 ★ SQ80 ★ ESQ 1 ★ R50 ★ LXP5

C-lab Notator (ST)	£399.00
Steinberg Cubase (ST)	£399.00
Bars & Pipes Pro (AMIGA)	£229.00
B&P Upgrade Kits (AMIGA)	£49.00
M1 Supermanager (ST)	£49.00
SM M3/r (ST)	£49.00
SM Prophet VS (ST)	£49.00
SY22 Pro Card (RAM)	£69.00
Microwave Pro Card (ROM)	£69.00
M1 Entertainer Card /ROM	£50.00
K4 Pro Card (RAM)	£49.00

SY77 Sound Disks ....Ring for details

U20/220 Sound Set 1&2 by Newtronic .....£29.00 only

Cheetah MS6 Bankloader £15.00 only

TX81z PD Editor/Librarian 500 top studio sounds .....£29.00 only

C-LAB midisystems Geerdes Steinberg

SOUNDS & MIDI SOFTWARE for

YAMAHA SY/TG77, SY22, DX/TX7, DX7II, TX802, DX21/27/100, FB01, TX81Z, V50, TX16W * ROLAND D5/10/20/110/MT32, D70, D50, U11O, MKS50, U20/220, MKS100/S10, MKS80, W30 * KORG M1, T1/2/3 Wavestation, M1Rex, M3/r, DW8000 Poly 800, Ensoniq VFX, Matrix 1000, Waldorf Microwave, Casio VZ, Prophet VS Kawai K1, K4 Cheetah MS6 and others.

62b MANOR AVENUE, LONDON SE4 1TE

TEL/FAX 081 691 1087

> "Fractal Music is on the other side of the musical playing field to M, not quite so far over as Fingers and hovering around somewhere near Ludwig."

➢ so on. Absolute quantisation lets you specify the quantise value in clock ticks - 2-384.

Stretch/Move can move a track forwards or backwards in time, transpose it and stretch or compress it. You can move it in increments of a single tick. Among other effects, you can use this to produce echoes. You can perform straightforward transposition but you can also specify the amount of transposition as a ratio, say 3:2 or even 124:29. This has the effect of compressing or expanding the pitches into a smaller or greater range. The music will retain the direction of movement but the pitches will be different.

Stretching and Compressing a track also works with ratios. The program tries to push and pull from the centre of the piece so if you compressed it to half its size (effectively making it play twice as fast) it wouldn't start playing immediately but a quarter of the way through. Obviously, if you stretch it and the track already starts at the beginning, the stretched version would start at the beginning, too.

Invert spins a track around a central pivot point, effectively turning it upside down. Inversion has been used by composers for centuries. This Invert lets you select the high and low note limits and the pivot point. It uses a box to show where the track sits in the scheme of your inversion. As we aren't doing anything particularly horrendous to the pitches and their relation to each other, this can produce very musical (to Western ears) output.

Composers have been turning music backwards for years, too. This is what Retrograde does and this, too, can sound very musical.

Retro/Invert performs the two functions in one fell swoop although, to pre-empt those who try it, the manual admits the result is not exactly the same. But it's close and if you want exact you can perform the two functions separately.

ON REFLECTION

IF YOU THINK about it - and I'm not forcing you to do so at this stage - inversion is a reflection of 180 degrees around a horizontal axis, retrograde is a reflection of 180 degrees around a vertical axis and retrograde inversion is a rotation around 180 degrees. The Other Reflections and Rotate options let you reflect and rotate about any angle.

This can get a little hairy, and I confess I couldn't even attempt an explanation without some diagrams (a picture is worth a thousand words and all that), but the manual does have diagrams and you can see what happens to the music during these reflections and rotations. The program, again, shows the music as a box and as you alter the reflection angle the box turns to, um, reflect this.

One of the outcomes of this type of operation is that the notes may overlap so you can get polyphonic music from a monophonic input. Think about it (yes, now's thinking time) - if you take a music score (or a display from a grid editor) in which the notes are strung out one after the other from left to right (the time domain) and then rotate it so the notes now run from bottom to top (the pitch domain), you're squeezing all those notes into a smaller time span.

Enough of the theory. Musical mathematicians will find it fascinating. Certain reflections and rotations will produce musical output but many won't.

BOOK LEARNING

THE MANUAL IS very friendly and not without its humour - and it has an index, too. The authors are aware of the potential complexity of some of the operations as is demonstrated when they say: "After all that, you'll no doubt listen to the result and then go looking for a 12-bore and our address".

There are keyboard alternatives for just about everything and some functions can only be performed from the keyboard.

WHOSE TUNE?

THE READ.ME FILE on disk makes a very interesting and valid point concerning music which is generated through Fractal Music. It is easy in the extreme to take a piece of music and process it beyond recognition into something completely different. This is very easily and ably demonstrated on a little Bach.

The authors point out that to pass this off as your own is, at best, morally dubious and that copyright should remain the property of the original composer. They suggest that Fractal Music may give rise to copyright issues which are not covered by existing law.

Food for thought there, although I suspect it would only be the legal profession who would make any money out of a case.

VERDICT

FRACTAL MUSIC IS fascinating. I'm tempted to say that if you work in the mainstream it is not for you. In fact, I feel the authors would agree but some of the edit options such as retrograde and reflection can produce musical results which the more adventurous mainstream musician might like to explore.

Talking of Western musical expectation, I'm sure the program could be adapted to work around conventional divisions of the beat, tonal centres and possibly harmonies which would produce more "melodic" output. Just a thought.

But that's not the main purpose of the program. Its purpose is to generate music based on mathematical processes and that's exactly what it does. As such, it's on the other side of the musical playing field to M, not quite so far over as Fingers and hovering around somewhere near Ludwig. And for a composition program it is surprisingly easy to operate - honest - in spite of the mathematics behind it.

If you like the idea of computer (assisted) composition then you'll find Fractal Music very interesting. If you're into modern composition you'll love it. If you fit into either category - or are just plain curious - then send Datamusic a fiver for a demo disk. ■

Price *Fractal Music £65 plus £2.50 p&p.*
More from *Datamusic, 4 Sharon Court, Alexandra Grove, London N12 8NX. Tel: 081-446 9699.*

MUSIC MAKER EXHIBITIONS

PRESENTS

The London Guitarist Show '91 & The Music Recording & Technology Show '91

THE LONDON GUITARIST SHOW

MUSIC RECORDING & TECHNOLOGY SHOW

Saturday 2nd November 9am – 6pm &

Sunday 3rd November 9am – 5pm

Novotel International Centre, Hammersmith, London

Two shows in one – each on its own floor.

One admission price: £5.00, which includes admission to both events, all live showcases, demos, seminars and feedback sessions.

Music Maker Exhibitions Ltd is a division of Music Maker Publications plc, Alexander House, Forehill, Ely, Cambridgeshire, CB7 4AF. Tel: 0353 665577. Fax: 0353 662489.

Bring this voucher to the show to save money!

Normal admission price £5.00, with this voucher £4.00.

Only one voucher per person.

RAPMAN

PHOTOGRAPHY: JON SHRIMPTON

Dismissed by musos worldwide, the Casio VL1 found itself topping the charts in 1982. Could Casio's latest oddball, the Rapman, do the same in 1991? Review by Tom Robinson.

"THE CASIO RAPMAN?" I hear you howl. . . "Why waste valuable pages devoted to the cutting edge of music technology to tell us about a *toy*? We want software specifications, synth librarians, synchronisers, samplers, sequencers, stereo studio sound systems - not cheap children's crap from Casio." Patience, patience. . .

As Brian Eno, that much misunderstood guru of low-tech, once pointed out: "in the studio you often see a keyboard player spend hours scrambling through the electrons searching for a new sound, when it's obvious what he's really looking for is a new idea".

Of course new technology is highly exciting and great to drool over - why else would we buy this magazine from month to month? But why do any of us need all this gear, really? Theoretically, to improve our music making in some way or other - will Studio Vision with a Mac IIfx and Proteus card improve our songwriting, our productivity or our chances of getting a record deal? I doubt it. What you and I, and Brian Eno (not to mention every record company on earth) need more than anything is, yes, new ideas.

Consider instead the Casio Rapman - one hundredth of the price and, believe me, several hundred times more fun. It doesn't sit and sneer at you - you don't have to plug it in, boot it up, interface it, struggle through the manual or upgrade your system software. It has batteries, a built-in speaker and mic, and screams "play me" as soon as you've got it out of the box.

In any creative field, fresh ideas emerge through play and spontaneity - if you've got even one first rate idea, a RAP1 would be well worth the money. In fact, you'd have to be a miserable po-faced bastard to resist jamming with it for hours. I took the review model with me to Real World studios last month and had difficulty prising it back off every musician who saw it. Manu Katché and his producer ordered four on the spot - even Peter Gabriel sat happily rapping and scratching away at the dinner table until Daniel Lanois came and dragged him back into the studio. ➢

BRISTOL MUSIC FAIR

The South West's Largest Music Exhibition

- **Get your hands on** all the latest equipment demonstrated by the major manufacturers including- Akai, Casio, Fender, Marshall, Roland, Sound Technology, Tascam, Washburn and many more.

- **Live music** demonstrated by top musicians.

- **GWR FM** broadcasting live from the show.

The Place

Bristol Exhibition Centre, Cannons Road, Bristol

The Time

Saturday 10.00am - 6.00pm
16th November 1991

Sunday 10.00am - 5pm
17th November 1991

The Price

One day £3.00 or £5.00 for a two day ticket

ABC music

GWR FM

MUSIC MAKER EXHIBITIONS

For more information contact:
Music Maker Exhibitions, Alexander House, Forehill Ely, Cambs, CB7 4AF

GETTIN' DOWN

TO DESCRIBE OPERATING the Casio Rapman as child's play is overstating the difficulty. My son, aged one-and-a-quarter, got the hang of it in seconds: you slide the power switch from Off to Rap, hit a key - any key - and off you go, bashing the effect pads, scratching the turntable and shouting wild distorted nonsense through the microphone as you sway from side to side. Which rap pattern comes up depends on a glorious lucky dip - which note you happen to hit first - after which the keyboard reverts to playing all the tacky sirens, car alarms and instrumental hits you could want - even one or two reasonable musical sounds if you're feeling ambitious.

When a 15 month old child who's never seen a DJ or rapper in his/her life can do passable imitations of a chart-topping dance act, we traditional singer-songwriters are supposed to wring our hands in despair and ask what contemporary music is coming to. However, the same cry was heard when '50s teenagers first discovered electric guitars, and in my book the RAP1 beats the hell out of a tennis racquet and Bert Weedon's *Play in a Day*.

"What did people do after lashing out thousands of quid on some new gleaming piece of gadgetry they barely understood? My guess is, wet themselves in terror."

As for the technical stuff, I always hate those reviews which simply run through a recital of knobs and faders (or, these days, pages and parameters) and spend paragraphs describing the appearance of an instrument you can see perfectly well in the photograph. The really interesting questions (how does it sound? What can you do with it? Does it have a nasty power supply? Will it make me sound like Thomas Dolby? And so on) get skimped in favour of lists of specifications, most of which could just as easily be gleaned from the manufacturers' ads.

Still, I'd better mention that the Rapman features two basic modes: Play, in which it is a three-voice polyphonic keyboard, and Rap, in which you can play back one of 30 preset patterns, adding single-voice keyboard parts. Three sound pads and a small plastic turntable offer additional percussion and effects in either mode. The keyboard offers a choice of 25 tones - some synthetic, some sampled. Several are beefy and quite usable, the majority are weedy and naff - though agreeably daft in some cases.

The patterns themselves are two bars long - 14 being drums only and (this is the good bit) 16 including rudimentary bass and chord parts. Me, I wouldn't know a credible rap pattern if it bit my leg but I know what I like. Some of these little grooves could be made to work in any number of idioms, while one or two are genuinely inspiring. Obviously the rudimentary drum kit sounds pretty thin and nasty through the internal speaker, but hook the RAP1 up to a desk with some decent EQ and a pair of studio monitors and. . . it still sounds thin and nasty. What do you expect for 80-something quid?

RAP MIDI

DON'T BE SILLY: of course it hasn't got MIDI. But it has got a real stroke of genius: for your money Casio not only provide a plug-in microphone but, yes, a harmoniser. This has to be the cheapest on the market, and it's a brilliant addition. Anyone might feel a little awkward shouting "Yo Homeboys! Tell these motherf***ers what time it is" down a tiny plastic microphone in their parents' living room. But whack your voice up or down a major sixth into Darth Vader/Bart Simpson mode and all inhibitions fly out the window in a stream of spontaneous gabble.

My main disappointment was the turntable; it's a brilliant idea which has been disappointingly executed due to a ridiculously short scratch sample. Presumably this is to economise on chip memory. Luckily there's a longer and more workable scratch sound on one of the keyboard patches, while the turntable's alternative voice - a spacey vocoder sample - is a perfectly usable substitute. The other bad news is that the tempo change increments are completely out to lunch. Most patterns seem to default at around 107bpm - one step down gives you 100bpm, while one step up is 114bpm. So far, so approximate. But two steps up produces 126bpm, while two steps down results in 94bpm. Maybe I'm missing something here. Have those cunning Casio chaps programmed in every hip tempo known to rap and left out all the others? Improbable, somehow. In practice it didn't bother me - but you might not feel the same way.

This inflexibility plus the lack of MIDI would make it hard to use the RAP1 for any kind of serious work - perhaps the most compelling reason of all to buy one: tinpot trash instruments are such a boon to creativity and inspiration. Remember Trio's '82 chart-topper 'Da da da' with the original Casiotone VL1? Or how Roland's primitive and discontinued Bassline became *the* flavour of 1989. Or how Phil Collins sometimes chose an ancient CR78 in preference to his own drum kit? Or even, God forbid, the dreaded Stylophone on Bowie's 'Space Oddity'? The great thing about cheap instruments is that they don't intimidate you; we all have this spurious distinction in our heads between "work" and "messing around" while paradoxically - as Eno is fond of pointing out - messing around often produces our most interesting work.

Can you remember the first record to feature a Fairlight, a Prophet 5, a Linn drum machine, Yamaha CS80 or modular Moog system? Neither can I - probably because the blasted things were so expensive at the time only super-rich boffins and bored pop stars could afford them. And what did these people do after lashing out thousands of quid on some new gleaming piece of gadgetry they barely

understood? My guess is, wet themselves in terror. They certainly didn't doodle with it in the back of a tour bus.

Encouragingly, it always seems to take several years before any low-end equipment filters through onto contemporary records. On this showing you and I have until at least 1993 to write and record the first Rapman-inspired hit single; after which everybody and their dog will follow suit - until it becomes terminally unhip again a couple of months later.

Of course the burning question in the wake of the M/A/R/R/S and KLF litigation will be who owns the copyright when a two-bar snatch of music from the Rapman's ROM finally does take the charts by storm. (My money's on patterns 20, 22 or 30.) Everyone at Casio UK was extremely cagey on this subject. On domestic instruments with demo sequences, they told me, Casio always negotiate an appropriate composer's rate with PRS for all titles featured - 'Hi-ho, Hi-ho', 'Someday My Prince Will Come' and so forth - and account scrupulously for every instrument sold. But are these two-bar drum patterns actually someone's copyright, I wondered. They weren't sure. How about the ones where there's a bassline and a couple of chords as well? They were even less sure.

It's a tricky one, this, for obvious reasons - the wrong reply could end up costing your bosses in Japan several hundred thousands pounds. Finally the official answer came back that all copyrights relating to the RAP1 are owned by the Casio Music Corporation, and that seemed to be that. My own guess is that if someone appeared on *Top of the Pops* with a song featuring the instrument prominently they'd be more likely to receive a massive sponsorship deal than a writ for breach of copyright.

VERDICT

IN CONCLUSION, YOU don't have to know, understand or even like rap music to derive huge enjoyment and (with luck) some fresh ideas from the Casio Rapman. If you hanker after cheap portable creativity and have waited too long for bug-free Yamaha QY10 machines to arrive in your local shop, I'm afraid you'll have to hanker a little longer, however. The Yamaha, if it ever arrives in quantity, promises not only the portability and hip patterns of the Rapman, but a wide range of musically useful features to interface with your existing equipment. If you have a limited budget and very little equipment so far, the QY10 - even at £249 - should prove far better value for money, if a great deal less fun. On the other hand, if you're already reasonably equipped and can afford to lash out 90-odd quid in search of a little wacky inspiration, I'd warmly recommend you to do so. ■

Price *£89.99 including VAT.*
More from *Casio Electronics Ltd, Unit 6, 1000 North Circular Road, London NW2 7JD. Tel: 081-450 9131.*

The Incredible NEW
brother®
PDC 100
MIDI SEQUENCER

For the price of a modest Datafiler you can now own a powerful, fast and reliable sequencer with these fabulous features:

- 21,000-note internal RAM (128K)
- 32-character backlit display
- Extensive bar and event editing
- Quantization and transposition
- 96bpq tempo resolution
- Save and load songs and sysex simultaneously
- 32 tracks – 16 channels per track
- Realtime or step recording
- Cut and paste song "Units"
- Variable tempo in same song
- Multiple song Programming
- 3·5 disc drive

OUTSTANDING VALUE FOR MONEY AT £299 +VAT.

from MUSIC VILLAGE
230 High Street, Barnet, Herts EN5 6TO. Tel: 081-440-3449
86 Mill Road, Cambridge CB1 2AS. Tel: 0223 324536
10 High Road, Chadwell Heath, Romford, Essex RM6 6PR. Tel: 081-598-9506

OR FROM BLUEBRIDGE MUSIC'S CREDIT CARD HOTLINE 0787 475325

Or send coupon to: **BLUEBRIDGE MUSIC LTD.** 3/5 Fourth Avenue, Halstead CO9 2SY (cheques, postal orders, bankers drafts, Building Society cheques, Access and Visa orders and cash in registered envelopes accepted)

Name:.....
Address:.....
.....
.....Postcode .....

Credit Card Number:
...../...../...../.....
Expiry Date:

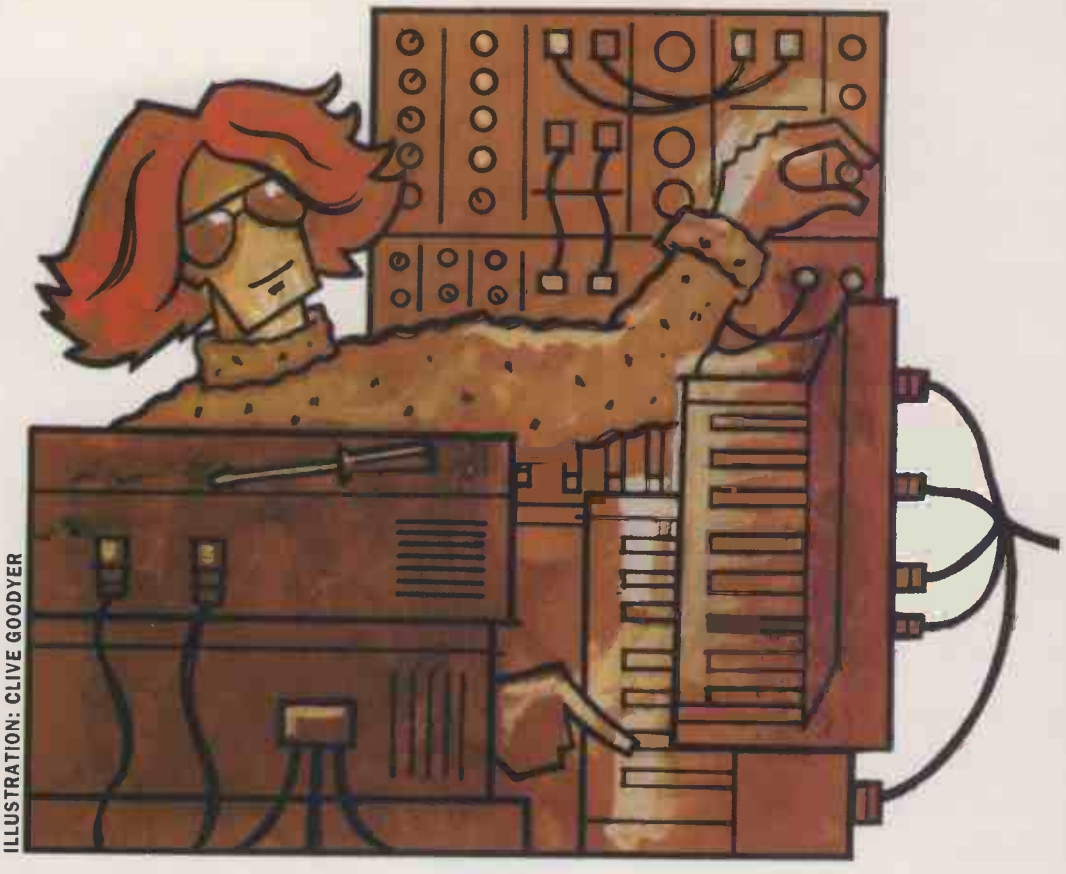


ILLUSTRATION: CLIVE GOODYER

POWER PLAY

MAINS ELECTRICITY: THE ENEMY WITHIN. YOU CAN'T RUN YOUR MUSIC SETUP WITHOUT IT, YET IT'S ONE OF THE MAIN CAUSES OF EQUIPMENT MALFUNCTIONS. TEXT BY MARK BURLETSON.

IT'S A SAD, simple fact of life: if you're running a computer-based sequencing system in an onstage music situation, it will crash. Maybe not today, maybe not tomorrow, but someday soon. And you can bet it'll happen at just about the most embarrassing moment possible.

You won't be much safer if you're working with a computer-based system in a studio or at home either. Or if you're using a dedicated hardware-based system. There are more than enough true life horror stories about lost or corrupted data, crashed disks, blown power supplies and the like to make you feel a bit *The Silence of the Lambs* when putting the finishing touches to your 32-minute acid house opus in the bedroom.

All these problems are, of course, the work of some malevolent Norse god, piqued at the absence of Viking plainsong from the Gallup Top 40. Or rather they aren't, but it's a convenient way of explaining things away as you reboot and start from scratch once again. As always, the reality is far more dreary - all the hiccups in a processing system are actually caused by monkey-faced trolls that live in your MIDI ports and gobble up the information as it passes by. . .

Seriously, the *real* source of the problems is somewhat less exotic, but if you face up to it you can protect yourself against it fairly easily. But before you can do that, you need to identify the source of all this mayhem, and this is best achieved by using that good old scientific chestnut, the process of elimination. Possible answers come as follows: operator error - this is a ridiculous idea and not even worth considering here.

Software error - all proprietary sequencing programs have been pretty thoroughly tried and tested by truckloads of users and they don't always have the same problems. In any case, the random nature of the faults doesn't tie in with the cyclic way the software works.

Hardware error - all electronic equipment obeys what's known as the Bathtub Law, so-called because the curve produced if you plot product failures against time is the same shape as a sectional view of a bathtub. (Electronics boffs are a bit weird, y'know?) This basically says that equipment is quite likely to fail when brand spanking new because of manufacturing errors, and is also likely to fail when old and knackered because it's old and knackered. Apart from these two periods, electronic kit usually works perfectly well unless something nasty is actively done to it to make it not work.

That leaves us looking for some active, external variable - monkey-faced trolls! No, no, no, the problem is *mains electricity.*

OK, so you knew what the problem was anyway. But it's as well to compound the idea, just to make sure you don't overlook it and lay into your hardware next time something goes wrong. Your computer, your expanders, your samplers and all your other gear is fine. It's doing its best, don't go blaming it. It's just that it was only designed to operate under certain conditions, and very dodgy mains electricity is not one of those conditions.

Let's take a closer look at what dodgy mains is and how it can affect your gear. The electrical power delivered to your house, studio or concert hall by the electricity authorities is actually of relatively good quality in the UK. It's only "relatively" good because the apparatus used to generate and distribute the electricity is of archaic design and there

are a number of faults inherent in the system. These faults are generally manifested as one or more of the following:

Sags - where the voltage periodically dips significantly below its 240 volts norm and then goes back up again.

Brownouts - where the voltage dips significantly below 240 volts and stays there.

Surges - where the voltage periodically rises significantly above 240 volts and then goes back down again.

Blackouts - where the power disappears altogether.

All these fluctuations occur frequently throughout the day as the authorities switch bits of their circuit on and off to cope with variations in demand (as weather conditions change, as the nation switches on its kettles after *Brookside*, as equipment in the grid malfunctions, and so on). There are loads of other glitches that appear in the mains lines, they're less important than the monsters above but they're still dangerous.

This all sounds fairly frightening, but things aren't quite as bad as they seem. All equipment that is plugged into the mains, including computers and other processing gear, is designed to be quite tolerant of fluctuations in the mains supply. Only the most extreme fluctuations will cause weirdness in a processing system, but this still happens often enough to be of concern. The real nightmares start when you actually start using the electricity that's delivered to you. Stage lighting, backline, power amps, effect processors, mixing desks, fluorescent lighting, air conditioning, heating, fridges, ovens, television sets and so on. These are the real villains; these are the monkey-faced trolls. Some appliances whack huge spikes and harmonics back into the mains to be circulated around everything connected to the mains circuit; others force the mains to supply really odd electrical waveforms to themselves and everything on the circuit; others switch on and off intermittently causing total disarray in the circuit, and combinations of these produce all sorts of strange shit. Again, most appliances are fairly tolerant of the smaller disturbances but electricity, well, it's a lot like life. Wild, unpredictable and bitchin' enough to completely fry your dongle.

THE MOST COMMON ailment caused by electrical disturbances is data corruption. Going back to basics, all a computer or sequencer or sampler or anything "digital" does is read and/or manipulate huge strings of "1s" and "0s" which are translated into "ons" and "offs" of electronic circuitry respectively. When a spike or voltage surge zaps through a processor all of the "offs" are turned into "ons" and, although a spike might only be measured in thousandths of a second, it would still be capable of altering countless thousands of "off" signals. Depending on the information being processed at the time, the event may pass unnoticed. On the other hand it might result in altered characters, a spew of hieroglyphics, a disablement of a load or save command with subsequent loss of data or a complete system crash. Large spikes also stress the mains input side of your equipment, and will eventually mean that the power supply unit will need to be replaced. This is a very expensive exercise.

Large sags, brownouts and blackouts happen less frequently but we're still talking about weekly, if not daily, occurrences in most environments. These cause the system to pucker out through simple lack of juice and again have results ranging from mildly irritating to coronary inducing.

The severity of the problems encountered does vary from circumstance to circumstance and it is just about feasible that you might be unaffected by any major nasties - if you're luckier than Mr Lucky, the Lucky Luckster. But I don't think so. As with other forms of relaxation, it is certain suicide if you indulge in the pleasure of volatile, hi-tech music without recourse to adequate protective measures. So what's to be done?

There are a number of power protection units available from various sources, ranging in effectiveness from just about useful to being the absolute business. The device that you buy depends on the money you want to spend, which in turn depends on how much you value your equipment and, more important, the info stored on it. You're right - it's just like insurance.

Even if you don't think it's worth doing anything else, I'd strongly recommend that you dash out and buy one of the surge arresters which replace an ordinary 13A plug, and connect it to a suitable multi-socket outlet. It'll cost about £30 and will pay for itself many, many times over by filtering out a portion of the spike/surge spectrum.

If you can spend between £50 and £350 (depending on the size of your system) you can get a line conditioner/voltage stabiliser arrangement which filters out most of the nasties and maintains a steady voltage. This is OK as far as it goes but is really only a half-way house to the best solution - an Uninterruptible Power Supply (UPS). This is a shoebox-sized gadget which is connected between the mains and your processing system and contains a battery charger which keeps a set of internal batteries (similar to miniature car batteries) charged. Normally the load (your system) is connected to the mains via an internal filter, but in the event of a drastic fluctuation the batteries feed the load through an inverter which converts DC to a mains-style sinewave by a process very similar to PWM sample playing. This gives you ten or 20 minutes to finish what you're doing and save all your data gracefully. Prices start from about £150 for something suitable for a dedicated hardware rig or an Atari and S1000, through about £250 for a big Mac and a suite of samplers and upwards in increments to about a couple of grand for something suitable for a large-ish studio. It's the only real solution for sophisticated systems.

There you have it. You pays yer money. . . I'd say that if you're a studio, or hire company or you've got a large MIDI setup and you haven't got a UPS then you are running a very serious risk of losing your work (and your mind). If you're running any sequencer and/or sampler and you haven't got some protection then you're running a smaller risk, but you should think about protecton.

Sadly, there doesn't seem to be power protection companies catering for the muso at the moment, so you're not going to find reliable information as readily as if you're shopping for a new mixing desk. In a moment of weakness I agreed to avail MT of my services, so if you're up against the monkey-faced trolls and need a friend, you can contact me via MT and I'll try to help you get the requisite protection for your setup. Keep it up. ■

"YOUR COMPUTER, YOUR EXPANDERS, AND YOUR SAMPLERS ARE FINE - IT'S JUST THAT THEY WERE DESIGNED TO OPERATE UNDER CERTAIN CONDITIONS, AND DODGY MAINS ELECTRICITY IS NOT ONE OF THOSE CONDITIONS."

reader's ads

MUSIC TECHNOLOGY's free classified section is the biggest of its kind in the business. Every month, we carry more ads for synthesisers, samplers, computers, signal processing gear and assorted other goodies than any other monthly magazine. So when musicians and studio engineers are on the lookout for some extra gear to update their line-up, they turn to these pages *first*.

If you're a private seller, advertising in the back of MUSIC TECHNOLOGY really couldn't be simpler. And if you're searching for a specific piece of equipment or looking for other musicians to fill a gap in your band, we can help out there, too.

Just pick up the phone and dial (0898) 100767. At the other end of the line, you'll be able to select a category in which to place your ad and let us know exactly what it is you're selling or seeking.

The service operates 24 hours a day, so there's no need to hunt for stamps, envelopes or Biros. Pick up the phone and we'll do the rest. If you buy and sell musical equipment as part of a business, you'll have to use the regular classified section on the last page. And we regret we can't answer any queries regarding free classifieds published in MUSIC TECHNOLOGY.

Calls cost 34p per minute cheap rate and 45p per minute at all other times

KEYBOARDS

AKAI AX80, analogue synth, vgc, £250. Tel: (0562) 753485.

ARP AXXE monosynth, inc carry case, vgc, £150 ono. Tel: (0507) 606956.

ARP PRO SOLOIST, with f/case, £150; Synergy digital keybd plus Carlos ROM cartridges - several broken keys hence best offer over £400; Steiner mono analogue synth module, collector's item, £200. Tom, Tel: 081-961 3314, eves.

CASIO CZ1, flagship, velocity/aftertouch, digital synth, plus card, multitimbral layers etc, boxed, manuals, vgc, £350 ono. Tel: (0492) 860673.

CASIO CZ101, psu, manuals, card, 100s voices printed, £120. Tel: (0492) 860673.

CASIO CZ1000, digital MIDI synth, full size keys, multitimbral, instructions, power supply, £150. Keith, Tel: 051-521 2013.

CASIO CZ5000, multitimbral, 8-track sequencer, with ST sound library, mint cond, £300. Tel: (0877) 30999, eves.

CASIO CZ5000, £350; Roland Juno 6, £150; Sequential Circuits Pro1, £75, all mint cond. Steven, Tel: (0298) 26184.

CASIO HT3000, programmable digital synth, 5-octave keybd, great selection of sounds, inc stand, manual and RAM card, exc cond, £150. Jamie, Tel: (0884) 257746.

CASIO HT3000, 5 octaves, programmable synth, 1 month old, £165. Tel: (0929) 424097.

CASIO VZ1, exc sounds, decent keybd, plus ROM card, vgc, £350 ono. Jason, Tel: (0425) 271371, work after 5pm.

CASIO VZ1, multitimbral synth, mint cond, boxed, manuals, great keybd feel, unique sounds but a bitch to program! Offers. Tel: (0202) 393254, anytime.

CASIO VZ10M, £150. Alan Welch, Tel: (0271) 24198.

CASIO VZ10M, 3 RAMs, 1 ROM, Dr T's VZ Rider, many sounds, £250; Korg Poly61, inc case, £175; Sequential Tom, £120. Buyer collects. Andy, Tel: 081-450 7909.

CHASE BIT1 keybd, needs slight attention, £150. John, Tel: (0843) 228038.

CHEETAH MK7VA, 7-octave MIDI control keybd, as new, boxed, £180 ono. Ian, Tel: (0442) 825030, eves.

CLAVINET D6, £250; Korg P3 piano module, £150; Cheetah MK5/2, £80; Tascam 238, £800; Alesis 1622, £450. Jerry, Tel: 071-733 0204.

E-MU PROTEUS 1, exc cond, boxed, under warranty, £449. Don, Tel: (0493) 669109.

ENSONIQ ESQ1, manuals, 320-voice cartridge, vgc, £480; Yamaha TX81Z, £150. Dan, Tel: 081-958 7012.

ENSONIQ SQ1 PLUS workstation synth, multitimbral with onboard FX and easy-to use sequencer, few weeks old, little used, only £895. Tel: (0684) 561397.

ENSONIQ VFX, v2 s/w, £800; Roland D110, £300; Kawai K4R, £300; Yamaha GEP50 fx unit, £150, all as new, boxed, with manuals. Tel: 081-878 0512.

ENSONIQ VFX-SD, third-party sounds, immac, boxed, £1290 ono; Roland TR505, boxed, £85. James, Tel: 051-727 0110.

EVOLUTION EVS1 and Akai XE8, both £220 ono. Mac, Tel: 081-759 9392, after 6pm.

HAMMOND COUGAR double manual organ, plus free Yamaha CS15D synth, £400 ono. Chris, Tel: (0942) 818686.

KAWAI K1, 16 voice, 8 channels, multitimbral synth, extra sounds on disk, home use only, exc cond, £350 ono. Hugh, Tel: 081-311 2765.

KAWAI K1, good cond, supplied with manual and psu, £400 ono. Hugh, Tel: 081-523 1497.

KAWAI K1, immac, £300; Casio VZ1, immac, £270; dbx 120 sub-harmonic synth, bass enhancer, boom box, offers. CJ, Tel: Norwich (0603) 765303.

KAWAI K1R and Roland PC100 keybd controller, both superb cond, original boxes, with their manuals, £300. Paul, Tel: (0256) 475406.

KAWAI K5, 2 cards, Atari editor, manual, potential wondersynth, £600 ono. Joe, Tel: (0904) 793464, eves only.

KAWAI SX210, rare polysynth, Poly 84 mono mode, chord memory, sub oscillator, £325; ARP Omni 2, rich string synth, split keybd, with synth section, £295; Korg DV800 monosynth, £100; Sequential Drumtrax, brand new, separate outs, tunable, manual, boxed, £200. Tel: 021-477 5006.

KAWAI SX240, analogue MIDI synth, Roland SH09, Yamaha DX7 plus 2 ROMs, Ensoniq Mirage, Tascam Porta 05 HS 4-track, reasonable offers only. Trev, Tel: (0992) 468294.

KORG DELTA string synth, fully polyphonic, Korg Mono/Poly, 4 VCOs, arpeggiator, each £150 ono. Tel: (0424) 439219.

KORG M1, 3 RAM cards, f/case, £950 ono. Andy, Tel: (0203) 319293.

KORG M1, good cond, guaranteed, £750. David, Tel: (0793) 529667.

KORG M1, RAM card, boxed, as new, £850 ono. Tel: (0792) 206466, after 6pm.

KORG POLYSIX, inc case, £180; Roland TR808, £250; Boss DR550, plus power supply, £140, all exc cond, no offers. Paul, Tel: Leeds (0532) 865197.

KORG POLY800, mint cond, with f/case, exc as first-time pro keybd, £170. Tel: 071-231 2058.

KORG POLY800 synth, £120 ono; Roland SH101 synth, with mod grip, £100 ono; Roland TR909 drum m/c, £350 ono; Korg SQD1 sequencer, £140 ono. Craig, Tel: (0742) 750419.

KORG POLY800, MkII, digital MIDI synth, psu, instructions, £190 ono. Martyn, Tel: (0925 75) 4012.

KORG T3 UPGRADE for your Korg M1R, mint cond, boxed, £225. Tel: 061-442 3817.

KORG WAVESTATION, advanced vector synth, the industry standard, 3 months old, boxed, as new, inc 2 Korg voice cards, £950; E-mu Proteus/1, 1U rackmountable 16-bit sample player, boxed, as new, with free Steinberg Twelve ST sequencing s/w, £550. Tel: Tyneside 091-253 2460, eves.

MINIMOOG, with spare temporary oscillators, £400. Barry, Tel: Abergervenny (0873) 79517.

MOOG TAURUS bass pedals, £500 ono. Gary, Tel: Doncaster 727800.

OBERHEIM MATRIX 6, the analogue monster, full MIDI, very rare, £550. David, Tel: 061-498 9935.

OBERHEIM MATRIX 6 keybd, fully programmable, velocity, aftertouch, immac, £695; Seck Dynamix 16:8:2, modified, 8 extra aux returns, £645. John, Tel: (0255) 675748.

OCTAVE CAT analogue synth, ideal for house and dance music, bargain at £150. John or Jools, Tel: 061-678 1622.

ROLAND ALPHA JUNO 2, boxed, £300. Jason, Tel: (0257) 278274.

ROLAND ALPHA JUNO 2, gig bag, manual, £299; MC202, £99; TR626, £130; Axxeman guitar preamp, £110. Nigel, Tel: (0437) 762661.

ROLAND D5, as new, boxed, manuals etc, £375 ono. Gordon, Tel: (0223) 464117, days/(0638) 720090, eves.

ROLAND D10, multitimbral synth, good cond, £495 ono or will consider exchange for decent keybd sampler. Tel: Burnley (0282) 416451.

ROLAND D10, manuals, hard case,

home use only, plus editor and 2000 sounds, £500. Andy, Tel: Leeds (0532) 430177.

ROLAND D10 LA synth, superb cond, c/w box, manuals, leads and pedal, £450. Brian, Tel: Cambridge area (0954) 719532.

ROLAND D110, plus Atari edit librarian disks, £350 ono. Tel: (0925) 68114.

ROLAND D110 synth module, good cond, £250 ono. Tel: Nottingham (0602) 279384.

ROLAND D110, plus RAM card, £330; Cheetah 7P, weighted master keybd, £520; Evolution EVS1, plus Atari editor, £190, all boxed, with manuals, mint cond. Neil, Tel: (0706) 218938.

ROLAND D110, as new, £299; Yamaha TX81Z, as new, £150. Both £400. Lee, Tel: (0252) 871243, anytime.

ROLAND D20, f/case, £700. Tel: Clwyd (0490) 2090.

ROLAND D20, plus 4 sound cards, manuals, £750. John, Tel: 081-347 8842.

ROLAND D20, immac, home use only. Stuart, Tel: Norwich (0603) 685967, days/484036, eves.

ROLAND D50, 2 Valhala International Gold ROM cards, 1 memory card, home use only, manuals, £595. Michael, Tel: 081-802 3435.

ROLAND D50 MEX, fitted multitimbral expansion board, 256 patches in memory, boxed, manuals, exquisite cond, £790 ono. Nick, Tel: (0635) 42110.

ROLAND JUNO 1, with manual, £200 ono. Richard, Tel: (0274) 590302.

ROLAND JUNO 6, £170. Tel: (0344) 429163.

ROLAND JUNO 60, exc cond, plus hard case and expression pedal, £220. Tel: (0233) 640643.

ROLAND JUNO 60, with case and JSQ60 sequencer, £280. Richard, Tel: (0869) 249995.

ROLAND JUNO 106, MKS70, PG800, 4x M64C cartridges, Quad 306 power amp, all mint cond, offers. Tel: (0734) 580764.

ROLAND JUNO 106, immac, £220; Moog Prodigy, £90; Yamaha RX21, £90, or swap the lot for Roland D-Series (plus cash). Tel: Tyneside 091-427 5737, days/237 2495, eves.

ROLAND JUPITER 6, good cond, boxed, £525. Chris, Tel: (0734) 794493.

ROLAND JUPITER 6 MIDI synth, exc cond, full heavy-duty f/case, original manual, £350, no offers. Tel: Flat 7 051-733 2684.

ROLAND JX3P, £250 or offers. Philip, Tel: 081-549 8933, days/667 1957, eves.

ROLAND JX3P, with programmer, £275; MC202 and TR606, the pair: £100; DR220E, £65; Korg DVP1 vocoder, £250. Swap JX3P and DVP1 for JX8P. Tel: Doncaster (0302) 367515.

ROLAND MKS70, plus 4 RAMs, Juno 106, Studiomaster 24:2 Sessionmix mixer, all mint cond, offers. Tel: (0734) 580764.

ROLAND MT32 sound module, exc cond, box, manuals, £200 ono. Colin, Tel: (0705) 863108.

ROLAND PC200 MIDI keybd, brand new, boxed, £100. Richard, Tel: (0532) 642210.

ROLAND SH101, psu, manuals, great sounds. Tel: (0668) 81485.

ROLAND SYSTEM 100M, £325 ono. Justin, Tel: (0225) 330865.

ROLAND U20 keybd, full f/case, Roland MC50 sequencer and full f/case, swap for Roland W30? Marnie, Tel: (0304) 215078.

ROLAND U110 module, plus 4 ROMs, with manuals. Roy, Tel: South Wales (0554) 771948.

RSF KOBOL, 19" analogue module, collector's item, serious callers only, £400. Zoran, Tel: 071-436 4591.

SEQUENTIAL CIRCUITS PRO1, with custom modification, manual, circuit diagrams, great acid synth, vgc, £165. Andy, Tel: (0223) 412201.

SEQUENTIAL PROPHET T8, f/case, rare opportunity to buy Sequential's flagship analogue synth, exc cond, only serious offers considered. Howard, Tel: (0274) 577147.

TECHNICS KN600, 8-track sequencer, sampled instrument sounds, full MIDI etc, velocity sensitive, still boxed, with dust cover, cost £850 November 90, sell for £650. Tel: (0629) 55886.

TECHNICS SXKM800, portable keybd, inc 112 sounds, 40 rhythms, 8-track sequencer, MIDI and fx processor. Grant, Tel: 081-759 9247.

YAMAHA CS15, classic monosynth, good working order, £100. Graham, Tel: (0604) 843536.

YAMAHA DX5, 2 ROMs, 1 RAM, £950 ono. Peter, Tel: (0257) 424257.

YAMAHA DX7, c/w MonstROM cartridge: 512 sounds, Atari voice lib for DX7, 3000 sounds in library, £520. Tel: Nottingham (0602) 504052.

YAMAHA DX7, plus RAM and ROM, f/case, breath controller, manuals, 1000s of sounds, £450; Alesis MMT8 sequencer, manual, box, leads, £160, both home use only, both for £600 ono. Tel: Loughborough (0509) 413218.

YAMAHA DX7IID, f/case, £750. Tel: 081-570 1746.

YAMAHA DX11 and Roland TR505 drum m/c, asking price £360, might swap for something. Paul, Tel: (0532) 621589.

YAMAHA DX21, £180; Juno 60, with Groove MIDI and f/case, £250. Tel: High Wycombe 534423.

YAMAHA DX21 keybd, exc cond, manuals, box, very quick sale needed, £200 or swap for good sequencer. Jason, Tel: (0323) 641074.

YAMAHA DX27, £160; Roland TR626 drum m/c, £140; Korg MS10 keybd, £70; Marlin sidewinder guitar, £60; Band In A Box s/w, Atari, v4, £40. Tel: Lincolnshire (0427) 615865.

YAMAHA DX100, £125; Korg Poly800II, soft case, £150. Rueben, Tel: Camberley (0276) 20994.

YAMAHA EMT10 sound expander, with manual, exc cond, home use only, £150. Phil, Tel: 061-773 9003, eves and weekends.

YAMAHA KX5, remote MIDI keybd, black, touch sensitive keys, never had the guts to use, offers around £110. Tel: Chester (0244) 660812.

YAMAHA KX88, with f/case, £900; Roland S330, monitor and mouse, £750. Stuart, Tel: (0273) 695336.

YAMAHA PSS790, 100 sampled voice, drum pads, vector synthesis, 8-track sequencer, 4 months old, vgc, £150. Robert, Tel: (0933) 273915, days.

YAMAHA SY55, new, with case, stand, pedal, RAM card, all manuals, £700. Tel: (0388) 776046.

YAMAHA SY77 and Korg Mono/Poly, asking price, £1500 ono. Tel: (0483) 747395, days/(0344) 20099, eves.

YAMAHA TG55 sound module, 6 hrs home use, pristine cond, £450. Gerald, Tel: Falkirk (0324) 31513.

YAMAHA TG55, £350; Tascam 644 MIDIstudio, £600; Casio VZ1, boxed, with manuals, as new cond, £300. Postage no problem. Jerry, Tel: (0491) 579272, work/571779, home.

YAMAHA TG77 tone generator, brand new, boxed, with manuals, £850. Richard, Tel: (0532) 642210.

YAMAHA TX802, £600; Akai VX90, £180; Evolution EVS1, £200, all perfect A1, possible part-swap Roland D550. Tel: (0545) 560164.

YAMAHA TX81Z, boxed, £160. John, Tel: (0843) 228038.

YAMAHA TX81Z, £200. Tel: (0344) 429163.

YAMAHA TX81Z, mint cond, with manual, £180 ono. Adam, Tel: (0602) 229523.

YAMAHA TX81Z, vgc, FM multitimbral synth, £150. Daniel, Tel: 081-958 7012.

SAMPLING

AKAI S612, £250. Tel: (0344) 429163.

AKAI S700 sampler, plus 30 disks, £350. Tel: High Wycombe 534423.

AKAI S1000KB, home use only, unmarked, with library, manual, boxed, £2500, no offers. Paul, Tel: Camberley (0276) 22946.

AKAI X7000 sampling keybd, hardly used, £400. Adrian, Tel: (0928) 560047.

AKAI X7000, plus memory expansion, loads of disks, plus f/case, exc cond, £450. Keith, Tel: (0450) 76131, eves.

AKAI X7000, good cond, package inc box, manuals, over 70 disks, memory expansion board, s/w upgrade and editing s/w to run on Atari ST, £500. Brian, Tel: Cambridge area (0954) 719532.

AKAI X7000, vgc, £400 or p/x M1. Steve, Tel: (0733) 241516.

CASIO FZ1 sampler, loads of samples, new disk drive needed, just been made redundant, hence bargain at £400; CX5II, plus 8- and 16-track sequencer, 200 extra sounds, £200; Roland 505 drum box, extra patterns, £90. John, Tel: (0623) 751928, anytime.

CASIO FZ1, 2Meg version, 20 disks, leads, Masterbits CD, plus manuals and complete FZ1 guide by Steve De Furia, vgc, £675. Matt, Tel: (0293) 537950, after 6pm.

CASIO FZ1 sampling keybd, disks, manual, hard case, £625 ono. Bill, Tel: 061-928 5946.

CASIO FZ1 clone, mint cond, and Alesis MMT8 sequencer, £650 ono. Neil, Tel: (0582) 411189.

EMAX sampling keybd, with internal 16-track sequencer, 15 sound disks, £750; Yamaha FB01 sound module, £110, both vgc, with manuals. Tel: 081-903 9473.

EMAX sampler, with loads of sounds, plus Steinberg editor for Atari ST, £950. Narinda, Tel: 021-356 1344, eves.

EMAX I sampling keybd, never gigged, boxed, manual, disks, offers around £800. Des, Tel: 081-692 6857.

EMAX SE sampling keybd, large sound library, Steinberg editing program for Atari 1040, altogether £950; Atari 1040STFM, Pro24 v3

sequencer, Virtuoso sequence program, business package, £250. Mr Singh, Tel: 021-356 1344, eves.

EMAX SE sampling keybd, large library, full f/case, £850. Paul, Tel: Leeds (0532) 400621.

E-MU PROTEUS/1, 1U rackmountable 16-bit sample player, boxed, as new, with free Steinberg Twelve ST sequencing s/w, £550; Korg Wavestation, advanced vector synth, the industry standard, 3 months old, boxed, as new, inc 2 Korg voice cards, £950. Tel: Tyneside 091-253 2460, eves.

ENSONIQ EPS, plus 4x expander, sampler, 18 months old, exc cond, 150-disk library included, £1400. Brian, Tel: 031-447 0878.

ENSONIQ EPS sampling keybd, exc sound library, expanded memory, home use only, £800. Tel: Brighton 870560.

ENSONIQ EPSM sampler, 16-bit, 4Meg memory, £750 ono. Tel: (0763) 261448.

ENSONIQ EPS16+ sampling workstation, 16-track sequencer, with built-in 24-bit fx section, a few months old, with library, only £1400 ono. Matthew, Tel: Barry (0446) 744165, anytime.

ENSONIQ MIRAGE, inc 30 disks, £400 or offers. Laurence, Tel: (0277) 225071.

ROLAND S10 sampling keybd, f/case, disks, £360. Paul, Tel: Liverpool 051-235 2821, days/Warrington (0925) 725133, eves and weekends.

ROLAND S330 sampler, 1 yr old, perfect cond, £650, no offers. Rick, Tel: (0473) 462447, days/(0449) 673815, eves.

ROLAND S330 sampler, £650 ono or exchange for Roland U20 or D20. Tel: (0831) 557049.

ROLAND S330, with mouse and monitor, 2 yrs old, exc cond, £700; 45Meg removable hard disk drive, connects to any SCSI sampler/computer, £300. Tel: (0706) 50897.

ROLAND W30 workstation, plus disks, stand and hard case, £1100 or offers. Gary, Tel: Mansfield (0623) 28358.

ROLAND W30, huge pro library, over 400 samples, 50 disks, mint cond, £1100. Tel: Devon (0364) 661420.

ROLAND W30, boxed, with 30+ disks, £1100; Roland R5 drums, with manual, £250. Mark, Tel: (0905) 55240 or Richard, Tel: (0924) 377112.

ROLAND W30 workstation, disks, f/case and leads, £999. Alan, Tel: 021-355 1331, days/350 1356, home.

SWAP EPS SOUNDS. Pete, Tel: (0527) 543452.

YAMAHA TX16W sampler, 3Meg memory, £800 or swap for immac Jupiter 8. John, Tel: (0737) 779194.

SEQUENCERS

ALESIS MMT8, exc cond, boxed, manual, power supply, £150. Tel: 021-552 1049.

CHEETAH MQ8 sequencer, vgc, £135 ono. Mark, Tel: (0656) 650820.

KORG SQD1 MIDI sequencer, 16-track, 16000 events, real- and step-time record, full editing and construction facilities, with disk drive and disks, very fast loading time, boxed, manual, £125. Gavin, Tel: (0602) 732979.

KORG SQD1 MIDI recorder, 10 double-sided disks, 30K notes per disk, £250 ono. Malcolm, Tel: (0603) 503994, days/409036, eves.

ROLAND MC202 micro composer, synth and sequencer combined, exc cond, boxed, with manuals, £120 ono. Mick, Tel: 071-326 0090.

ROLAND MC500, MkII, £400; Carlsbro 45K combo, £80. Lewis, Tel: 071-609 5750.

YAMAHA QX3, 16-track digital sequence recorder, disk drive, massive memory, vast editing facility, £450 ono. Tel: (0324) 612990.

YAMAHA QX3, immac, boxed, with manual, £600. Ian, Tel: (0404) 42234.

YAMAHA QX5, 8-track sequencer, boxed, with manuals, excellent first sequencer, £160. David, Tel: (0402) 474565.

YAMAHA QX7 MIDI sequencer, boxed, manual, leads, vgc, £45. Andy, Tel: (0223) 412201.

YAMAHA QX21 MIDI sequencer, 1 yr old, £90 ono. Desmond, Tel: (0734) 428604.

YAMAHA QX21, good cond, manual, psu, £50. Tel: (0883) 341653.

YAMAHA QX21, £120. Tel: (0344) 429163.

DRUMS

ALESIS HR16, boxed, immac, £180. Ian, Tel: (0450) 73178, eves.

ALESIS HR16 drum m/c, perfect cond, power supply and leads, £180; Korg DRV1000 digital reverb, £110. Tel: 061-336 8647.

HAMMOND DPM48, digital overlooked classic, separate outs, tape sync via "synctrack", replacable chips, (Linn, Drumulator etc), spare sound card, (RAM), pad interface, total cost £900+, bargain at £125. Tel: (0492) 860673.

KAWAI R50 drum machine, good cond, boxed, manual and extra sound chip, £110, unmissable! Tel: (0782) 336574.

KORG DDD5 drum m/c, MIDI, £90 ono. Tel: Derby (0332) 780355.

ROLAND M64C memory expansion cartridge, £40. Andy, Tel: (0223) 412201.

ROLAND SPD8 and Simmons drums, bass pedal, Carlsbro amp, £395. Tel: (0252) 315448.

ROLAND TR505 rhythm composer, as new, must sell, £115 ono. Tel: 091-529 4788, anytime.

ROLAND TR505 rhythm composer, boxed, £100. John, Tel: (0322) 221545.

ROLAND TR707 and TR727, latin, drum m/cs, each with box, power supply and manual, separate outs, MIDI, built-in mixer etc, £250 ono for both. Tel: (0232) 328417.

ROLAND TR707, excellent MIDI m/c, £120. Tel: 071-694 8072.

ROLAND TR727 percussion m/c, £120; Korg DDD1 sample drum m/c, £180; Roland PG1000 programmer, £140. Paul, Tel: 041-423 5485.

ROLAND TR808, good cond, inc manuals, £250; Boss DR550 drum m/c, boxed, as new, inc power supply, £135. No offers. Paul, Tel: (0532) 865197.

ROLAND TR808, classic drum m/c, highly sought-after sounds, will swap for Roland TR909 or sell for £400. Graham, Tel: (0604) 843536.

ROLAND TR808 drum m/c, £265 or swap for good cond Sansui MR6 recorder. Ian, Tel: Tunbridge Wells (0892) 545777.

SIMMONS SDS7, 5 pads, rack, leads, 18 selector pads, 99 digital analogue memory, plus amp, slight fault, £300. Tel: (0223) 832612.

YAMAHA RX8, good cond, manual, psu, £150. Tel: (0883) 341653.

YAMAHA RY30, brand new, unused, 1 yr guarantee, not suitable for pensioners, £325. Bill, Tel: (0402) 223345.

COMPUTING

ATARI 1MEG STFM, plus SM124 hi-res monitor, £375 ono. Tel: 041-332 8849.

ATARI STE, 4Meg, inc manuals, mouse and joystick, exc cond, home use only, £650. Annie, Tel: (0269) 861256.

ATARI 520ST, plus 1Meg update, double-sided disk drive, Atari monitor, Cubase sequencer s/w, all as new, £550. Tim, Tel: Bristol (0272) 514035.

ATARI 520STE, 1Meg expanded, SM125 hi-res monitor, Steinberg Pro24 v3, Comarner drive, no boxes, as new cond, £350 ono, buyer collects. Jerry, Tel: (0491) 579272, work/571779, home.

ATARI 520STFM, plus s/w and accessories, £180; Yamaha RX17 drum m/c, manual, vgc, £130; Roland Juno 6, £120. Dave, Tel: 081-597 4845, eves.

ATARI 520STFM, with 1Meg drive, sampler, Mastertracks Jnr 64-track sequencer, joystick, games, £260 ono; Star LC10 mono printer, £80 ono. Colin, Tel: (0705) 863108.

ATARI 520STFM and mono monitor, £200; Yamaha CX5M, with SFG05, editor and sequencer, £80; Akai ME15F philosophy controller, £25. Andrew, Tel: (0242) 514737.

ATARI 1040STE, SM124 monitor, Trackerball, Notator, latest version and Export, all in perfect cond, £750. Mr Craven, Tel: 071-381 3796.

ATARI 1040STFM, monitor, all manuals, everything somebody will need to get started, Steinberg Pro24 s/w, loads of other items, asking price £300 ono or offers. Barry, Tel: (0302) 535242.

ATARI 1040STFM, monitor, Pro24 v3, Creator, 2 joysticks and over £100 games, £500 or swaps. Craig, Tel: Humberside (0472) 79264.

CHEETAH MIDI INTERFACE and 8-track sequencer for ZX Spectrum, £30. Mark, Tel: Preston 722722, office hrs.

C-LAB NOTATOR, v3, totally unused, £350 ono; Steinberg Cubase, v2, £350 ono. Simon, Tel: (0279) 443877.

C-LAB NOTATOR, s/w sequencer for Atari ST, complete original s/w, with manual and security key, £250. Tel: (0753) 682028.

DR T'S D110/D10 editor, manual etc, plus 2000 sounds, £40; Roland D-Series ROM cards, PN.D10.01 Unique D sounds and PN.D10.03 Natural Variations, £30 each or £50 the pair; MIDIDrummer v2, manual, £20. Andy, Tel: Leeds (0532) 430177.

DR T'S KCS, Level 2, Atari original, with manuals, £75; Roland TR707, £120 ono; GBS reverb, stereo excellence, £35. Tel: East Sussex (0424) 218711.

DR T'S X-OR, multi-synth generic editor, latest update, with manual, £150. Tel: (0545) 560164.

DX ANDROID, ed/lib, 1000s of

voices on disk/tape for TX7, £80; MT32 ed/lib, £20; TX81Z, FB01 4-op ed/lib, £20; D10/D110 ed/lib, £20; DX100 ed/lib, 100s pro voices on tape, £30; AMS Studio 20-track sequencer, £20. Tel: (0492) 860673.

HOLLIS RESEARCH MIDIMAN, universal synth editor for Atari ST, latest update and manual, cost £90, sell for £50. Martin, Tel: (0242) 510434.

HYBRID ARTS EZ-SCORE PLUS, v1.1, EZ-Track Plus sequence and scoring s/w, £125 ono for both; 1040ST, £200 ono. Tel: (0925) 68114.

JORETH MUSIC SYSTEM for Commodore 64, MIDI interface plus Composer, Linker and System 7 editors, cost over £400, must sell, sell £80 ono. Tel: 091-529 4788, anytime.

MEMORY UPGRADE for Atari ST to 2.5Meg, £125. Tel: (0925) 68114.

STEINBERG CUBASE, v2, original manual, key and registration, only £300. Tony, Tel: 071-580 9191, days/081-889 7332, eves.

STEINBERG FB01 editor, £25. Alan Welch, Tel: (0271) 24198.

STEINBERG MIDEX PLUS, £400; Atari Cubase, £450, both boxed, registered and with manuals, as new. Nick, Tel: (0635) 42110.

STEINBERG PRO24, v3 sequencer, inc manual and dongle, £40. Steve, Tel: (0223) 212226.

STEINBERG PRO24, v2 and 3 complete, £100; Roland RD250S, £800. Tel: 081-534 5064, afternoons.

TATUNG COLOUR MONITOR, vgc, £60. Jeff, Tel: Hull (0482) 46166.

YAMAHA CX5M, with YK10, 2 cartridges, TV, cassette recorder, £70 ono. Steve, Tel: (0387) 720133.

RECORDING

AIWA WX110, 4-track cassette duplicator/mastering deck, new head and calibrated, high quality copies, ie C60 in 15 mins, Dolby B and C, synchrostart, £95. Dave, Tel: (0264) 738750.

AKAI MG14D, 12-track recorder, vgc, £1200. Tel: (0545) 560164.

AKG D320B vocal mic, plus boom stand and lead, perfect, £70. Alan, Tel: 081-568 9698.

ALESIS MIDIFEX digital delay, reverb, fx, brilliant, manual, psu, (MIDI), £150. Tel: (0492) 860673.

ALESIS QUADRAVERB PLUS, as new, £250; Proteus/1, £400; Roland PR100 digital sequencer, £300. Tel: (0909) 566695.

BOSS DIGITAL DELAY, £90; Alesis Microverb, £80; Frontline 8:2 mixer, £60; Pearl 6:2 mixer, £60; Cutec graphic EQ, £60. Julie, Tel: (0222) 750343, days only.

B&W DM110 studio monitors, 100W 2-way ported design, finished in black ash, boxed, as new, £110; Alesis Midiverb II, 1U rackmountable, 16-bit fx unit, boxed, as new, £140. Tel: Tyneside 091-253 2460, eves.

CASIO DA2 DAT m/c, all extras, inc DAT rack, £350 ono. Dave, Tel: 091-514 2136.

CASIO DA7 DAT m/c, 2 months old, c/w carry case, battery pack, power supply, blank tapes, box, manual, £449. Kevin, Tel: (0270) 872558.

CUSTOM-BUILT 16-TRACK STUDIO, with full automation, digital mixdown and mastering, asking price around £18000 but all offers will be considered, for a full list contact Chris, Tel: (0536) 744288.

FOSTEX E16, exc cond, home use only, well-maintained, £2000 or swap for M80/R8 and cash adjustment. Tel: (0255) 434217.

KAWAI MX8R, 8:2 rackmount mixer, 2 stereo fx returns, very quiet, £215. Fred, Tel: Newport (0633) 266647, eves.

KORG A5 bass, programmable multi-fx unit, new, boxed, £180; Vestax 601 mini 4-track recorder, £40. Taxman forces reluctant sale. Tel: Sussex (0273) 493659.

KORG SDD1000, digital delay unit, 19" rackmounting, exc cond, boxed, manual, £75; Vesta Fire RV3 reverb, built-in limiter, noise gate and 3-point EQ, 19" rackmounting, exc cond, £60. Phil, Tel: Sunderland 091-548 6124.

MOOG 10-BAND GRAPHIC EQ and Moog 12 stage phaser rack units, £150 each; MXR dual comp/lim, £100; EXR Exciter, dual, balanced, £100. Tom, Tel: 081-961 3314, eves.

NOMAD AXXEMAN guitar preamp, rackmounting, great guitar sound, chorus, ADT, compression, switchable overdrive and reverb, £100, no offers. Carl, Tel: 081-907 6182.

PACE 16:8:2 mixer, 1 input channel not working, hence £200; Tascam 4-channel EQ, £30; Boss DE200 DDL, £50; JVC 7-bnd stereo graphic, £30. Andrew, Tel: (0242) 514737.

PHONIC 4-CHANNEL professional disco mixer, 4 inputs and 1 master fader, cue and fade facility, talkover function, 5-bnd EQ, headphone monitor, LED metering, as new, boxed, £80 ono. Tel: (0384) 410853.

REVOX PR99, MkII, auto locator, half-track, high speed, inc alignment tapes, immac, £925. Tim, Tel: (0272) 514035.

SANSUI MR6, 6-track cassette recorder, 1 yr old, good heads, hardly used, £295; Roland TR707 drum m/c, manual, vgc, £99. Martin, Tel: Bedfordshire (0462) 812918.

SIMMONS SPM8:2 MIDI mixer, £190 ono. Greg, Tel: Medway (0634) 715387.

SONY TC377, 3-head, 3-speed open reel, longlife ferrite heads, excellent budget mastering machine, vgc, £125. Tel: (0684) 561397.

SOUNDTRACS 16:8:16, 32 tracks on mixdown, exc cond, never gigged, the desk that Phil Collins used on his first album, only £1099. Richard, Tel: (0225) 317615.

STUDER A810, 2-track, plus manual, regularly serviced and maintained, £2500; 2" multitrack test tape, £200; 6ft equipment rack, £100. Ray, Tel: (0752) 895323.

STUDIOMASTER PROLINE 16:8:16:2 desk, £1100; Yamaha AM802 8:2 mixer, with EQ and 3 auxs, £200, both as new, boxed, with manuals. Colin, Tel: 081-878 0512.

STUDIOMASTER 24:16:2 desk, Series I, 3-bnd EQ, 2 sweepable, 3 auxs, very articulate-sounding desk, immaculately maintained, will also include custom-built patchbay and leads, £900. Tel: 081-994 7914.

STUDIO RESEARCH 6:2 mixer, full EQ, stereo fx, sends and returns, excellent for keybd monitor and recording etc, as new, £150 ono. Chris, Tel: 081-533 6273.

TASCAM ATR60 16-track 1" recorder with dbx, auto-locate, remote, stand, exc cond, home use only. Cost £13,000, sell for £6995. Tel: (0684) 561397.

TASCAM PORTA 01, boxed, vgc, £200. David, Tel: (0293) 521648.

TEAC A103, hi-fi cassette deck, suitable for mastering, new head and calibrated, £45. Dave, Tel: (0264) 738750.

TEAC A3440, (faulty switch), Korg PolySix, (few keys stick in), otherwise both in exc cond, no reasonable offers refused, also Akai GX635D quarter-inch reel-to-reel, trolley rackmounted, plus remote, £300. Graham, Tel: (0484) 533440.

TEAC INTEGRATED STEREO: turntable, tape deck, CD player, Akai 220W amp, Jamo 170W speakers, £700 ono. Raj, Tel: (0656) 861574, after 6pm.

YAMAHA MT3X portastudio, 6 months old, still guaranteed, high speed record, dbx, 2-bnd EQ, 6 inputs, £390 ono. Craig, Tel: (0742) 750419.

YAMAHA MT3X, 4-track recorder, £325; Studiomaster 16:4:2 mixing desk, Series V, £750, or both for £925. No offers or time wasters. Tel: 071-511 1120, 24 hrs answerphone.

YAMAHA MT100, good cond, manual, psu, £200. Tel: (0883) 341653.

AMPS

CARLSBRO COLT 45K keybd combo, home use only, exc cond, £160. Tel: (0284) 735710.

CARLSBRO K115 keybd combo, as new, £240; Studiomaster 1000W stereo power amp, £380; Studiomaster Mixdown Gold 16:8:16, £1500; 200W W Bass bin, with 15" fane driver, £75. Tel: Luton (0582) 420332.

CARLSBRO MARLIN 150W PA amp, spks, plus powered monitors, £240. Tel: (0734) 425369.

MTR STA200, rackmount amp, £150. Tel: (0925) 68114.

SANYO 50W, stereo auxiliary monitor amp, £30; AKG SLM50 cube spks, similar to Auratones, £45 the pair; Philip Rees V10 MIDI thru box, £25. Pete, Tel: 081-367 1720.

SUNN SX4150 PA amp, £150; Custom Sound 12" horn and wedge monitors, £80. Alan Welch, Tel: (0271) 24198.

TOA KD1, 4-channel mixer amp, fx, reverb etc, superb cond, home use only, highest offer secures. Andy, Tel: 081-343 1811.

PERSONNEL

ART NOUVEAU, based in Stoke-on-Trent, require synth players and vocalist to form synth pop band in Depeche Mode style. Anybody considered. Steve, Tel: Stoke-on-Trent (0782) 660969.

ATARI ST MIDI USER seeks contacts to exchange sequences, MT32/DX27 editors and voices. Write: Ben, 126 Womersley Road, Knottingley, West Yorkshire WF11 0DQ.

GROOVE STATION INCORPORATED seek record company for dance project. Stuart, Tel: (0257) 262753.

KEYBOARD PROGRAMMER/SONGWRITER seeks partners in Midlands area, interested

in writing and producing studio-based pop dance music tracks. Paul, Tel: (0384) 410853.

MANAGER REQUIRED, whose best friend is a sharp accountant, to manage a talented instrumentalist, specialising in techno/house/dance. Mark, Tel: (0733) 66973.

MEN MACHINES NEEDED for MIDI noise project in Brighton area. Into: KLF, 808, Blue Nile, Kraftwerk. Graham, Tel: (0273) 565042.

OWNER OF SY22 and Atari ST is looking to contact people with same hardware to swap patches, s/w and sequences. Richard, Tel: (0493) 667388.

PRODUCER/KEYBOARD PLAYER seeks vocalist for collaboration on commercial techno/Eurobeat material. Tracks already written. Studio and live work. Absolutely no time wasters. Andy, Tel: (0295) 279339.

THE HAZARDS require synth player/drum programmer, for gigs and recording. Vince Clarkes welcome. Influences: Depeche, New Order, Human League, Soft Cell, Erasure, Yazoo. Write: Steve, 57 Huntingdon Gardens, Colley Lane, Cradley Heath, West Midlands B63 2TT.

YOUNG AMBITIOUS male seeks position as trainee sound engineer in Norwich area. Fast learner and willing to work very hard. Sean, Tel: (0362) 87615.

MISC

AKG SLM50 cube monitors, 50W, £40; Philip Rees 1:10 MIDI thru box, £35. Pete, Tel: 081-367 1720.

CARLSBRO 100W SPKS, stands, plus power amp, £150; Wurlitzer electric piano, offers. Fab, Tel: (0709) 828655.

LARGE FLIGHTCASE, custom designed to hold 2 STs, 2 SM124/125 monitors, 1 5U rack, large lift-out tray for leads etc and long section for keybds/stands etc, phone for more details. Tel: (0706) 50897.

MIDITEMP PMM88 MIDI matrix, £250; Midiverb II, £100; Roland U110 cards, £25 each; Roland D20 voice crystal RAM, £30. All mint cond. Rob, Tel: (0527) 543307.

PEARL cased stereo floor fx, inc delay, flange, chorus, phase, 6 foot switches, provision for 6 more, guitar, keybds etc, psu, take lid off, plug in, and boogie! vgc, £150. Tel: (0492) 860673.

REAL WORLD SYCOLOGIC M48, 16 in, 48 output MIDI patchbay, boxed, brand new, unused, cost £1300, sell £995. Tel: (0483) 273842.

ROLAND hi-tech guitar and bass MIDI synths, 128 programmable memories, with cards, cost over £2000 each, manuals, cases, GR707, £525; GR77B, £625. Tel: (0492) 860673.

ROLAND M64C memory expansion cartridge, £40. Andy, Tel: (0223) 412201.

STAGE LIGHTS: 16 300W cans, stands, controller, £250 ono. Richard, Tel: (0603) 413171.

WANTED

C-LAB UNITOR N, pay £150 plus Notator dongle, also Wavestation patches - swaps. Tel: 081-692 8129.

CHROME STAND LEGS for Yamaha CS60, must be original type, will pay £40. Paul, Tel: 041-423 5485.

ENSONIQ SQ80 disks urgently required, will buy or do swaps, also required: manual for Ensoniq SQ80. Graham, Tel: (0604) 843536.

HELP! Can anyone fix my lovely Roland SVC350 vocoder or sell me a dead one for parts? Ian, Tel: (0450) 73178.

KORG DVP1 or Powertran vocoder, also Elka CR99 wanted. Tel: (0925) 68114.

KORG EX800 or Yamaha FB01 modules, in good cond, cash or exchange Phonic disco mixer (see Recording section). Tel: (0384) 410853.

KORG T1 workstation wanted. Tel: (0909) 566695.

ROLAND D110 synth module, good price paid or will exchange for Boss DR550 16-bit drum m/c. Tel: (0703) 220152.

ROLAND MKS80 desperately wanted, MPG80 programmer preferable but not essential, will pay good price. A Prentice, Tel: 031-440 1797.

ROLAND P330 piano module, £300 approximately cash waiting. Tel: 081-951 0413.

ROLAND PG800, must be relatively good cond. Graham, Tel: 081-464 7873.

ROLAND SH101 analogue synth, up to £100, with MIDI-CV converter if poss. Dave, Tel: 021-426 2843.

ROLAND SYSTEM 100M modular synth, any configuration considered. James, Tel: (0376) 570066, anytime.

SANSUI MR6, £350 cash waiting. Steven Martin, Tel: (0636) 830779.

STEINBERG KEY EXPANDER, all offers considered. Rod Egglestone, Tel: (0909) 770162, before 5pm.

STEINBERG SYNTHWORKS editor for Roland MT32 synth, needed urgently, cash waiting or swap for Hollis Midiman editor. Martin, Tel: (0242) 510434.

12U 19" TABLE RACK wanted, must be very cheap. Tony, Tel: 071-625 5187, anytime.

VOCODER WANTED, must be in good cond. Brian, Tel: (0474) 533914, days only.

WANTED: Casio FZ1, plus memory expansion, £650. Derek, Tel: 081-311 8124.

WANTED: good keybd synth, Kawai, Korg, Roland or Yamaha. Tel: Dorset (0202) 734415.

YAMAHA FX500 multi-fx, must be vgc, cash waiting. Tel: 041-954 0802.

YAMAHA YC45D organ, cash waiting if reasonable price or swap for Roland D110 synth. Tel: (0324) 612990.

ad index

ABC Music.....10
Acrobat Music.....48
AMG.....45
Andertons.....64
Audio Quest.....57
Axe Music.....37
Bluebridge.....71
Brixton Exchange Mart.....10
Casio Elec.....IBC
Cheetah.....13
Computer Music Systems....55
Digital Music.....23
Eddie Moors Music.....48
Intrinsic Tech.....53
Korg U.K.....OBC
Miditech.....58
Music Connections.....55
Music Corporation.....57
Newtronic.....65
Patchworks.....29
Peavey U.K.....21
Roland U.K.....5, 41
Soho Soundhouse.....43
Sound Control.....15
Sound Technology..7, 9, 24, 27
Thatched Cottage Audio.....33
The Synthesizer Co.....1
Time & Space.....31
Yamaha.....IFC

CALL IN YOUR READERS' AD ON

(0898) 100767

A call costs 36p per minute (cheap rate) and 48p at all other times.

CLASSIFIED

CLASSIFIED ADVERTS

A classified advertisement can cost you as little as £30 per month*. You choose how long you want to advertise, for one month, three months, six months or 12 months, the following is an example:

3cm

1 Column

One month £20 per column cm
£60 + VAT per insertion

Three months £18 per column cm
£54 + VAT per insertion

Six months £17 per column cm
£51+ VAT per insertion

12 months £15 per column cm
£45 + VAT per insertion

To advertise please send your copy & cheque (including VAT) for the first advertisement to:
Music Technology, Classified Department, Alexander House, Forehill, Ely, Cambridge, CB7 4AF

* Based on a minimum size 2cm x 1 column advert booked for 12 months

PROTECTIVE DUST COVERS

Ashes to Ashes

Dust to Dust

IF YOU VALUE IT - COVER IT

Jenart Design the only manufacturers of Protective Dust Covers to MoD and 'Preferred Supplier' to HMSO offer a wide range of covers for electronic keyboards and numerous other musical applications.
For further information and prices Tel: 0769 574127.
Fax :0769 574487 or write to:
JENART DESIGN
'The Great Cover Up'
Pathfields Trading Estate
South Molton
Devon EX36 3LH

Preferred HMSO Supplier

Copyright © 1990 JENART DESIGN. ALL RIGHTS RESERVED.

FOR SALE

System Enclosures Ltd.

WHERE ELSE CAN YOU BUY A PROFESSIONAL 2U HEIGHT x 300mm DEPTH 19" RACKMOUNT ENCLOSURE FOR UNDER 26 POUNDS. COMPLETE WITH SEPARATE CHASSIS AND COVER SYSTEM. IF THAT SIZE DOESN'T SUIT, THERE ARE 46 OTHER SIZES WITH A HOST OF OPTIONS AND NOT A SELF-TAP SCREW IN SIGHT. MEET YOUR BUDGET TARGET WITH 'MASTERFRAME' FROM SYSTEM

Dene Industrial Park, Kingstone, Herefordshire HR2 9NP Tel: 0981 251484

CASSETTE DUPLICATION

PLUS ONE TAPES

For the best in cassette duplication Real Time or High Speed-Ferric or Chrome.Also custom wound blanks -any length C5-C100 Nobody does it better

FOR FURTHER DETAILS:

telephone (0327 843092) or write to

Plus One Tapes,26 High St.Long Buckby Northants NN6 7RD

ANG ON A SEC....

DON'T SELL YOUR KEYBOARD, SAMPLER OR STUDIO GEAR UNTIL YOU'VE PHONED ME, AS I CAN GIVE YOU THE BEST CASH DEAL AROUND

081 390 7324

ANYTIME 24 Hrs.

STUDIOS, COURSES AND TUITION

COMPACT DISCS

COMPACT DISCS
95p (LP) 80p (SINGLES)
Plus Mastering Min. 1,000
SELECTA SOUND
TEL. 04024 - 53424

MIRROR CASSETTES

CASSETTE DUPLICATION ON NEW SONY MACHINES FROM DAT ¼", F1, CASSETTE. DAT TO DAT, EQ ING AS NECESSARY

071 385 1751

FOR HIRE

Audiohire

Hire of ; Synths / Samplers / FX / Drum Machines / Tape Machines / Mics. etc

Tel : 081 - 960 4466 or 0836 710 281

C-LAB TUITION

From beginners to advanced notation users.
Call Peter Dudley for your appointment now.

081 539 9729

COMPETITIVE HOURLY RATES

SOFTWARE, HARDWARE AND SAMPLES

A New and Exciting Product

The Drum Vault for the Korg MI/MIR

100 Drum Kits all pre-programmed with Dual FX and variable amounts of Pitch Bend, Modulation and filter sweeps, using the Joystick.
Give your Drum Tracks a totally new feel with the Ultimate Drum Kit Library on Atari Disc with full instructions or Synthworks format for all Korg M and T Series Synths.

Send Cheque or PO for £24.95 to:

**The Voice Vault,
138 Boyce Road,
Stanford Le Hope,
Essex
SS17 8RJ**

S900/950 SAMPLES

High Quality,professional collection
Full range choice - over 300 disks available
Pre set Volumes, 25 disks £79.95
Individual disks £4.00 each
All prices inclusive of VAT and UK postage
Access and Barclaycard welcome
Send or Phone for full listing

VALLEY STUDIOS
Pant Byrlip Farm, New Quay, Dyfed, SA45 9TU
TEL: 0545 560164 FAX: 0545 560885

ROW AUDIO HIRE

Very cheap rates on 8+16 track packages, DAT F-X, Keys, etc.
NATIONWIDE DELIVERY
061 483 8551
7 Days 24 Hours

SOUTH LONDON BASED

HURRICANE STUDIOS

2 INCH 24 TRACK

DIGITAL MASTERING. LIVE ROOM. FULL MIDI CAPABILITY EXCELLENT WORKING ENVIRONMENT

Tel.081 - 699 - 6945
Fax.081 - 699 - 5845

We are the U.K.Centre for City and Guilds qualification courses in Sound engineering and Music Technology. Phone for details and a free prospectus.

Ask about our short Christmas courses

S900/950 SAMPLE LIBRARY

Over 300 disks available
£3.50 per disk
Please phone / write for cataloque
Also 3.5" Blank DS/dd Disks available
Prices starting from £7.50 for 10

MIRROR IMAGE
AUDIO Cassette Duplication
474 Manchester Road, Heaton Chapel, Stockport SK4 5DL Tel: 061 442 9045

BIDBROOK SYSTEMS
100 % ERROR FREE DSDD DISKS

25	£11.25
50	£22.00
100	£43.00
40 and lockable case	£22.00
40 capacity lockable case + 2 free disks	£5.00

Cheques /P.O.s to BIDBROOK SYSTEMS Ltd.
11 Sutherland Ave,London W9 2HE
Calls strictly by appointment only
Tel: (0831) 311782

ADVANCED SOUNDS HIRE

Musical Equipment ● Studio Equipment ● Home Recording Packages ● Del/Coll
VISA + ACCESS Low Rates. Good Service
TEL: 081 462 6261 or 0860 310618

16 TRACK HIRE

*FOSTEX B16
*SECK 18/8/2 MIXER
£129 PER WEEK

CASIO R.DAT £60 per week.
*E16-G16 Available *All outboard equipment
Tel: ASCOT (0344)) 22113 / (0860) 220800

MIDI DRUMMER 2

Rhythm Pattern Sequencer for the ST only £40
Egan Composition Tool only £15
Both available now from
BIT BY BIT SOFTWARE
P.O. Box 70, Lincoln, LN1 1SS
Telephone 0522 533461

"WE ARE THE SAMPLER MEMORY EXPERTS"

DOES YOUR SAMPLER NEED A MEMORY UPGRADE?
We make memory and SCSI Expansions for, the Akai S1100, 1000, 950 & MPC 60, Ensoniq EPS & VFX 50, Yamaha TX16W, Roland S770 & others !!
Our commitment to being the best assures you of the highest Quality, reliability & value. Each product is designed, manufactured and tested to earn our life time warranty.
PARK LANDS PROFESSIONAL AUDIO SERVICES
TEL: 0737 765026 FAX: 0737 773 639
TELEX: 911167

FAX YOUR ADVERT to Alex Day on 0353 662489

SOFTWARE, HARDWARE AND SAMPLES

APPLIED AIRTIME PRODUCTIONS

KORG M1/CUBASE USERS- GET INTO ORBIT!

...take full advantage of the powerful SATELLITE accessory with our new POLESTAR COLLECTION of 200 SUPERB NEW M1 SOUNDS /COMBI's in Synthworks format.

NO MORE HASSLE WITH DOWNLOADERS OR EXPENSIVE ROM CARDS

Audition new sounds while running Cubase
Edit and update sounds with Macro editors
Copy sounds to tracks

AVAILABLE ON DISK FOR ATARI ST ONLY £19.95 inc. P & P
CHEQUES/POSTAL ORDERS TO-
APPLIED AIRTIME PRODUCTIONS, 44 GRANSHA PARK, BELFAST BT11 8AU
Tel: (0232) 616658

MIDI SEQUENCES

Get your "Hands On" to *the most accurate* sequence data available from the U.K.'s premier commercial sequence data company.
Our comprehensive range of songs are ideal for pro's and hobbyists alike. Great to rehearse to and easily adapted to suit your own requirements.
Each song contains *ALL* parts and includes Lyric and Info files as standard.
Individual Drum Tracks. Bulk Discounts available.

Phone or Write for Cataloque.

4 Chart Hits for *only* £20.95 (+75p P&P)

"HANDS ON" MIDI SOFTWARE LTD., 14 LODGE ROAD, BEDHAMPTON HAVANT, HANTS P09 3LL
TEL/FAX (0705) 452628

SAMPLE LIBRARIES
EPS/ FZ1/ S950/ S1000/S700/X7000/S550/S330/W30 EMAX/EMAX 2/DPX-1/S770/S750/PEAVEY DPM SP/DPM-3 SE/SX-16/MIRAGE/ ATARI SD/AVALON/GENWAVE FORMATS

We are Europe's largest sound library with over 2 hundred thousand samples. Taken from "State of the art" systems. Ranging from Fairlight 3 Orchestral sounds to the latest House sounds, we've got them all
Most disks only £4.99 each. Write/phone now for our free catalogue (Specify machine)

SAMPLE TAPES. We now have 20 volumes of our famous sample tapes on Chrome cassette, including "House Attack"/"Analogue No.1/MI/ Orchestral 1 + 2/World Music. Each tape is £7.50. Our new tapes are The dance collection and "Digital textures", each series contains over 4 hours of hi quality samples and comes on 3 Hi grade Metal C-90 cassettes. Both collections come with full track listings, and are priced at £53.00 each inc. p+p. Write/phone for free Tape Listing.

SAMPLES ON R-DAT. 1500 SOUNDS ONLY £80.00

We also sell..... Synth patches for most Synths and FX units on Rom/Ram/Atari ST disk, Sample CD's from Pro-Sonus/Sonic Images/Korg, Software from Dr.T/Steinberg/Opcode and memory upgrades for EPS/EPS -16+/FZ1/S1000/S950/TX16W. All at LOW LOW PRICES.

DESERT ISLAND
TEL: 0463 - 221488
DESERT ISLAND (DEPT. M)
20 EDINGTON RD. INVERNESS, SCOTLAND, IV2 3DB

SAMPLES, SOUNDS & SOFTWARE

S330/W30 S1000/S900 S700/S612 QUALITY SOUNDS ON DISK FOR ALL AKAI AND ROLAND SAMPLERS

100's of disks to choose from - various formats:
Disks available in STEINBERG AVALON format.

S700 Editor
Saves X7000, S700, S612 Samples onto 3.5" ST disk

XE8 Editor
Desk Accessory drum module editor for Atari ST.

Memory expansions for S1000,S950, EPS, FZ1, TX16W, MPC60.
Software for ST, Amiga, Mac, PC by Steinberg, Dr T, Opcode, Passport, Coda.
ACCESS AND VISA CARDS ACCEPTED.
Please phone or write for further details to:
FOUR MINUTE WARNING,
298 HORBURY ROAD, WAKEFIELD, WEST YORKSHIRE WF2 8QX
TEL: 0924 386527

DR. BEAT FOR THE ST
£10 inc. p & p
Over 100 Drum & Percussion Patterns programmed by PROFESSIONALS! in Standard MIDIFILE FORMAT.
Full documentation included on disk
You name the styles, They're here
Hit back with DR. BEAT
To order, Phone Heavenly Music Ltd. on
Clacton on Sea
(0255) 434217
Or send cheque or postal order to Heavenly Music Ltd. 39 Garden Road, Jaywick, Clacton on Sea, Essex CO15 2RT

ForeFront TECHNOLOGY
FT3 PATCH COMMANDER PLUS
Hand-held MIDI Remote controller
as reviewed in Music Technology Sept '91
Now with Bank Select for Roland E35/70 & Program Increment as standard features.
ONLY £49.95 + P&P
(Soft carry case £5 extra)
Enquiries, cheques/P.O.'s, Visa/Access to ForeFront Technology, 2 Rebecca Gardens, Silver End, Witham, Essex. CM8 3SR.
Tel: (0376) 83920 (Dealer enquiries welcome)

WORLDS FINEST DISKS FROM KAO & TDK

	KAO	TDK
3.5" MF2DD	£8.00	£9.00
3.5" MF2HD	£15.00	£16.00
5.25" MD2DD	£5.00	£8.00
5.25" MD2HD	£8.00	£10.00
KAO BULK DISKS CHOICE OF 8 COLOURS		
SUPERB QUALITY	x50	x100
1 MEGABYTE MF2DD	£24.00	£45.00
2 MEGABYTE MF2HD	£35.00	£68.00

(FREE MOUSE MAT OR DRIVE CLEANER WITH ORDERS OF 100 DISKS)
POSSO DISK BOXES £14.00 each
prices include VAT

Free P&P on orders over £50.00, under please add £3.00

TDK DAT TAPES	
DA-R-60	£6.00
DA-R-90	£7.00
DA-R-120	£8.00

Weekdays 9.30 - 7pm
Saturdays 9.30 - 7pm
Sunday 10 - 3pm

K.C. Video,
6&8 Doncaster Rd.,
South Elmsall,
Pontefract,
West Yorks
WF9 2HZ
Tel: 0977 649100
FAX: 0977 643312

OVERNIGHT = £8.00 EXTRA

Reach today's Hi-Tech musicians through MT's display classified ads. To book your advert call ALEX DAY on 0353 665577

KEYFAX 3, *by Julian Colbeck*

Keyfax 3 is the latest edition of Julian Colbeck's indispensable keyboard guide, and contains over 300 assessments of synthesisers, samplers, sequencers, pianos and more.

As well as the established reviews, there's an Appendix containing, among other things, a layman's guide to MIDI, profiles of the leading instrument manufacturers and a glossary of terms.

Previously priced at £10.95, *Keyfax 3* is now on sale for a limited period at just £7.95 incl. p&p, while stocks last.

ROCKSCHOOL II

The second series of the BBC's *Rockschool* focussed its attention on new technology and its implications for todays musicians. Written by the four presenters (Dierdre Cartwright, Alistair Gavin, Geoff Nicholls and Henry Thomas) with well-known technology scribe Julian Colbeck and edited by series producer Chris Lent, *Rockschool* the book is an indispensable guide to the techniques, technology and musical vocabulary needed to play in a band.

Even more tempting is the news that *Rockschool* has now been reduced from the previous asking price of £9.95 to a ridiculously silly £6.95 incl. p&p. Act now before stocks run out.

Yes, today is my lucky day, and I would like to take advantage of my good fortune by ordering the following books:

Keyfax 3 .....copies at £7.95 incl. p&p
Rockschool .....copies at £6.95 incl. p&p

I enclose a cheque/PO for £..... made payable to Music Maker Books, or please debit my Access/Visa card number:

_ _ _ _ / _ _ _ _ / _ _ _ _ / _ _ _ _ for the same amount.

Name .....

Address .....

.....

.....

.....Postcode .....

Please include your full postcode and allow 28 days for delivery.

Send coupon to: Music Maker Books, Alexander House, Forehill, Ely, Cambs, CB7 4AF.

THE CASIO DA-7. AT HOME IN THE STUDIO PERFECT FOR THE STREETS OF LONDON.

Whatever you record, voice, music or sound effects, quality is your first priority.

The Casio DA-7 DAT recorder delivers in that and every other department.

Digital PCM recording* and playback eliminates distortion, wow and flutter.

Highly accurate time displays keep you informed and the DA-7 comes complete with all the necessary accessories; AC Adaptor, 2 connecting leads, Ni-Cad rechargeable battery and carrying case.

Alternatively, consider the DA-R100 a DAT recorder so small it sits in the palm of your hand.

DA-R100

The DA-R100 can be set to Long Play or Short Play mode for up to 4 hours of recording time and like the DA-7 it features an analog to digital converter for microphone recordings.

The DA-R100 also has dual digital input terminals for coaxial digital or optical input built in as standard, together with adjustable auto Fade In and Out.

Both machines feature 48 kHz 16-bit sampling recording (12-bit non linear

DA-7

in LP mode for the DA-R100) for top quality recordings every time.

If you've not considered DAT before, or were contemplating anything other than a Casio, your local dealer will show you something that will help you change your mind.

CASIO

MODELS FEATURED: DA-7 PRICE GUIDE £649.99 OR LESS (MICROPHONE NOT INCLUDED), DA-R100 PRICE GUIDE £549.99 OR LESS. LEADING STOCKISTS INCLUDE: SYNTHESIZER CO., THATCHED COTTAGE AUDIO, HHB, SOHO SOUND HOUSE, STIRLING AUDIO SYSTEMS, KGM STUDIO, WHITE RABBIT RECORDS, EDDIE MOORS MUSIC, A1 MUSIC, HI-FI CARE RETAIL, CARLSBRO, VIDEO CENTER, KJ MUSIC, ABC MUSIC. *Serial Copyright Management System (SCMS) limits direct recording from digital sound sources to first generation copies only. Legal warning: Pre-recorded material, material broadcast or transmitted on television and radio, and material performed live will usually be protected by copyright law. The copying of such material without the express consent of the copyright owner is against the law and may result in civil and/or criminal sanctions.

FOLLOW THE LEADER . . .

. . . AGAIN.

Korg does it again! The new 01/W and 01/W FD (disk drive). The flexibility of a music workstation with the sound shaping capability of an advanced synthesizer.
Incredible PCM sounds and Korg's exclusive AI² Non-Linear Synthesis, which adds ultra-realism to acoustic sounds and lets you make new sounds no other instrument can.
32 voices, 200 programs and 200 combinations. Up to 800 sounds with Korg's new PCM and program cards. A 16-track sequencer.
Two Stereo Digital Multi-Effect Processors, 47 effects, real time control.
Run the 01/W demo at your Korg dealer and send for our free colour brochure.
The 01/W is here. It's time for everyone to catch up with Korg . . . again.

01/W
MUSIC WORKSTATION

01/W FD
MUSIC WORKSTATION

Please send me my free 01/W colour brochure.

NAME _____

ADDRESS _____

_____

_____

Please send to : KORG UK,
8-9 The Crystal Centre, Elmgrove Road,
Harrow, Middx HA1 2YK Tel: 081-427 3397

KORG
MUSIC POWER