Established 1981

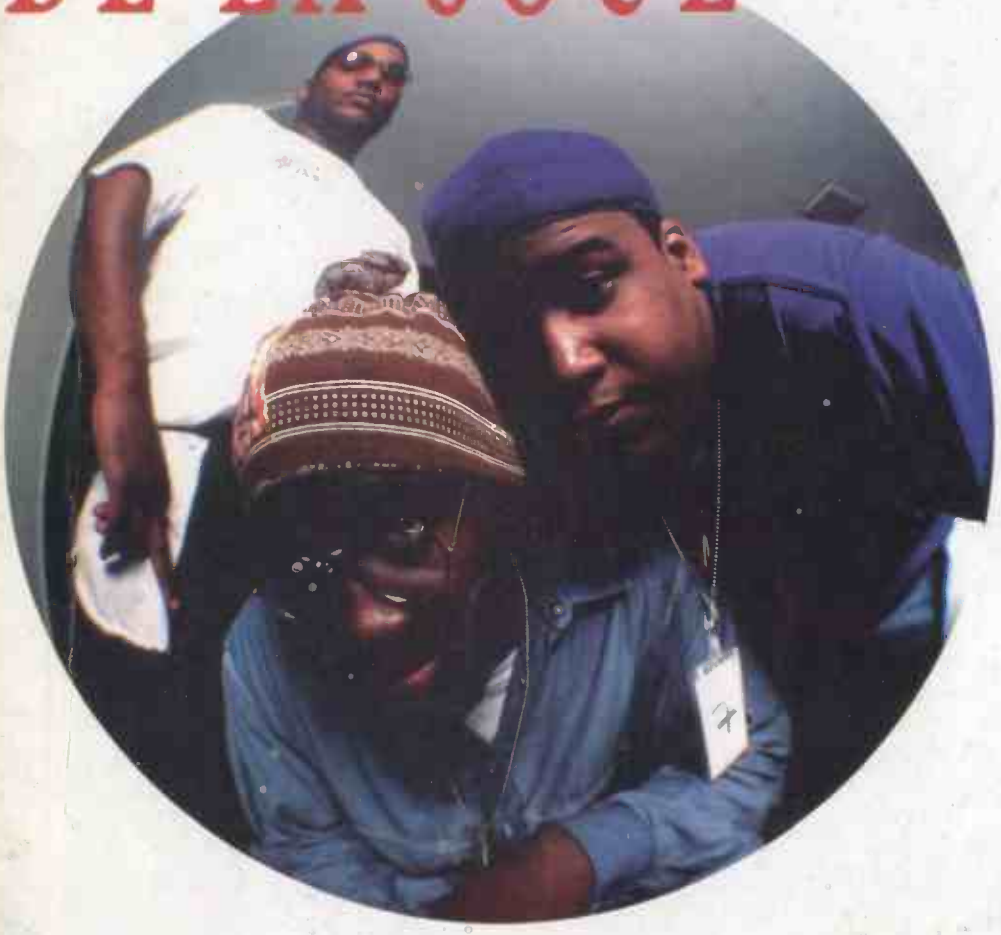
Music Technology

THE WORLD'S PREMIER HI-TECH MUSIC MAGAZINE

MARCH 1992
£1.75

9 770957 660022 03

DE LA SOUL



dead after the daisy age?

ON TEST

Geerdes
Roland D-series Editor

Korg SoundLink
Digital Recording System

Bourbaki Fractunes
ST Imaging Program

C-Lab Unitor 2
Synchroniser

Yamaha
MDF2 Datafiler

E-MU
PROTEUS MPS
master
performance system

SAMPLE CDS: ART OR THEFT?

pascal gabriel simon harris
ed stratton norman cook
coldcut

PUT THEIR CASE

FILE UNDER 'INDISPENSABLE'

YAMAHA

THE SPIRIT OF MUSIC

If you use MIDI, you need the new Yamaha MDF2 Data Filer.

It quickly and easily saves MIDI bulk data (up to 99 files at a time) to a 3.5" disk.

And now there's no need to take heavy, breakable computers on gigs.

Simply save your sequences to the MDF2 and play them back direct from disk.

Reading direct from disk means virtually no loading time. So *your* performance will be as glitch-free as the MDF2's.

And computer crashes on stage, however rare, will be a thing of the past.

What's more, because the MDF2 accepts Standard MIDI Files, it will replay disks recorded on other sequencers or computers.

Plus the growing selection of MIDI File based popular songs.

The MDF2 is being dispensed by your local Yamaha Dealer today.

And with a manufacturer's suggested selling price of just £299, now is the time to file your claim.

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

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

NO COMPETITION

AT TSC THE CHOICE IS YOURS: APPLE, SAMPLERS, ANALOGUE SYNTHS, HARD DISK RECORDING

APPLE POWERBOOK COMPUTERS

FACTS

Apple's™ new Macintosh™ Powerbooks™ are the perfect choice for the musician-on-the-move. 3 models available from the ultralight 100 to the superfast 170. for a limited period we are offering a **free midi interface** with every powerbook!
The choice is yours.

AUTHORISED APPLE DEALERSHIP

PRICES

POWERBOOK 100 **£1595**
POWERBOOK 140 FROM **£2095**
POWERBOOK 170 FROM **£3495**
MAC CLASSIC 11 FROM **£1150**
MAC QUADRA 700 **£XXXX**
MAC QUADRA 900 **£XXXX**
2ND USER MACS FROM **£575**
MAC IICI **NEW LOW PRICE**
MAC IISI **NEW LOW PRICE**

CD & OPTICAL SAMPLE LIBRARIES

FACTS

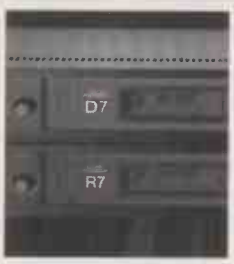
The largest selection of sample CD's and CD Roms in the UK.
Bob Clearmountain Prosamples Vol. 1&2 Audio CD or CD Rom
Prosonus Drums & Bass CD Rom
Invision Vol 1,2,3 CD Roms
Audio CD's **£69**
CD Roms **£349**
Levine Vol 1&2 Audio CD **£115**

PROFESSIONAL SAMPLERS

PRICES

AKAI S1100 **£LOWEST IN UK**
AKAI S1000 **£XXXX**
AKAI S950 **£NEW LOW PRICE**
ROLAND S750 **£XXXX**
EX DEMO ROLAND S750 **£2895**
S/H AKAI S1000 FROM **£1595**
S/H EMU E3 **$7995** OR **£4695**
2M/B S1000/1100 MEMORY **£118**
8M/B S1000/1100 MEMORY **£349**

SONY SIGNAL PROCESSORS



FACTS

At TSC the 2 great new signal processors from **Sony** are **superb D7** is a 38 tap digitol delay line, **R7** is an enhanced digitol reverb. Both offer 18bit signal processing, incredible MIDI specificotion and a sound associated with units costing ten times as much! There is even a remote that can control 15 units.

ZOOM AND DAT

PRICES

SONY D7 **£816**
SONY R7 **£935**
ZOOM 9030 MULTI EFFECT
ZOOM 9010 STUDIO PROCESSOR
ZOOM 9002
SONY DAT DTC 750
SONY DAT D3
CASIO DAT DA7 **£499**
CASIO DAT R100

ANALOGUE SYNTHESIZERS

FACTS

TSC hos the largest selection of new and used **Analogue** synths in the UK. Need a great bass sound? - **MidiMoog**. Roland **JD800** is a poly solution for maximum control. Waldorf **Microwave** brings PPG sound into the '90s. Oberheims **Matrix 1000** at under £500 is *the* choice.

DIGITAL SYNTHESIZERS

PRICES

OBERHEIM MATRIX 1000 **£449**
WALDORF MICROWAVE **£999**
ROLAND JD800 **£NEW LOW PRICE**
MIDIMOOG **£CALL**
KORG O1W **£XXXX**
KORG WAVESTATION AD
KORG T1, T2, T3 **£XXXX**
PROTOLOGIC PROTEUS BOARD **£410**
EMU MPS & PROTEUS 1 & 2

DIGIDESIGN PRO TOOLS

FACTS

Digidesigns Protools is the TSC recommended choice for **4** to **16** track **recording** on the Moc. We probably know more about HD recording than any other company in the UK. Opcodes's StudioVision, Digital Performer or Cubase Audio will allow true integration of MIDI and audio from as little as **£1595**

NEW PRODUCTS

NEW

OPCODE STUDIO 5 MAC INT/FACE
PASSPORT AUDIO TRAX SOFTWARE
CNI 3.5" OPTICAL DRIVES
KURZWEIL K2000 SYNTH
ROLAND DM80 H/D RECORDER
AKAI MPC60 MKII
SCSI INTERFACE FOR MPC60 **£349**
EMU PROTEUS 3
ALESIS ADAT DIGITAL MULTITRACK

TSC DIRECT

FULLY TRAINED, KNOWLEDGEABLE STAFF, SUPER DEMONSTRATION SUITES AND ASTOUNDING DEALS. TO PLACE YOUR ORDER TELEPHONE 071 258 3454 AND QUOTE ACCESS, VISA OR AMEX, OR FAX ON 071 262 8215, OR CALL IN PERSON TO NO. 9 HATTON STREET, LONDON NW8 8PR. WE ARE HAPPY TO SUPPLY WRITTEN QUOTATIONS ON ANY EQUIPMENT.

ALL PRICES INC VAT **AT TSC THE CHOICE IS YOURS** ALL PRICES INC VAT

TSC THE SYNTHESIZER COMPANY 9 HATTON STREET LONDON NW8 071 258 3454 FAX 071 262 8215

contents

COMMENT 4

According to Laurie Anderson, language is a virus from outer space. Tim Goodyer examines the problems with and the justifications for technical jargon.

NEWSDESK 6

I read the news today, oh boy/10,000 holes in Blackburn Lancashire/And though the holes were rather small/They had to count them all/Now they know how many holes it takes to fill the Albert Hall - profound Beatles lyric.

COMMUNIQUE 12

An inside perspective on lipsyncing for TV and a personal response to the ravings of a mad MIDI guitar vigilante are a couple of the highlights of this month's selection of readers' writes.

READERS' ADS 74

MT's one-stop shop - the largest hi-tech readers' classified section in print as used by pros, opportunists, hobbyists, wannabes, collectors, speculators. . . What about you?

Appraisal

YAMAHA MDF2 14

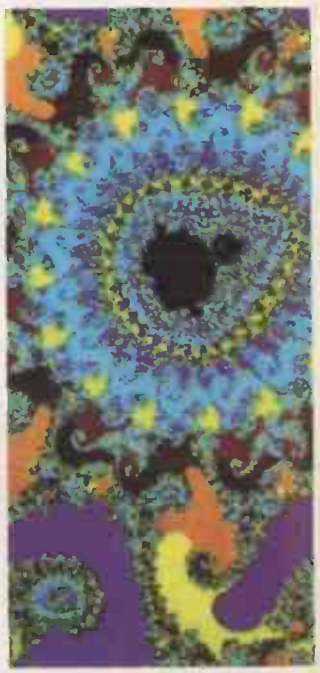
Yamaha's new MIDI datafiler currently enjoys the honour of being the cheapest of its kind on the market. Ian Waugh gets on with the filing.

GEERDES D-SERIES EDITOR 38

If you're using one of Roland's D-series synths (or an MT32) and you're tired of doing battle with its programming system, this ST editor/librarian can help. Gordon Reid goes soft on his D5.

BOURBAKI FRACTUNES 49

The gap between audio and video technologies closes - a recent crossover is software that allows you to generate fractal images from your music. Ian Waugh's PC gets psychedelia.



VOLUME 6 NUMBER 4 MARCH 1992

KORG SOUNDLINK 60

From the home of the M1 and the Wavestation comes SoundLink - an advanced digital recording and editing system. Simon Trask trips into the future.

E-MU PROTEUS MPS 68

With the popular Proteus series of sample playback modules as its inspiration, E-mu's new synth sounds as good as it looks. Simon Trask explores the Master Performance System.

Music

DEMOTAKES 25

Returning from the battlefields of Yugoslavia and inspired by repeated viewings of *Terminator 2*, Skum wades into another batch of MT's readers' demos.

SAMPLE CDS 54

First they were sampling off other peoples' records, now they're selling records to sample off. Tim Goodyer listens while Simon Harris, Pascal Gabriel, Norman Cook, Ed Stratton and Coldcut put the case for sampling CDs.

DE LA SOUL 64

In spite of The Turtles' attempts to sue them to death, De La Soul is Dead remains simply the title of their second long player. Mark van Schaick talks samples and success with Maseo.

Studio

C-LAB UNITOR 2 26

Synchronisation made easy - for Creator/Notator users, at least. Tim Goodyer locks into C-Lab's integrated SMPTE synchroniser and MIDI expander for the Atari ST.

Technology

ON THE BEAT 16

MT's beatbox programming series survives the acid test of the recording studio. Nigel Lord renews his efforts in bringing the rhythm divine to your drum machine.

DIAL M FOR MUSIC 30

With the musical fraternity showing little interest in computer bulletin boards, the popularity of MIDI Song files could be well timed. Ian Waugh explains how to download music over the phone.

MOOG MULTIMOOG RETROSPECTIVE 44

In trying to follow the immortal Minimoog, Moog produced a series of innovative mono synths. Peter Forrest & Tim Goodyer revive two of the best.

editorial

COMMUNICATION BREAKDOWN

JARGON - LOVE IT or hate it, you can't escape it. It's tempting to associate "exclusive terminology" with Second World War RAF types, spotty computer whizzes or be-anoraked train spotters, but none of us can really claim to avoid it. So why is it that we love to talk about certain subjects in terms nobody else can understand? Is it simply a case of defining an elite group to which we belong or is there something more to it?

Although jargon *can* lend itself to the definition of a social group, it serves another, more imortant and rather obvious purpose: it facilitates communication of ideas and information where general language does not. Unless you have already defined the terminology associated with certain areas of a science (for want of a better term), it is impossible to apply it, make advances in understanding it, or further awareness of it. So what are we talking about here: quantum mechanics? Non-linear mathematics? Genetic engineering? How about electronic musical instruments?

It's easy to single out the people who revel in the terminology surrounding MIDI and studio gear for its own sake. But it's impossible not to use that terminology yourself - if you're going to read manuals, follow synth operating architecture, explain your requirements to a studio engineer, or understand the solution to your MIDI problem when a manufacturer explains it to you. Terminology is, in fact, an essential part of any field of understanding. And the more complex the considerations, the more important it is that the terminology functions accurately and efficiently.

If we're going to get the best from the technology involved in music, we have to accept and assimilate the terminology that accompanies it. This applies equally to everyone from the novice bedroom musician to the R&D team working on the latest hi-tech musical marvel - and certainly includes a magazine like MT and its readers. To a novice, the terminology may appear daunting but you can rest assured that MT's writing team actively try to keep the jargon in perspective. Take my word for it, a little perseverance when you encounter new terms for the first time can go a long, long way.

While it makes comfortable reading to avoid technicalities, it severely limits the usefulness of an article. The most profitable way of dealing with most subjects is to take onboard enough of the technicalities to allow a practical understanding of what's going on. And that's exactly what MT's editorial aims to give you.

Right now we're entering an era of digital music technology - complete with its talk of error rates and logic levels. You can choose to try to ignore the background to the technology and deal only with its applications or to deal with the technology largely on its own terms. Without suggesting we all enrol in a doctorate course in digital electronics, I'd suggest we try to confront the gear and the terminology. In this I hope you'll find MT responsible as well as informative. But don't expect any of us to be able to escape talking jargon.

ON AN ENTIRELY different note, you'll doubtless have noticed that MT's cover price has been increased to the princely sum of £1.75 this month. We will, however, be holding subscription rates at their present level until the end of March. You'll find a special discount form elsewhere in this issue, so fill it in and save yourself some cash - and ensure yourself of regular delivery of the world's premier hi-tech music monthly. We can't say we're happy having to pass some of our increased production costs on to our readers, but we think you'll find that it leaves MT not just the best read in its field, but the best buy too. ■ *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** *SM Disttribution, London. Tel: 081-677 8111.*

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 1992 *Music Technology (Publications) Limited.* **Cover Photography** *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
SECRETARIAL ASSISTANT
Nicky Jackson

ADMINISTRATION

CIRCULATION MANAGER
Cheryl Oates
MAIL ORDER
Jenny Howard
SUBSCRIPTION ENQUIRIES
(0353) 668586
GROUP PRODUCTION MANAGER
Mike Stapleton
EXECUTIVE DIRECTORS
Alan Goodes (Marketing)

MANAGING DIRECTOR
Dennis Hill

CHAIRMAN
Terry Day

Roland JD-800

Programmable Synthesizer

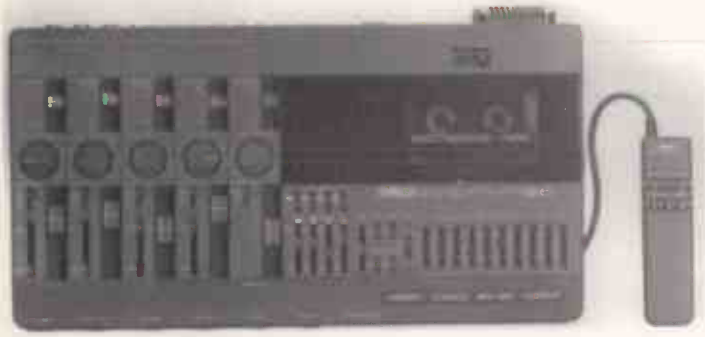
Out of this world

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

GEAR FEST I



The whole world may be going digital, but for most musicians, analogue tape is alive and well - a fact demonstrated by the continuing launches of new cassette-based multitrackers. Latest in the Yamaha line is the MT120, offering, according to Yamaha, "the definitive article for the world of multi-tracking". This successor to the popular MT100II offers significant improvements over its predecessor, foremost of which is the "sync" facility, allowing you to switch off the MT120's dbx noise reduction on one channel to facilitate recording of SMPTE and FSK timecodes. The dbx remains active on the other three tracks.

The 120 also offers two recording speeds for improved flexibility and better recording quality at the higher speed of 9.5cm per second. Enhancements have been made to the tape transport mechanism and related controls, using a "sophisticated micro-computer control system to improve tape handling and stability". Input sensitivity controls on all four channels accept just about any combination of input sources and each channel can be directly assigned to its own recorder track. Alternatively, several channels can be assigned to a single track via the Pan controls on each channel. Five-band EQ is provided.

Other features include flexible monitoring facilities, mono send/stereo return effects loop with send controls on each mixer channel, individual Tape Out jacks, independent LED peak meters for all four tracks and three-digit tape counter.

Last but not least, the answer to a musician's prayer! The MT120 comes with a standard two-pin plug-in mains cable, so there's no vulnerable 12V power supply. This little box of tricks retails for £399, with the optional RCM1 Remote Control at £32. Both prices include VAT.

If you're in the market for a cassette multitracker, getting more info about the MT120 couldn't be easier - call Yamaha's 24-hour action line on 081-419 5419 for a free brochure pack.

Yamaha are also about to launch their new MIDI storage device, the MDF2 (see review in this ish). Those of you with long memories may remember its predecessor, the MDF1, which was possibly the earliest device of its type, saving to 2.8" Quickdisks. The new unit brings the format bang up to date, including 3.5" disk drive and the capacity to receive and store System Exclusive bulk dumps of up to 600kB. Additionally, sequence or song data (up to 80,000 notes) can be recorded or read as a Standard MIDI File (format 0) and played back, though the MDF2 is also compatible with the Yamaha ESEQ format. Playback file are read directly from disk with virtually no loading time.

The new unit can work from batteries as well as the more usual power supply, and weighs a petite 1.1kg. It's expected to be available from February onwards and will be selling for a price not unadjacent to £299 including VAT. It looks jolly nice too.

More info from Yamaha-Kemble Music (UK) Ltd, Sherbourne Drive, Tilbrook, Milton Keynes MK7 8BL. Tel: (0908) 368872. ***Dp***

QUALIFIED SUCCESS

The University of London Examinations and Assessment Council is currently considering the introduction of a music technology option in A-Level and AS Music, with proposals being centred on practical work in sequencing and multitrack recording. The music technology option will also provide the first GCE in Music to allow candidates the possibility of submitting the majority of their work within the context of the creation, performance and production of popular music.

We think this is an excellent idea, and we're sure that it can only be good for cultural and artistic diversity in education. Naturally, MT should be required course reading!

Schools and colleges requiring advance details should write to Mrs D Muallem, the Subject Officer for Music, at ULEAC, Stewart House, 32 Russell Square, London WC1B 5DN. ***Dp***

KURZWEIL ON THE UP

Acrobat Music, are happy to announce the availability of a range of upgrades for 1000-series machines. The upgrades bring the 1000-series up to the spec of the current range and consist of A and B sound blocks at a fraction of their previous price, to add extra sounds and improve some of the existing ones, as well as a software and MIDI spec upgrade. The improvement means that, for example, the old PX-1000 is transformed into a Pro-1 and the K-1000 into a Pro-76. Upgrades are available for the K-1000, K-1000SE, PX-1000 and PX Plus 1000 at prices from £199 to £299.

More details on the upgrades are available from Acrobat Music, 30 Highgate Road, London NW5 1NS. Tel: 071-267 9229. Fax: 071-284 0083. ***Dp***

Everything You've Been Hearing Is True

adat

ALESIS
STUDIO ELECTRONICS

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

GEAR FEST II

Korg bound into 1992 with several new releases on the synth front. First up is the 01R/W, the rackmounting version of the successful 01/W. It has all the features of the 01/W and offers a 7000-note sequencer and card slots. Around £1,600 will buy you 200 programmes, 200 combinations, 2 multi-effect systems, full digital processing and a healthy 32-voice polyphony. The 03R/W, priced at around £999, is designed to offer "killer sounds at a more moderate price", and caters for those who also wish to use the General MIDI standard. It retains generous 32-note polyphony, AI² synthesis and effects sections and offers 100 user programmable patches, 128 ROM programmes for General MIDI and 100 Combination programmes, all in a 1U-high rackmount.

New keyboards for 1992 are the 01/W Pro and the 01/W Pro-X, with 76-note and 88-note weighted keyboards respectively. The 01W/Pro, expected to retail at £2450, is the 76-note version of the 01/WFD and has the same features plus the ability to load Standard MIDI Song Files and increased ROM capacity of 80Mbit. The 01/W Pro-X, at £2999, features Korg's weighted piano-action keyboard.

All the above new instruments will be available from Korg main dealers during March, and MT will be taking a detailed look at them very soon, so watch out for the indispensable reviews.

More info from Korg UK, 8-9 the Crystal Centre, Elmgrove Road, Harrow, Middlesex HA1 2YR. Tel: 081-427 3397. Fax: 081-861 3595. ***Dp***

NOT-SO-DANGEROUS LIASONS

A new agency was recently set up with the interests of songwriters in mind. Songwriter's Agency offers substantial contacts in the UK and worldwide who are seeking material for specific artists - and according to the Agency, demand for material is currently outstripping supply. The Agency's main purpose is to act as a liason between songwriters, artists and recording companies and publishers, using their contacts and experience to place material in the most appropriate publishing and recording contexts. The agency has recently entered into a working partnership with Cornwall-based Sawmills studio, with the aim of producing and recording selected material on an "in-house" basis, with the resulting master tapes available for marketing to recording and publishing companies around the world. Since its establishment, Sawmills Studio has played host to bands such as XTC, Sad Cafe, Wet Wet Wet, The Stone Roses, The Farm and New Model Army. Among the in-house production team is Martin Colley (recently interviewed by our sister mag H&SR) who has over 20 years experience in production and engineering, including numerous live sessions for Radios 1 and 2.

The partnership is looking for all types of music, including "service music" for jingles and signature tunes, and can be contacted at Songwriters' Agency, 21A Clifftown Road, Southend on Sea, Essex SS1 1AB. Tel: (0702) 436229. Fax: (0702) 433741. ***Dp***

TOUGH COOKIES

Flight cases can be a pretty much indispensable accessory if you do any live playing at all - you can't very well walk around with your M1 in a Tesco carrier, can you? John Hornby Skewes currently distribute an American-made range which could be worth a look if you're in the market for cases. SKB Cases are made in sunny California and meet the most demanding quality and durability specifications. In addition to musical instrument cases, SKB also manufacture cases for military weapons, medical equipment and computers. All of their music products are developed through extensive research and development and "performance-tested by pros".

The SKB range is extensive, including several styles of guitar and bass case, violin cases, sax and trumpet cases, keyboard, drum machine and sequencer/sampler cases, as well as lightweight rack and mic cases. As an example, their tough ATA Universal Keyboard case fits 95% of the popular professional keyboards being played today. This is achieved by their exclusive design which allows internal size adjustments via foam blocks which lock together to provide "secure and durable protection" around the keyboard.

John Hornby Skewes have an informative brochure covering the whole range and available from them at Salem House, Garforth, Leeds LS25 1PX. Or call them on (0532) 865381. Fax: (0532) 868515. ***Dp***

FZ1 IN THE CLUB

Good news for the many Casio FZ-series sampler owners out there comes in the shape of the Casio FZ Users Club, being set up by Adrian Cox and Will Penney. The Club has no connection with the previous club of the same name, but will no doubt be hoping to attract its former members. Judging by the number of enquiries we receive at MT about an FZ Users' organisation, there are quite a few of you out there.

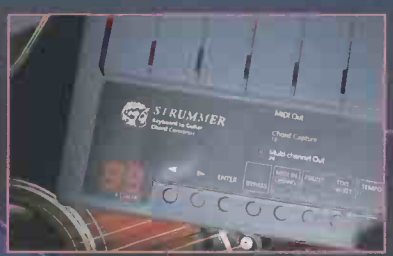
The new Club is not linked to Casio UK, though the company has provided encouragement. Member-ship is currently being offered at a very reasonable £10, for which members will receive six news-letters per year and access to the club's libraries. Casio have kindly given permission for the Club to pass on copies of the original FZ library and the Fangel (Option 2) set at £3 per disk. Around 75% of the original disks are currently available, though the founders are seeking to complete the set. A Public Domain library is also on offer, again at £3 per disk, or at a reduced price of £1.50 per disk for those members who send in a disk of samples not already in the Club's list. Finally, there is a library of samples originated by the Club at £4.50 per disk.

Newsletters will include articles about aspects of the FZ samplers and reviews of software and CDs/tapes. The founders hope that members will contribute with hints and tips. Additionally, they will be able to correspond with other users in the letters section of the Newsletter.

Interested parties should contact Adrian and Will at The Casio FZ Users Club, 53 Linkfield Road, Mountsorrel, Loughborough, Leicestershire LE12 7DJ. Tel: (0533) 375603. ***Dp***

the name is...
OBERHEIM
sound, power, value.

THE SIGN OF A FINE PRODUCT ★ MCM XCIX ★ DISTRIBUTED IN THE UK BY



matrix 1000

The world's best analogue synthesizer is just waiting to wow you with its 1000 superb analogue sounds. No digital machine can match the classic analogue quality of the 195 keyboard sounds, 118 string sounds, 130 woodwind and brass sounds, 239 synthesizer sounds, 119 bass sounds, 74 lead sounds and the 125 effects and percussion sounds.

strummer

Playing guitar sounds on a keyboard has never really been convincing, - until now. With Oberheim's clever little Strummer, you concentrate on playing the chords - it takes care of the rest.

Choose from one of the 96 on-board playing 'style' presets or tailor make your own, with full control over strum rate and strum direction.

drummer

Nobody likes to program drum machines, but everybody likes the way they sound. Now you can take away the tedium of programming with Oberheim's Drummer. With over 10,000 possible rhythms available the Drummer will respond to your playing style. You play quietly - it does too. And when you're ready to rock.....

Oberheim.

THE SIGN OF A FINE PRODUCT ★ MCM XCIX ★ DISTRIBUTED IN THE UK BY

081 963 0663

PHONE THIS NUMBER FOR A FREE CATALOGUE . MCMXCIX . 1[illegible]A ABBEY ROAD . TUDOR ESTATE . L[illegible] [illegible] 963 [illegible]

Cadenza™

The Graphic Sequencer £159

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!

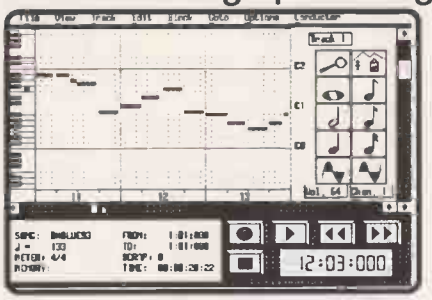
POWER

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 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.

Ask us for a copy of the PC TODAY "Rave Review" of Cadenza.

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..

NO GREY IMPORTS

POWER PACKED & OUT NOW!

Cadenza for Windows

Cadenza for Windows is the most powerfull & advanced sequencer available

Call for details NOW!

This'll rattle your Windows!

£275

From the EXCLUSIVE distributor
NO SUPPORT OR UPDATES FOR GREY IMPORTS!

NEW LOW PRICES!

Cadenza	plus
PC MIDI Card	£232
MQX-16	£299
MQX-32M	£379

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.

LOOK - NEW LOWER PRICES!

PC MIDI Card £87.50 MQX-16 £157.75
MQX16S £175.50 MQX32M £219.50

Ballade v2.5 & Ballade GS both £175

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 octavas
- 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!

£452

NEW!
MusicatorGS
16 Tr / 16 Staff Seq - Notator
Supports Roland GS Format
Upgradeable to The Musicator
Mixer panels lets you change Vol, Pan, Chorus & Reverb - AS THE MUSIC IS PLAYING!
£265

For further information about our exclusive product range and services why not call for a free catalogue?
Access & Visa accepted, please add £3.50 to your order for P&P. ALL PRICES INCL VAT.

E&OE

Digital Music

UK & OVERSEAS DEALER ENQUIRIES WELCOME.
27 Leven Close, Chandlers Ford, Hants, SO5 3SH, England.

☎ 0703 252131
Fax: 0703 270405

NOTATOR GOING CHEAP

If you've admired C-Lab's powerful Notator sequencing and notation package in the past but haven't yet taken the plunge, now could be the right time. For a limited period, Sound Technology are backing a special promotion on the C-Lab Sync Pack, which comprises Notator v3.1, Unitor 2 (see review in this ish) and a C-Lab mouse. The normal combined cost of these items would be £950, but selected dealers are currently offering the package for £649, a saving of just over £300 (look Ma, no calculator). Notator v3.1 running with Unitor 2 provides powerful SMPTE read/write facilities for locking Notator to tape, three Merged MIDI Ins and three separate MIDI Outs for simul-taneous use of 48 MIDI channels. The Tape Control Mode recently added to v3.1 of Notator is compatible with either the Fostex MTC1 or the Tascam LMTC1 to provide full tape machine control from within the sequencer software.

More info from Sound Technology at Letchworth Point, Letchworth, Herts SG6 1ND. Tel: (0462) 480000. Fax: (0462) 480800. ***Dp***

SAMPLE THIS

New additions to the Ensoniq EPS-16 Plus sample library are in the offing, including the SL7 Dance 1 Sound library, a set of five disks containing dance loops and other contemporary sounds selected for their suitability in dance music production. The SL7 Dance 1 sound library samples were produced by Scott Blackwell, who has worked with artists such as Kurtis Blow and ZZ Top, whilst Maurice White of Earth, Wind and Fire is the man behind the new Vocal Sounds set, and Marcus Miller has produced the new Ensoniq Bass Sounds set.

The new sample library additions are available now and cost £53.90 per set.

More from Sound Technology, 15 Letchworth Point, Letchworth, Herts SG6 1ND. Tel: (0462) 480000. Fax: (0462) 480800. ***Dp***

DANGER: UNEXPLODED DISC

New on the ever-expanding sample CD market is Danger 1, the first sample collection from the Dangerous CD company. Containing over 1000 digitally-mastered stereo samples, the CD is, according to the company, "probably the largest sample CD library ever made on one disk". Designed by Vitamin C (credits include The Shamen, Bomb the Bass and many more), the CD offers drum loops, keyboard sounds, basses, FX and that old favourite, "much more". It's also datastreamed for Akai S1000/S1100 users. The CD retails for £49.95.

We'll be reviewing Danger 1 in the near future; in the meantime, for further info or to order, contact The Dangerous CD Company at PO Box 2545, London N11 1TS. Tel: 081-368 8271, Fax: 081-361 5833. ***Dp***

MUSIC MAKER SHOWS THE WAY

Music Maker Exhibitions are pleased to announce three major public shows for 1992 in conjunction with the Music Industries Association. The Northern Music Show '92 takes place on 16th and 17th May at the G-Mex Centre in Manchester. A broad-based music show, it will also encompass the successful Northern Guitarist Show.

The Scottish Music Show, now established as Scotland's premier music exhibition, takes place on the 19th and 20th of September at the SECC, Glasgow. Finally, the London Music Show is this year located at Wembley, and takes place on the 28th and 29th of November. With the recent change of the International Music Show into a trade-only event, the London Music Show becomes the UK's largest public music show.

More information on any or all of the above shows is available from Clive Morton or Julie Day at Music Maker Exhibitions, Alexander House, Forehill, Ely, Cambs CB7 4AF. Tel: (0353) 665577. Fax: (0353) 662489. ***Dp***

GEAR FEST III

Loads of news from MCM kicks off with the launch of the new Zoom 9000 Guitar Processor (tell your band's guitarist about it). Featuring 21 digital and analogue effects, five of which can be used at the same time, the new processor is as compact as its predecessor, the 9002 (that's pretty small - about the size of a large-ish digital stopwatch). As well as a comprehensive range of effects, the 9000 offers an in-built tuner and its own dedicated foot controller, the FC01. Its retail price is £259.95 including VAT.

Of possibly more interest to synthists is the news that the new OBMx synth from Oberheim will be shipping from March. Though its audio path is entirely analogue, the OBMx is fully MIDI equipped and completely programmable. Features include complete front panel parameter control from 35 knobs and 62 switches, up to 12 stereo polyphonic voices, two oscillators per voice, four multi-stage envelopes per voice, three LFOs per voice and two separate filters per voice. Also included in the new synth are Matrix modulation, as found on the Oberheim Matrix synths, External audio inputs, individual stereo audio outputs for each voice, stereo mix output and LCD display for easier editing. The OBMx is a rackmount expander and will be available in two versions - two-voice and 12-voice. Expansion cards which increase the number of voices incrementally will also be available. The two-voice system will retail for £1199.95, while the 12-voice system will set you back £2999.95. Both prices include VAT.

MCM are also pleased to announce that they have won distribution rights for Turtle Beach Systems' MultiSound, a 16-bit digital sample playing audio card for IBM PC and compatibles.

Multisound has a 20Mhz Motorola 56001 digital sound processor chip capable of 10.5 million instructions per second. This fast processing makes real-time equalisation, data compression, varispeed playback and "much more" possible. MultiSound's built-in MIDI synth provides 32 polyphonic, 16-channel multitimbral voices. The voice data contains 126 16-bit sampled instruments, stored in 4Meg of ROM on the card. Multisound enables Analogue input/output, using 64x over-sampling technology on both input and output for analogue-to-digital conversions, so sound quality is clean and accurate. The system supports mono or stereo 8- or 16-bit recording with 44.1kHz, 22.5kHz and 11.02kHz sampling rates. Its recommended retail price will be £949.95 including VAT.

To conclude this bulletin, how about this: MCM have taken the unusual step of actually *reducing* prices on much of their range. The Oberheim Matrix 1000, Strummer and Drummer, Waldorf Microwave and MIDI Bay, most Opcode, Coda and Passport software and Ultimate Support Systems all benefit from these reductions. On top of this, MCM have also increased their current product range, adding over 12 new items. Let's hope this trend continues, and even catches on with other companies!

More information on any of the above from MCMXCIX, The MCM Building, 708A Abbey Road, Tudor Estate, London NW10 7UW. Tel: 081-963 0063. Fax: 081-963 0624. ***Dp***

communiqué

he can't trance dance

Well, you fell for the joke parts hook, line and sinker! If anyone's a prat, it's Martin Howard Naylor, aka Martin Howard (what's the point in having two names? MIDI guitarist by day and spandex-clad bank-robber by night?)

Gracious Martin, it's the old favourite of a mature (elderly?) technically-skilful musician attacking house music. Worse - he defends Bryan Adams (arf arf) and the disciples of Satan (Genesis). When either of these two come up with something as breathtakingly brilliant as Orbital's 'Chime' or Mr Fingers' 'Can you feel it?', then, maybe, he should be allowed to mention these nothings.

Why do musicians need to know about theory and technique? Music is about making sounds with feeling, emotion and atmosphere and you only need very basic technique to be able to do this. But it's something Genesis know little about; have you heard *The Lamb Lies Down on Broadway*? It's utter rubbish and probably one of the most stupid album titles in the history of popular music.

Mart, you're too old. Like Genesis, you probably Can't Dance, so, you sad man, you'll never fully appreciate house music. What's worse is that you obviously haven't even tried.

Marti, you're also misguided. A&R has little to do with house music - most house comes out on small independent labels who don't even have A&R departments. Instead, the musicians themselves control and dictate their own music. Which is really quite a good idea.

Martini, you're a pretentious fool, inflated by your own self-importance (sick).

Well, I'd better stop this and go and listen to the extended guitar solos and power-riffing of my favourite crash-chord power-rock duo, the Pet Shop Boys. Aren't they house music with vocals?

Andrew Bleep Hill
aka Andrew Hill
Norfolk

PS Could you please send me some photos of the British missionary Dr Livingstone?

Sorry Andrew, the last Livingstone went out this morning (to a guy named Stanley in Africa). Just got a batch of wicked photies of JM Jarre, if you're interested? ***Tg***

mime time

Good, thought-provoking stuff in your "what is live?" January editorial.

The problems with live, partly live or mimed music on TV are often political. In the old days, shows like *The Old Grey Whistle Test* recorded bands totally live, but more often than not ruined their sound by refusing the bands' sound engineer access to the mixing desk. Things got better with *The Tube*, where the engineers were actually allowed to mix; but unfortunately, the expense and inconvenience of providing decent equipment was too much for most pop shows to handle and as a result the *Top of the Pops* lip-sync format has become the norm.

The biggest problem here is that the musicians themselves get no say in how they are presented and that even in this day and age, television companies still want to pretend that furiously lip-syncing artists are "appearing live" on the show. Well OK, the singer may not be dead and yes, the show may be *broadcast* live, but miming is miming, and I think that to pretend otherwise is cheating. In their own perverse, illogical way, the Musicians' Union in this country made life hell for pop musicians through the '70s and '80s by ruling that miming was OK as long as the track was completely re-recorded for *TOTP* broadcast. It wasn't enough simply to pay all the musicians on the record a session fee (whether they appeared on the show or not) - the record had to be re-made. (I often pictured Brian Wilson and The Beach Boys trying to re-record 'Good Vibrations' in three hours in some North London eight-track.) How the groups and record companies got round this ruling is a source of countless bizarre, amusing anecdotes - don't worry, I won't spill the beans.

The whole TV sham could be put back on the rails with a dose of honesty (remember that?). Code all the performers with small letters in the corner of the screen: M - miming, LV - live vocal, L - completely live. It wouldn't do any harm, would it? At least the public would know what they were getting. . . And after 30 years of crap pop TV, not before bloody time.

Dave Stewart
(keyboard player)
London

repeat performance

I would like to congratulate you on the comprehensive and informative review of Mark of the Unicorn's Performer software by Ian Waugh in the January issue of MT. However, I would like to correct the impression that may have been given by his comments on the system of hard disk installation used by Performer, and on a number of other leading music software packages.

Firstly, although just one master disk is supplied with the Performer package, a second master disk complete with hard disk install, for backup use, is sent to each registered user once they have completed and returned the registration card to us at Sound Technology, Performer's UK distributor.

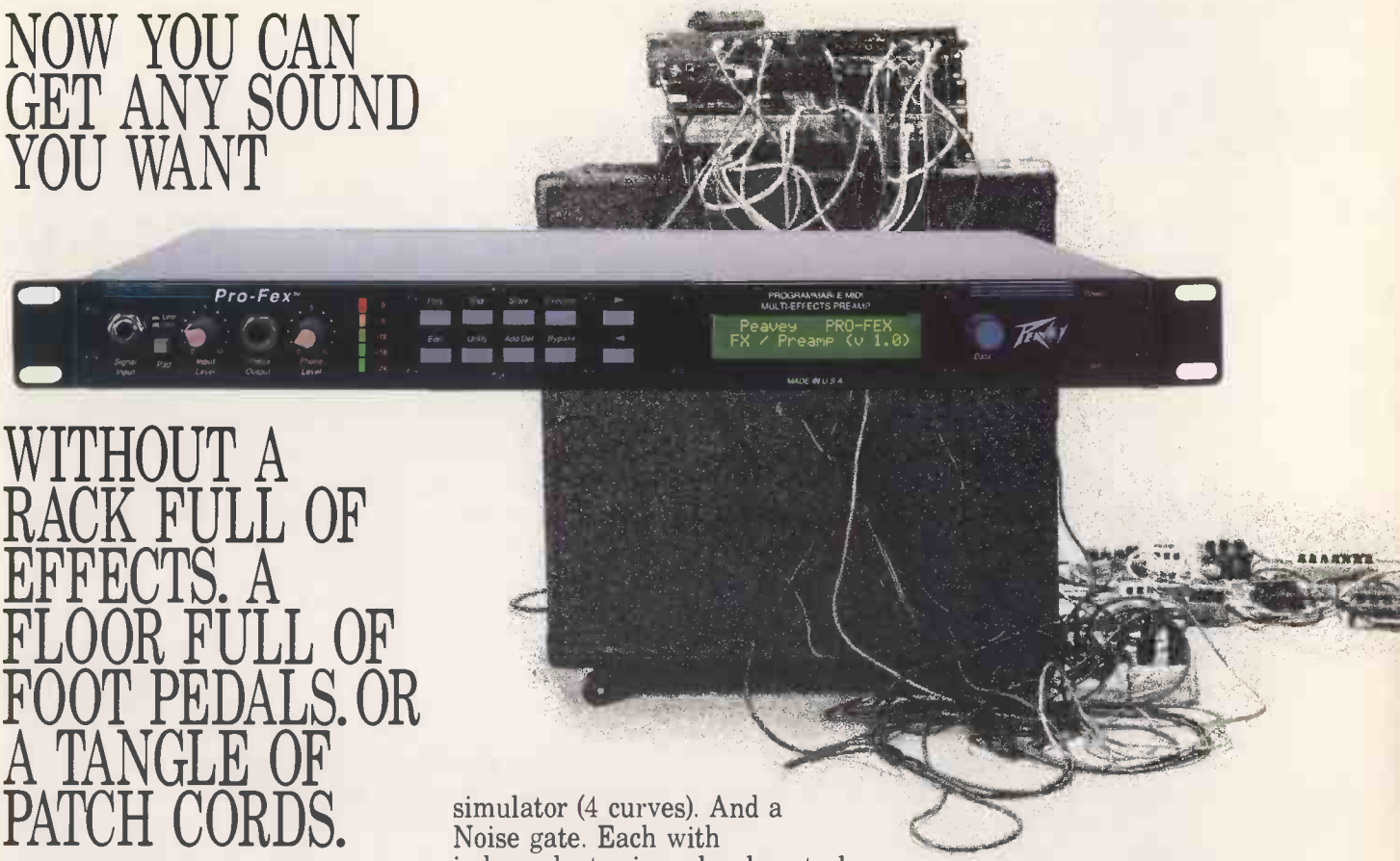
Secondly, if a HD install is lost due to a hard disk crash or other disaster, the master disk from which it came is still a master disk - you can still make an uninstalled working copy from it. That is, the program runs from the hard disk but requires the master disk to be inserted once for verification.

Thirdly, if a registered user needs to resort to their backup copy because of a mishap, the damaged disk can be replaced by ourselves by return of post.

I hope this will reassure current and prospective users of Performer that the copy-protection system used is not quite the dangerous tightrope that they may fear!

Simon Stock
Professional Products Manager
Sound Technology plc

NOW YOU CAN GET ANY SOUND YOU WANT



WITHOUT A RACK FULL OF EFFECTS. A FLOOR FULL OF FOOT PEDALS. OR A TANGLE OF PATCH CORDS.

THE PEAVEY PRO-FEX.™

"The Pro-Fex lets me realize the sounds I hear in my head."
—Craig Anderton

The Peavey Pro-Fex is not just another multi-effects processor. It is a complete instrument preamp that is capable of up to 16 simultaneous effects placed in any order, combined in series or parallel. Think of the possibilities! Virtually any sound you can imagine can be created with this powerful unit.

Over 30 effects types are available: Distortion. Compressor. Overdrive. Chorus. Delay. Auto-pan. Pitch shift. Reverb (eight types). Coil tap. Exciter. Envelope filter. Classic® guitar amp EQ. Stereo 5-band graphic EQ. 3-band sweepable midrange EQ (3 curves). Stereo 4-band parametric EQ. Hum filter. Short delay. Speaker simulator (4 curves). And a Noise gate. Each with independent mix or level control placed in any sequence in the effects chain, without any external outboard devices or a maze of patch cords.

Mono inputs are located on the front and back, a line level/instrument level pad selects the input range with an input level pot and 5-step LED ladder for input and level adjustment. We've also included stereo outputs and a stereo headphone jack with level control.

"I've replaced an entire rack of gear with the Peavey Pro-Fex."
—Chris Camozzi, guitarist with Michael Bolton

Parameters may be changed during performance by MIDI Continuous Controller commands with each preset having up to nine controllers independently assigned to it. There are also four optional footswitches available to control PROGRAM UP/DOWN, BYPASS, MUTE, or INFINITE REPEAT.

But, to really appreciate what the Pro-Fex can do, you've got to hear the sounds! We've built in 128 factory presets programmed by some of the leading names in the music industry...and they're HOT! Included are presets for clean lead, distorted lead, clean rhythm, distorted rhythm, and special effects. Any effect in any preset may be modified and effects may be added or deleted at will. Presets may be stored externally via MIDI System Exclusive individually, in banks of 10, or all 128 at once.

The Pro-Fex... One unit. One rack space. Infinite possibilities.

PEAVEY®

The Musician's Edge

The MONITOR Magazine by Peavey is a publication filled with the latest information that musicians want to know. To receive 4 issues for only $5 (price good in U.S.A. only) send check or money order to: MONITOR MAGAZINE, Peavey Electronics, 711 A Street, Meridian MS 39302-2898

PEAVEY ELECTRONICS (U.K) LTD. Hatton House, Hunters Road, Weldon Industrial Estate, Corby, Northants, NN17 1JE, England.
Telephone: (0536) 205520. FAX No: (0536)69029

YAMAHA MDF2 MIDI DATA FILER

WHERE WILL IT all end? That abomination of Japanese culture, the karaoke machine (once aptly described as a cross between entertainment and humiliation), already seems to be taking over from traditional "live" music. Part of the problem (apart from the appalling taste of the British public) probably lies in the cost of live music - it's not easy to field a five-piece band on £50 a night. Which is why many musicians have resorted to sequenced backing tracks.

Although essentially not much different from backing tapes, they should be at least one equipment generation clearer. And even though the majority of punters wouldn't know a backing tape from a sequencer, they let you honestly say "No, I don't use tapes", which helps appease your conscience, if not your bass player, drummer and keyboard-playing friends.

If you're going to sequence on stage, you need the gear for the job. Few musos actually carry a computer with them - too big and too fragile - and while some swear by hardware sequencers, they have their limitations for live use - generally lack of memory and a long loading time. The solution is, of course, a MIDI data filer such as Yamaha's MDF2.

The idea is simple: you use your sequencer to create backing tracks and then transfer them to the 3.5" disk of the MDF2. This plays back the tracks exactly as they were recorded, directly from the disk. That is, they're not loaded into any sort of memory area first, so playback is instantaneous.

Although it has record and playback functions, the MDF2 doesn't profess to be a dedicated sequencer and, indeed, has very little in the way of editing facilities. It uses a single-track system which records all 16 MIDI channels and there is no overdub facility. Essentially the data has to be "ready to go" before you record it onto the MDF2.

To record, hook your sequencer to the MDF2 (MIDI Out to MIDI In), select MIDI clock on the MDF2 and press Record and Pause. As soon as your sequencer starts transmitting, the MDF2 begins recording and saving data onto disk. The MDF2 records at a default tempo of 120bpm but you can change this before recording. Playback will follow any tempo changes within the file itself.

The MDF2 uses the standard MIDI File format 0 and recognises the ESEQ format used by Yamaha on their SY77, SY99 and the QX3. It distinguishes between formats by checking the header so you're not left with the responsibility for telling it which is which.

MS.DOS formatted disks are used, so the MDF2 should also read standard MIDI files saved to disk by a PC. The Macintosh also reads and writes to MS.DOS disks (using programs such as DOS Mounter or Apple File Exchange) and ST disks are fairly MS.DOS compatible, too, although some may need to have a special header written to them (such utilities are available in the public domain). MS.DOS compatibility programs exist for the Amiga and Archimedes, too.

The MDF2 worked fine with a file recorded with MOTU's Performer and transferred using Apple File Exchange, and it read sequence ESEQ files from an SY77 disk. The ability to read standard MIDI Files directly also gives you the option of purchasing pre-recorded backing tracks on MS.DOS disks from companies such as Hands On.

The MDF2 can also record System Exclusive data, files up to 600K in size. Apart from the obvious use of storing synth and expander setups, this could be used with portable keyboards and organs. The machine would also be a useful add-on for an instrument with a sequencer, for example, but no built-in disk drive, such as the M1.

Having recorded a number of songs, you can specify an order for playback or chain them together. There are other functions too, such as renaming, deleting, copying and appending files and formatting and copying disks.

As the disks are MS.DOS compatible, you can edit the files on a computer, although this is best restricted to changing file names (useful for re-ordering files).

For a piece of gear which seems so obviously suited to pro use, you may wonder why Yamaha put it in a desk-top case rather than a rack unit. Well, in use you're likely to want the unit beside you and lodged somewhere in a rack may not be the most convenient place. Plus, it can also be used at home on top of a piano or home-keyboard and, although it would be under-using it, you could use it as a scratch pad to record your doodlings. And should you want to pair it up with your QY10, it runs off both mains and batteries.

Currently, the MDF2 is the cheapest bulk storage/sequence playback machine on the market. It works well, it's easy to use and with standard MIDI File compatibility, it should be tempting to anyone using sequences for live work - particularly if they already use a computer. Is this where the musician's fight back to karaoke begins? ■ ***Ian Waugh***

Price *£299 including VAT.*

More from *Yamaha Kemble Music (UK) Ltd, Sherbourne Drive, Tilbrook, Milton Keynes MK7 8BL. Tel: (0908) 366700. Fax: (0908) 368872.*

£32.43 a month
Deposit £99.36 x £32.43
Total price £1266.30
APR19.3%

Roland MV-30

It's a Sound Module
It's a Powerful Sequencer
It's a Mixer

The personal MIDI studio workstation that's just so easy to use!! Just look at these advanced features!!

- 220 super built-in sounds using RSPCM generation
- 30 voice polyphony, 8 part multi timbral capability
- 16 track sequencer (8 tracks for internal sounds 8 for external MIDI devices
- 50,000 note capacity
- Multiple record methods
- Built-in reverb, delay, chorus
- Tape sync built-in
- Built-in Compu-mixer
- Automatic Mix-down
- On-board floppy disk drive
- X-tra large LCD display

Unbelievable features, Unbelievable price!! ABC Music saves you over £600!! No need for complicated MIDI set-ups with wires everywhere and compromised features/sound quality. **Upgrade NOW** to a Roland MV-30 - Ask about our special **Part-Exchange programme.**

abc exclusive deal, save £600 £999

Anatek gadgets

All Prices exclusive to ABC Music!!

Pocket Filter rrp£97 **ABC £29.95**
- Filter on all / select MIDI channels
- Filter controllers, Syst Excl data
- Selectable filtering

Pocket Channel rrp£97 **ABC £29.95**
- MIDI channel Mapper
- Footswitch controllable

Pocket Transpose rrp£113 **ABC £49.95**
- In-line 16 channel transposer
- Key sig & octave simultaneously

Pocket Record rrp£1[illegible]7 **ABC £49.95**
- Records 15,000 events
- Single track, 16 MIDI channels
- External sync, Loops mode

Pocket Split rrp£97 **ABC £39.95**
- 8-Zone keyboard splitt[illegible]
- Overlapping boundarie[illegible]

Pocket Sequencer rrp£1[illegible]57 **ABC £[illegible].00**
- Cheapest 16 track MIDI sequencer
- Variable quantise, Sync, Punch-in

add £2 p&p
save up to 60% OFF

6 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 and solve your problems.
- Legendary After Sales Service. Replacement or quick turn-around repair on all product.
- Extended ABC Warranty for up to 3 years available.
- Interest Free and Low Finance credit deals available.
- Leasing facilities our speciality.
- Part-exchange welcome.
- Top prices paid for all used equipment.

Call in to ABC today at: Addlestone! Bristol! Exeter! Kingston! Oxford! Slough!

choice, service & savings

0% Finance available
Deposit £99 10 x £90
Total price £999
APR 0%

FREE: Sound card set with waveform and voice data card. Worth over £100!! (Limited t0 1st few)

Yamaha TG77

- AWM2 samples / AFM Sound generation
- Versatile 1,2 or 4 element voice architecture
- Advanced digital filters, Dynamic panning
- Programmable aftertouch filters
- 4 internal dsp's for stunning effects
- Multi-timbral, built-in drums and 8 assignable individual outputs

rrp £1395 now only £999

this months 'blink & you miss 'em'

HI-TECH DEALS

Roland JX-1	559	299
Roland D10	799	549
Yamaha SY99	24952	200
Yamaha SY22	799	599
Yamaha DX5	Demo	550
Yamaha CP70..E/grand		699
Korg Wavestation	14991	199
Korg M1	1199	999
Emu Emax IIFD	27501	650
Emu Emax II HD	Demo	1950
Cheetah MS770	899	770
Emu MPS NEW	12991	199
Akai MX76 Mother	1299	799
Peavey DPM3	18991	499
Hammond XB2	in Stock	
Ensoniq EPS Exp	13501	199
Ensoniq SQ1+	13491	095
Roland D70	Only	1299
Roland JD800	Only	1495
Roland E30	899	599
Korg T3	22991	649

DRUM MACHINES

Alesis SR16 with free video tutor	Only	299
Alesis D4	459	375
Alesis HR16	299	199
Roland R8	649	449
Yamaha RX8 demo	349	199
Yamaha RX7	425	299
Yamaha RX5	399	299
Akai XR10	369	279
Akai MPC60 Mk2	1899	
Korg S3	899	499
Korg DD5	used	225
Emu Procussion	749	599

SEQUENCERS

Cheetah MQ8	299	199
Alesis MMT8 NEW	399	249
Yamaha QX5 demo	349	199
Alesis Datadisk	399	349
Kawai Q80 used	449	399

SAMPLERS

Cheetah SX16 16 BIT STEREO	799	549
Roland S750	29002	250
Akai S100 HD	39993	150
Akai S1100	36992	950
Ensoniq EPS key	13501	199
Ensoniq EPS 16R	17951	595
Emu Emax II FD	27501	650
Akai S612 used	249	199
Roland S330 used	649	599

MORE EXPANDERS

Roland U220	699	499
Roland D110	one only	399
Roland MV30	14991	199
Roland CM64	one only	299
Yamaha TG77	one only	1100
Yamaha TG33	499	449
Yamaha TG55	749	499
EMT10	one only	199
Cheetah MS6	349	299
EVS Module (demo)	299	149
Korg M1 REX	14991	275
Korg M3R	899	599
Ensoniq SQR	899	765
Emu Proteus I	749	599
Emu Proteus IXR	969	779
Emu Proteus II	1100	899
Emu Proteus II XR	13591	089
Emu Proformance	399	329
Proformance Plus	439	360
Akai VX90 used	295	195
Fujiha D9E	499	429

Roland JX-1 Only £299
- 61 touch sensitive keys
- 24 voice polyphony
- 64 quality pre-sets
- Logical editing
- Save over £260

Roland U-20 Only £699
- 61 touch sensitive keys
- RS-PCM sound generation
- Built-in digital effects
- ROM card expandability
- Save over £350

Cheetah SX-16 Only £549
- 16bit stereo sampling
- Internal 3.5" drive
- Plays Akai S900/S1000 disks. Huge library
- Save over £250

Roland D-70 Only £1299
- 76 touch sensitive keys
- 20 voice/6 part multi timb
- 50 performance set-ups
- Superb drum sounds
- Save over £275

Roland JV-80 NEW £1245
- Weighted 61-key velocity, and aftertouch velocity
- RC-PCM and Di sounds
- 129 preset waveforms
- 8 part multi timbral
- 128 preset / 64 user patch
- Superb percussion sounds
- MIDI Splits/Zones
- Expandable
- New for '92 and in stock

Roland JV-30 NEW £789
- 61-key velocity sensitive
- RC-PCM and Di sounds
- Access 445 sounds
- Easy tone editing
- 16 part multi timbral
- 128 Superb Drum sets
- Built in digital effects
- Layers, dual & Split sound
- GS format compatible
- New for '92 and in stock

mail order hotline **0372 468114**
Instant Despatch + Buy with confidence, 7 day money-back guarantee!

fax direct line **0372 469833**

ABC music

THE live music stores!

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

Kingston
15 mins direct from Waterloo.
56 Surbiton Road **Tel: 081 546 9877**

Oxford
M40 from Birmingham now open.
44 St Clements **Tel: 0865 724820**

Slough
Junction 6 on the M4. FREE Parking.
324 Farnham Road **Tel: 0753 822754**

Bristol
Off Whiteladies Road, Clifton
32 Alma Vale Road **Tel: 0272 238200**

Exeter
The South West's Leading Music Store.
68 Bartholomew St West **Tel: 0392 425125**

ON THE BEAT

Part 28

VARIETY, THEY SAY, IS THE SPICE OF LIFE; VARIETY IS ALSO, IT SEEMS, THE SPICE OF A GOOD INSTALMENT OF ON THE BEAT. TEXT BY NIGEL LORD.

A COUPLE OF weeks ago, I was in conversation with the house engineer at a local 16-track studio. The band being recording there relied heavily on sequenced drum tracks and - apparently - had a handful of patterns onboard their machine which had been culled from this very series. Having always been intrigued to find out just how well other programmers were able to interpret the information included in each article, I arranged to call round to the studio to hear just what they had managed to do with the patterns.

The results were much better than I could have predicted; admittedly the rhythms they had selected were some of the simpler dance patterns I outlined last year, but the rhythms had lost nothing "in translation" from page to program. I was delighted to find the band had used several variations of the original patterns timed to coincide with different elements within the songs.

ILLUSTRATION: CLIVE GOODYER

In the absence of a drummer or percussionist, programming duties had fallen to the band's bassist, who had the articles passed onto him by the vocalist/keyboard player who bought Music Technology. Why had he opted to use patterns from the series? Because a rival band with the same beatbox were using most of the good demo patterns for their songs. Couldn't they have written their own, I wondered? No - no-one in the band knew where to start; having previously all worked with drummers, rhythm was considered to be something of a black art. How, then, had he been able to program variants of the patterns? That wasn't so much of a problem, it seemed; the hardest thing was always thinking up the original idea - that was what he liked best about this series. By the way, how did I manage to come up with so many?

To my chagrin, they stopped short of concluding that it was because I was an enormously talented git - but no matter. My immortality was assured. A (sadly) unsung band was recording unknown material in a little-used studio. So this was rock 'n' roll. Still, they were using one of *my* rhythm tracks. . .

This chance meeting with one of the series' users was actually quite helpful in finding out just where the problems lie for most people when confronted with the task of writing a rhythm track. It transpires, for example, that on those occasions when they had come up with an idea of their own, they found it worked well when played in isolation - or perhaps with the bassline - but put into context within the intended song, didn't sound quite so impressive. And indeed, this is a problem which one often comes up against in the process of programming a rhythm track.

Anyone who's ever suffered a disaster at the hairdressers will probably see an analogy here; it's all too easy to get your hair done in the style you want, but finding a style which suits the face underneath it is quite different. This is, of course, one of the reasons I go to such lengths to encourage experimentation with the patterns presented each month. Whilst I accept their use as a source of useful ideas and inspiration, copying a pattern verbatim - and sticking to it - is unlikely to provide you or your music with anything like perfect rhythm - unless, of course, a song is to be built from the drum track upwards. Even then, there's always room for movement within the structure of a song.

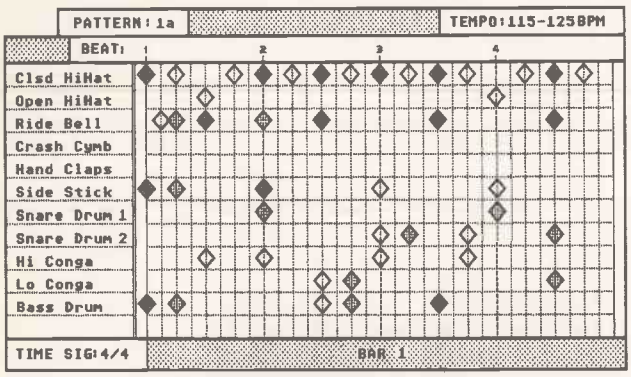
This is seldom a problem for real drummers as they usually default to an altogether more predictable level of playing, which, because few in the rest of the band are capable of improving upon it, is usually left as it is.

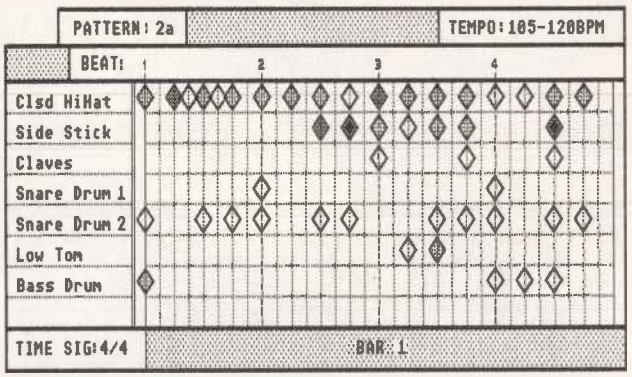
Hopefully, with several hundred patterns to choose from already and more added each month, this series should provide you with a sufficiently large library of rhythms to make it possible to select one suitable for ➢

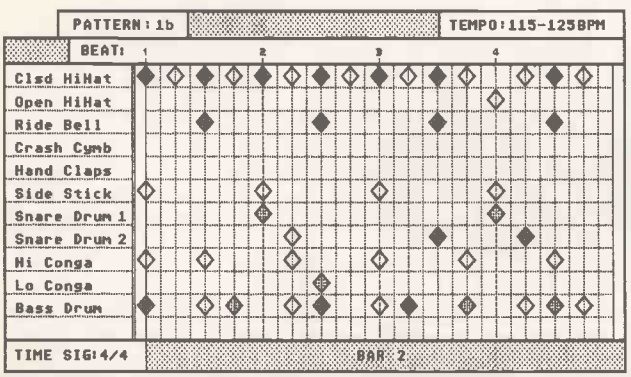
material you're working on. And if this seems like rather a lot, consider for a moment how many synth voices the average keyboard player has access to - or how many samples.

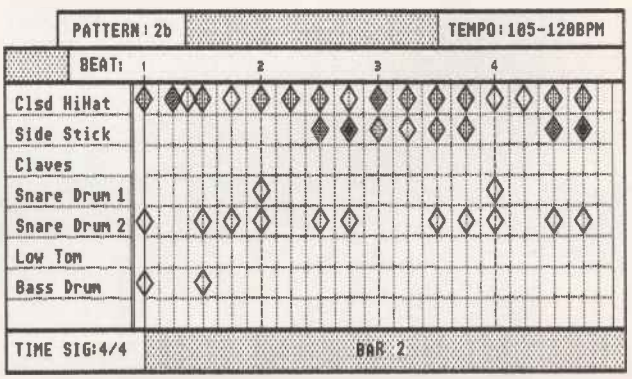
Any one of this month's patterns should make a worthy addition to anyone's collection. Each are highly individual, and each contain enough rhythmic ideas to keep you button-pushing for hours. Though all are fairly complex patterns to listen to, there's little here to tax a reasonably competent programmer. Once again, the real difficulty lies in finding easy categorisations for the six patterns. But that's something I shall leave for you.

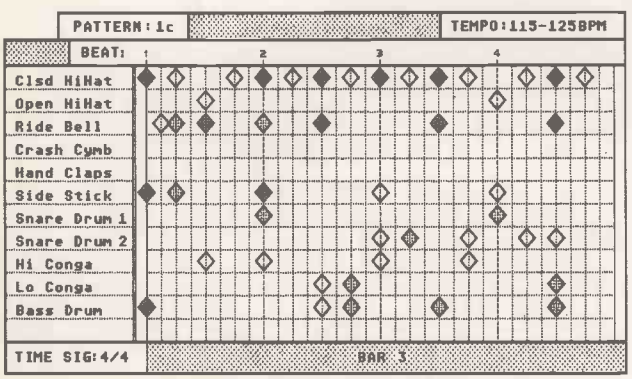
A couple of programming notes: in patterns which feature two snare drums, make sure you assign the longer sound to Snare 1 and the shorter, drier voice to Snare 2. Similarly, in example three, you should opt for more open-sounding, double-headed toms for the first three of the voices and (as indicated), a well-damped, drier instrument for the fourth. ■

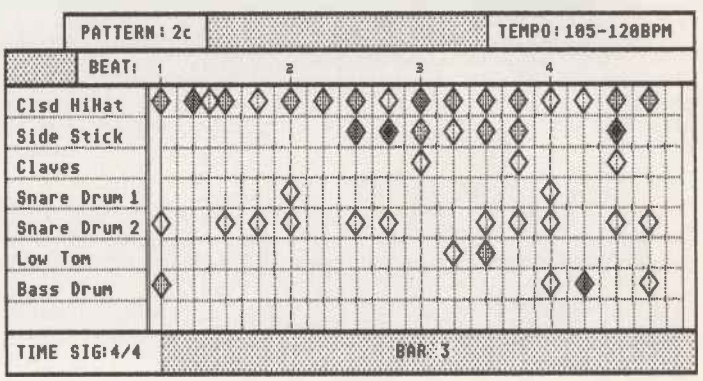


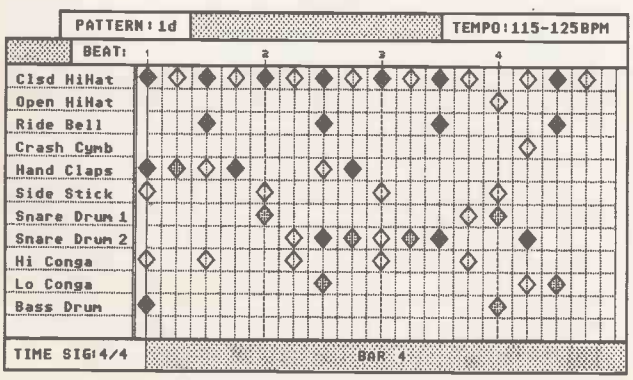


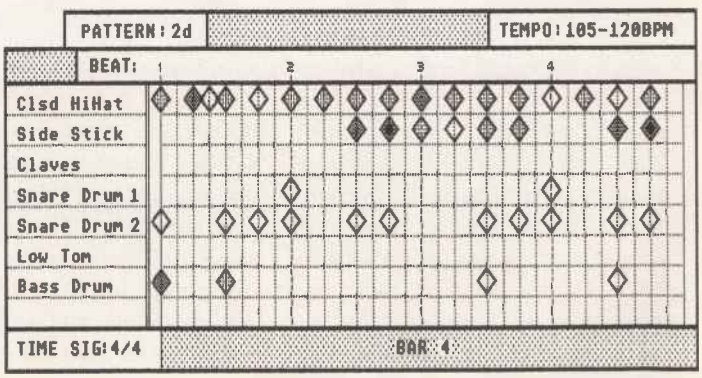












Percy Prior's Music Shop

31 Octagon Arcade, High Wycombe, Bucks. Tel:0494 528733/443418

PERCY SAYS "DO UP YER FLIES OR FEEL THE BLAST..."

...of the HOT TODGERS in synth city. Truck on down and set fire to your intestines. Just call the lads: Steve (He knows so much) Stevey, Ross (He does it for cheap) Rossy, Paul (He wears V necks) Pauly, Mike (He's in charge) Mikey: for unadulterated quotes and advice. We happily display our wares in the windows of our amazing Mega-Store situated at the centre of the universe (we're not pulling your lariots). Many well known musicians have bought gear from us.....and paid for it. We've got a JBL sound system....and it's really loud (oooh Madonna, me cones have fallen off!!). Take this lot for some bedwetting stunners...

ROLAND U20	£699 Sampled sound keyboard
ROLAND CA30	£149 Intelligent Arranger. (More intelligent than your average 'Going For Gold" contestant).
ROLAND CM32L	£169 MT32 type module. (Little white box).
ROLAND CM32P	£199 U220 type module. (Little white box).
ROLAND CM64	£369 The two above modules in one. (Little white box).
ROLAND CN20	£39 Music entry keypad, (almost useful)
ROLAND CR80	£299 Preset drums. (for all you solo artistes).
ROLAND KR3000	£1690 Weighted action piano with U20 sounds plus E series rhythm accompaniments. Funkamundo
YAMAHA SY22	£599 Vector synthesizer. William Shatners favourite.
YAMAHA SY55	£699 Music workstation. Heather Locklear!
YAMAHA TG55	£449 Sample sound module with filtering.
YAMAHA FX500	£295 Effect unit (Ideal additional pizza topping).
YAMAHA GQ1031BII	£99 Mono 31 band eq. (hours of fun)
YAMAHA P2350	£429 Power amplifier. Nadgers

KORG A3	£399 Sugar free effect unit with card updateability
KORG M1REX	£1099 Expanded M1 in a rack. Hodgers
KORG S3	£379 Drum machine/sequencer/squirrel with timecode
KORG T3EX	£1499 Like two M1's with a disk drive and a spatula
KORG WS1	£929 Let's all have a wave sequence
KAWAI K4	£499 (ex-dem) The longer lasting synth
KAWAI K4R	£299 The above with all the keys nicked.
KAWAI KC10 (SPECTRA)	£225 Synth (what can I say)
ENSONIQ SQ1	£699 Alternative to the M1
ENSONIQ EPS16+	THE SPECIALISTS Alternative to life itself
CHEETAH SX16	£599 Alternative to several packets of digestives

ALL THE REST. ALL THE TIME. ALL THE FISH. STEINBERG. CLAB, ALESIS, FOSTEX, TASCAM AND AL.

Free UK delivery, Mail Order, Telephone Hotline. Telephone Coldline, Lavatory Facilities, All prices include VAT (don't listen to those other blokes, they don't know anything). women, men, pelicans.

Ring now for the sensible solution:

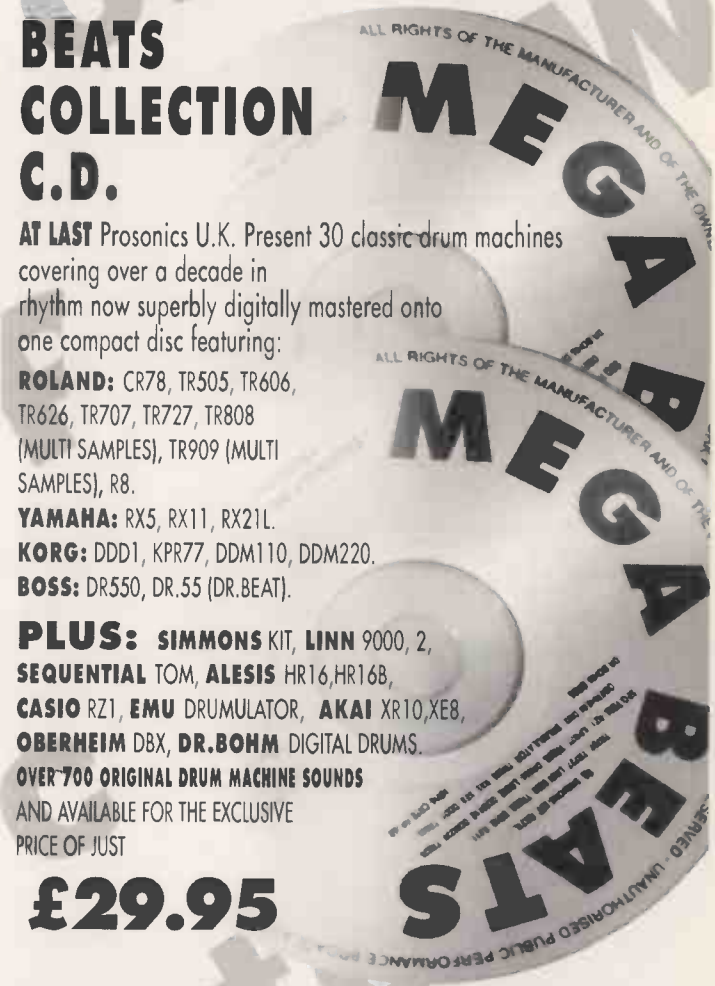
0494 443418 / 0494 528733

PERCY PRIORS MUSIC SHOP,
FREEPOST, (No stamp required)
31 OCTAGON ARCADE,
HIGH WYCOMBE, BUCKS. HP11 1BR

Access · Mastercard WELCOME HERE · VISA

SAMPLE THE RHYTHM

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:

ROLAND: CR78, TR505, TR606, TR626, TR707, TR727, TR808 (MULTI SAMPLES), TR909 (MULTI SAMPLES), R8.
YAMAHA: RX5, RX11, RX21L.
KORG: DDD1, KPR77, DDM110, DDM220.
BOSS: DR550, DR.55 (DR.BEAT).

PLUS: SIMMONS KIT, **LINN** 9000, 2, **SEQUENTIAL** TOM, **ALESIS** HR16,HR16B, **CASIO** RZ1, **EMU** DRUMULATOR, **AKAI** XR10,XE8, **OBERHEIM** DBX, **DR.BOHM** DIGITAL DRUMS.
OVER 700 ORIGINAL DRUM MACHINE SOUNDS
AND AVAILABLE FOR THE EXCLUSIVE PRICE OF JUST

£29.95

PatchWorks

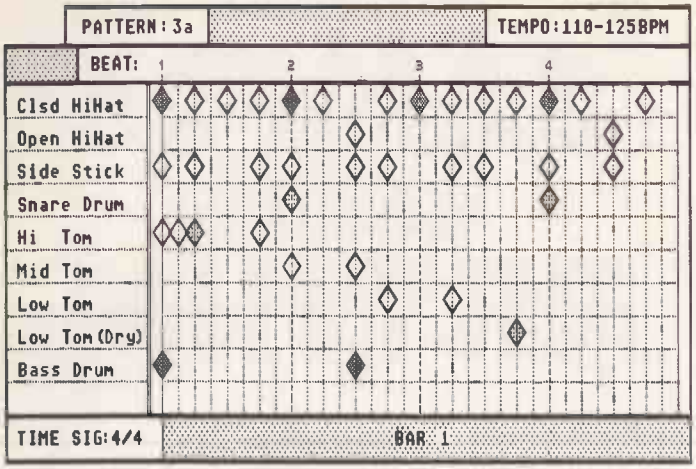
Frederick House, 211 Frederick Road, Hastings, E. Sussex TN35 5AU
Phone 0424 436674

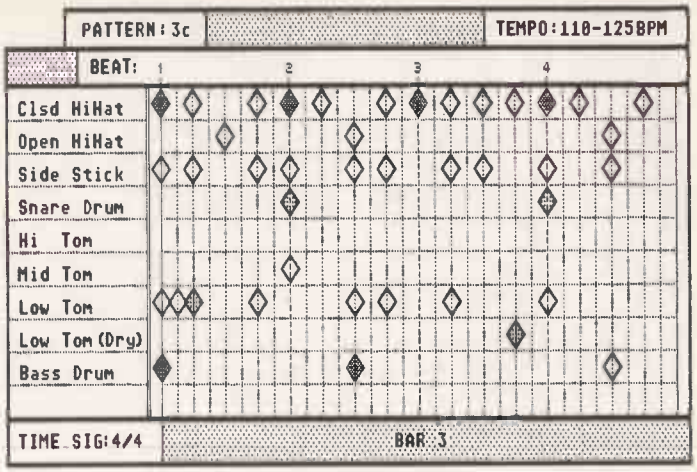
Access · VISA

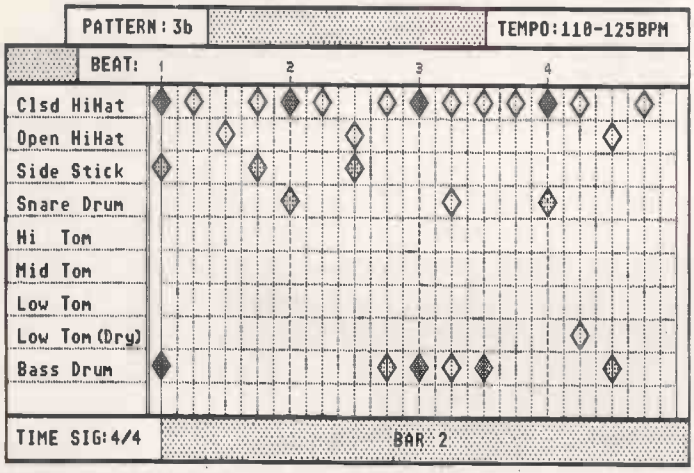
Please complete in block capitals making cheques / postal orders payable to "Patchworks" at the above address.
Overseas:- Please add £5.00 for express despatch and carriage.

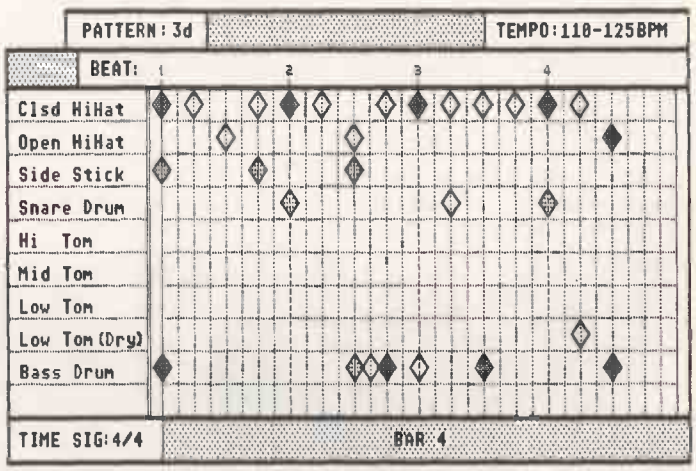
Please send me.....copy (ies) of MEGA BEATS
NAME .....
ADDRESS.....
.....
.....
.....
POST CODE.....
TEL. NO.....
Music Technology Feb '92

☎ PHONE HOTLINE 0424 436674

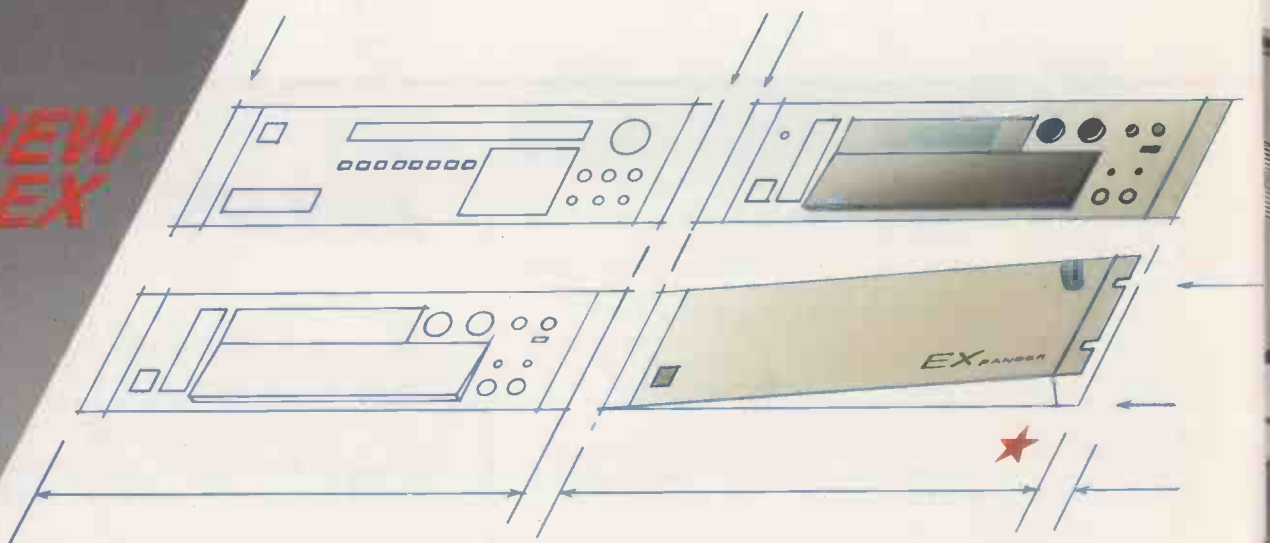








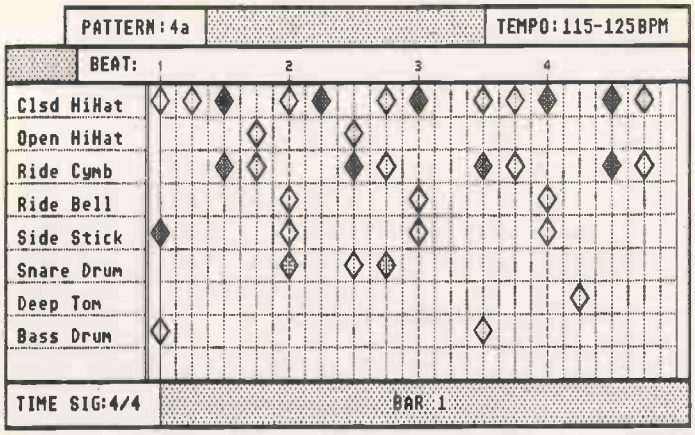
*NEW S-1100EX

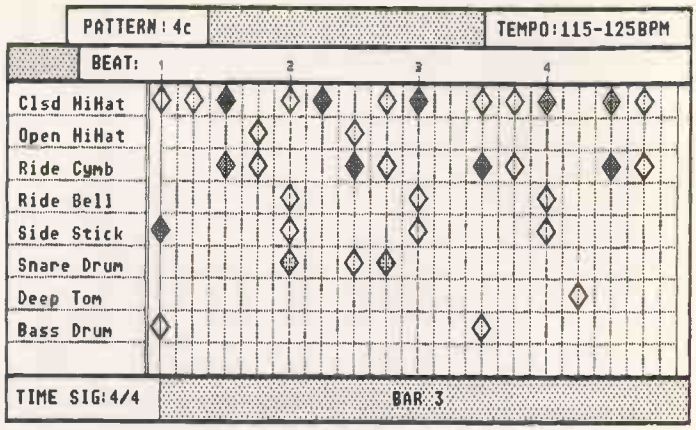


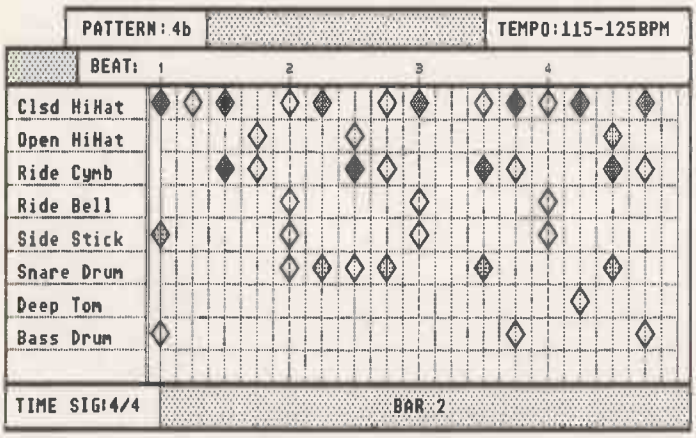
S IS FOR SAMPLER

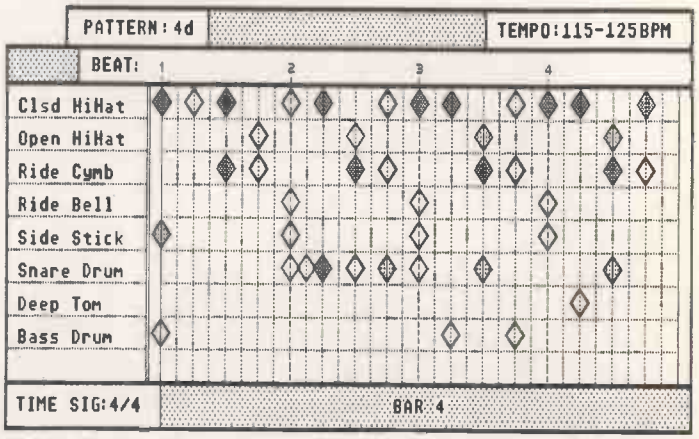
AKAI professional

Akai (U.K.) Ltd, Haslemere Heathrow Estate,
Silver Jubilee Way, Parkway, Hounslow,
Middlesex TW4 6NQ.
Tel: 081-897 6388 Fax: 081-759 8268









Used by the world's leading studios and musicians to achieve the highest quality music and effects, Akai's intelligent S-Series samplers have the power and performance to meet the most demanding needs.

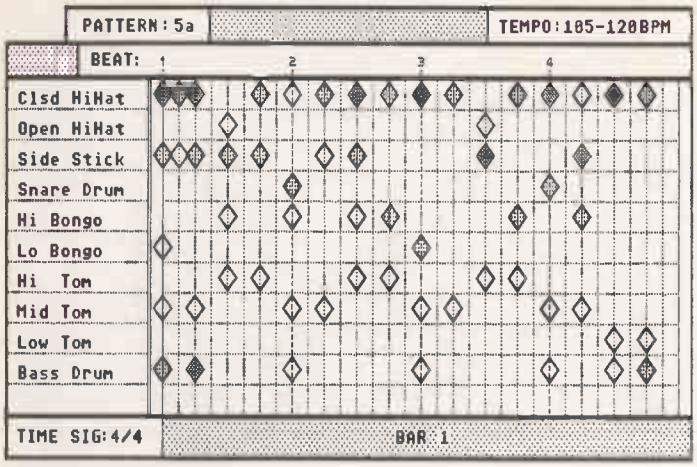
Complemented by regular software upgrades and a vast library of sounds which is regularly expanded, there's a whole family of user-friendly samplers to choose from –

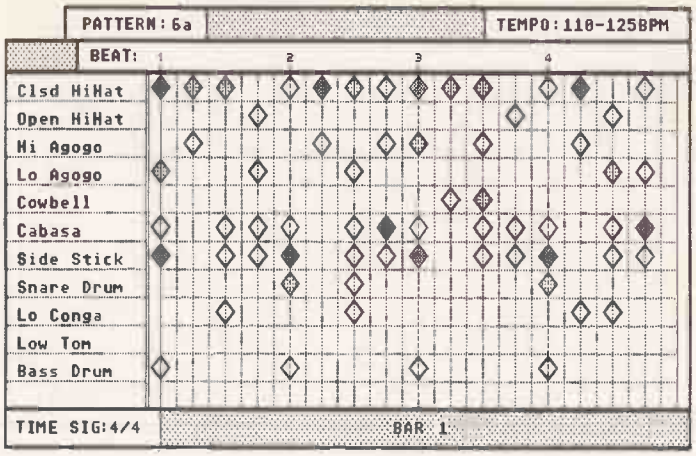
S950** – with its 48kHz sampling rate, expandable memory, timestretch and 'load while play' facilities, this powerful 'second generation' sampling/editing unit is **now available with optional SCSI board for hard disk sound storage.

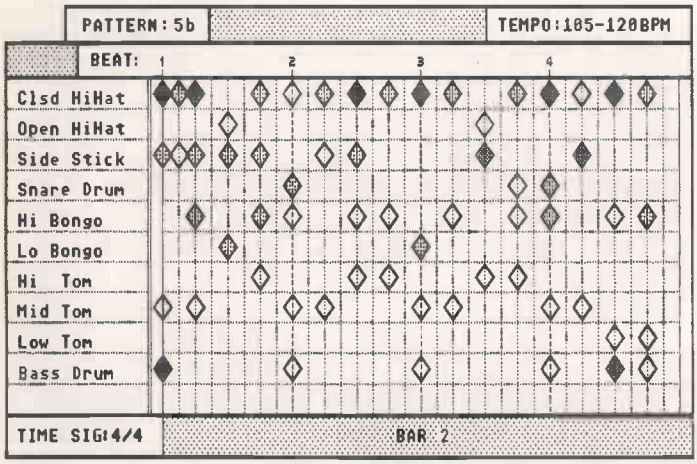
***S1000** – memory expandable to 32mB . . . timestretch . . . multiple loop points . . . optional SCSI interface and digital I/O . . . the versatile S1000 is also available as the **S1000KB Keyboard** (61 note velocity sensitive), **Playback** and **S1000HD Hard Disk** (40mB) versions.*

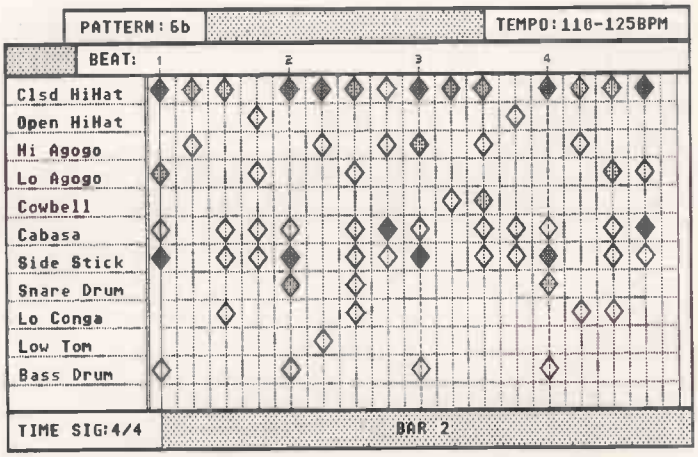
***S1100** – gives you the option of recording direct to hard disk whilst retaining full 16 voice polyphony. This major new feature, plus 50 digital effects, cue list programming, SMPTE read/write, integral SCSI interface, real-time digital output and optional Mac software makes the S1100 a winner.*

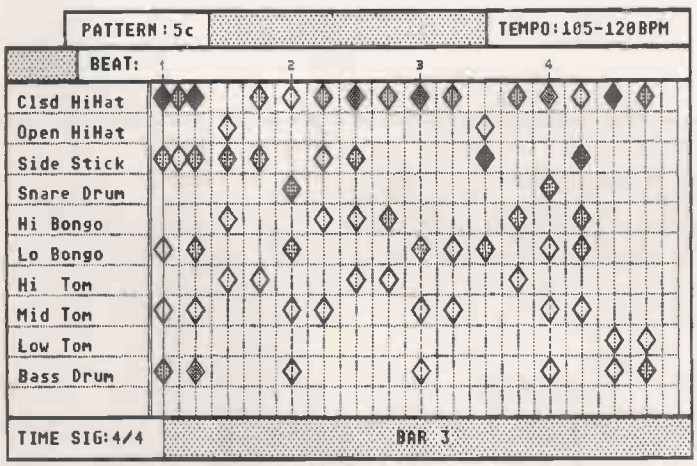
***S1100EX** – a NEW expansion unit for the S1100 offering 16 additional voices and the same features at a highly cost-efficient price! Chain up to 6 of them to an S1100 for extra polyphony, or use them as individual multi-timbral units.*

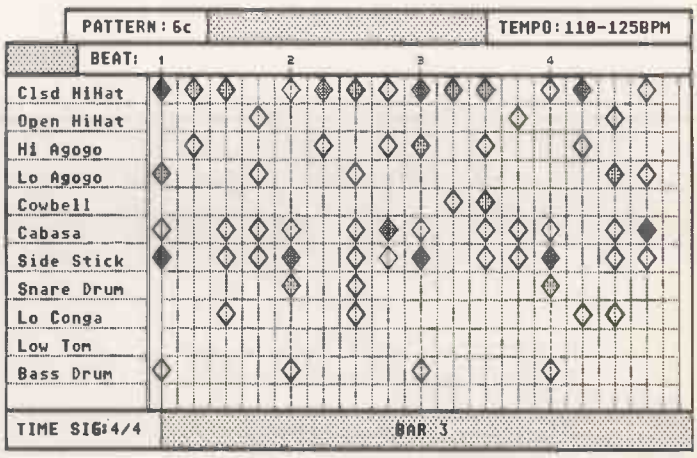

PATTERN: 5a
TEMPO: 105-120BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Side Stick
Snare Drum
Hi Bongo
Lo Bongo
Hi Tom
Mid Tom
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 1

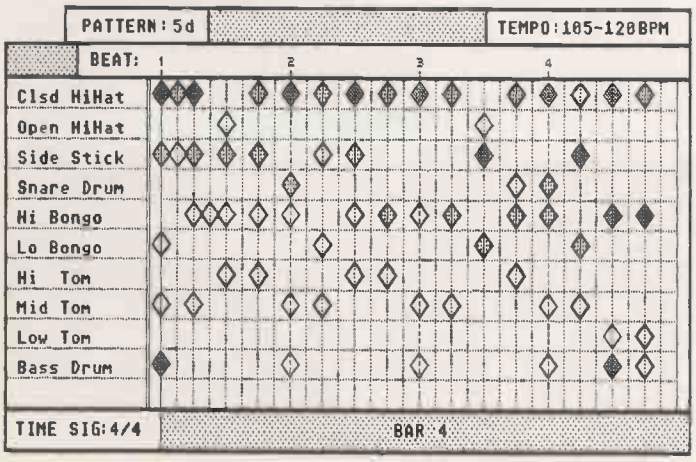

PATTERN: 6a
TEMPO: 110-125BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Hi Agogo
Lo Agogo
Cowbell
Cabasa
Side Stick
Snare Drum
Lo Conga
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 1

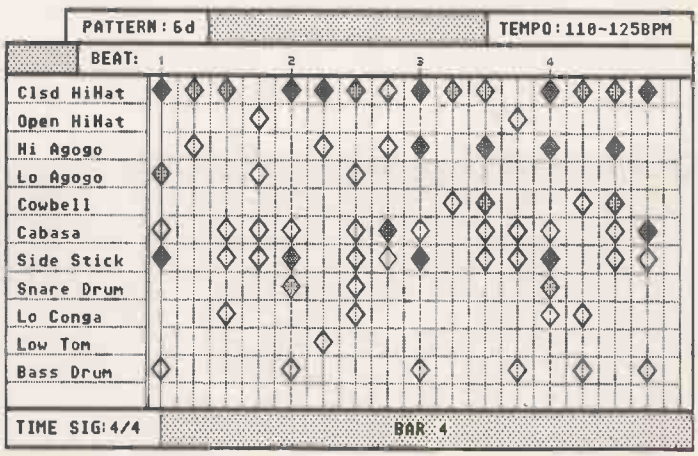

PATTERN: 5b
TEMPO: 105-120BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Side Stick
Snare Drum
Hi Bongo
Lo Bongo
Hi Tom
Mid Tom
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 2


PATTERN: 6b
TEMPO: 110-125BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Hi Agogo
Lo Agogo
Cowbell
Cabasa
Side Stick
Snare Drum
Lo Conga
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 2


PATTERN: 5c
TEMPO: 105-120BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Side Stick
Snare Drum
Hi Bongo
Lo Bongo
Hi Tom
Mid Tom
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 3


PATTERN: 6c
TEMPO: 110-125BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Hi Agogo
Lo Agogo
Cowbell
Cabasa
Side Stick
Snare Drum
Lo Conga
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 3


PATTERN: 5d
TEMPO: 105-120BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Side Stick
Snare Drum
Hi Bongo
Lo Bongo
Hi Tom
Mid Tom
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 4


PATTERN: 6d
TEMPO: 110-125BPM
BEAT: 1 2 3 4
Clsd HiHat
Open HiHat
Hi Agogo
Lo Agogo
Cowbell
Cabasa
Side Stick
Snare Drum
Lo Conga
Low Tom
Bass Drum
TIME SIG: 4/4
BAR 4

Get your finger out and get yourself a Mega Deal from Sound Control

Dial Freephone 0800 52 52 60

(your call won't even cost you a penny)

KAWAI K4R 16bit SYNTH MODULE
ONLY
£ 299.00
INCLUDES VAT AND DELIVERY

KAWAI & ROLAND
EXCLUSIVE DOUBLE DEAL
JX-1 plus K4R
£ 575.00
PRICE INCLUDES VAT AND DELIVERY

£ 299.00
INC. VAT AND DELIVERY
ONLY
ROLAND JX - 1 PERFORMANCE SYNTH

SOUND CONTROL
MAIL ORDER

73 Elgin St, Dunfermline, Fife. KY12 7SD. International: (0383) 733353. Fax: (0383) 725733.

• GUITARS • BACKLINE • HIGH TECH/F.X. • KEYBOARDS • RECORDING • SOUND REINFORCEMENT •

1) All our prices quoted include V.A.T. & delivery, 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 whitin its warranty period (through no misuse by the user), 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. Don't worry if you can't call during office hours we have an after hours answering service and we will call you back.

KORG HAVE DONE IT AGAIN

The 01/WFD is a fantastic new music workstation. On board it has a 16 track sequencer, 200 program sounds, 200 combinations, 100 banks of 47 stereo digital effects.

Hearing is believing.....£1749

KEYBOARDS

Korg 01/W music workstation £1645
Roland JD800 powerful performance synth.....£1450
Yamaha SY77 music synthesizer workstation £1550
Ensoniq VFX SD music production synthesizer £1299
Ensonlq EPS16 plus digital sampling workstation £1759
Korg Wavestation, one of the most creative keyboards ever made £1150
Cheetah 5V, 5 octave mother keyboard..£275
Cheetah 770 full size 88 key mother keyboard with weighted action and aftertouch, one of the most powerful mother keyboards in the world.....£729
Roland A50 mother keyboard.....£999
Yamaha SY55 music workstation £799
Kawai K4 multi-timbral performance synth.....£599
E-mu Emax II sampling workstation £1400
Korg 01/W FD music production workstation "BEST SELLER".....£1749
Now in stock – The new Akai MX1000 76 key mother keyboard with piano samples on board. MX1000 .....£1199
MX1000 with piano samples.....£1699

PIANOS

Roland RD300 digital piano, full size, 88 key weighted piano.....£1195
Yamaha PF1500, full size weighted digital piano.....£1195
Kawai MR170, 76 key weighted piano..£1150

P.A. EQUIPMENT

NEW JBL M330 .....45HZ – 18KHZ
The M330 is a two way full range loud speaker system, capable of producing 350 watts into 8 ohms. It has a 12 inch low frequency speaker and a high frequency compression driver (horn).....£899 a pair.
NEW JBL M350 .....32HZ – 18KHZ
The M350 is a two way full range touring or backline PA speaker capable of 350 watt into 8 ohms. The M350 has a 15 inch LF driver and also an HF pure titanium diaphragm compression driver .....£999 a pair.
NEW JBL M360 .....35HZ – 22KHZ
The M360 is a 3 way full range loudspeaker system designed for bands who need a high quality PA system or sidefill speaker system. This unit also has 350 watt into 8 ohms handling and comprizing of a 15 inch high power woofer for clean accurate bass response, an 8 inch midrange tranducer speaker and a horn loaded + tweeter ...£1300

BOSE 802 SPEAKERS
Gigsounds can offer the best advice going on PA systems and the Bose 802's are one of the finest most respected PA speakers ever made.
We are offering 802's for a limited period only for just.....£899 a pair
Bose 802 system controller for the speakers.....£200

EV ELECTROVOICE S200 SPEAKERS
Electrovoice have always been known for quality and the S200 PA speakers are just that, they are small easy to carry units that produce an astonishing 300 watts per speaker of perfect accurate sound.....£999 a pair

TOA SL150
One of the most important requirements with equipment today is the cost as well as the quality.
The TOA SL150 speakers fit both these requirements, they have a 15 inch woofer and a horn capable of 240 watts each. All this for just .....£299.

MIXER AMPS

STUDIOMASTER POWERHOUSE 8:2
The Powerhouse is probably the finest stereo mixer amp around. It offers 250 watts a side, digital effects built in. There are two versions of the Powerhouse an 8 input and 12 Input unit. PURE QUALITY 8:2 .....£899
12:2 .....£1100

CARLSBRO PMX 8:2
A similar unit to the Powerhouse but the PMX offers a staggering 300 watts per side.
Price £847

SUNN SX8350
This is a mono 8 input mixer amp designed for small bands with built in reverb £460

NEW CARLSBRO GRX7
A fine new mixer amp from Carlsbro, The GRX7 has 6 inputs (mono) capable of producing 400 watts of Power £486

AMPS

We are proud to be a main agent for Klynstrom amplifiers.
They produce clean stereo sound for any PA system.
Klynstrom PXA 300 a 300 watt amp £399
Klynstrom PXA 600 a 600 watt amp £525
Klynstrom Mosfet 1000 the leader of the range cost.....£799

THIS MONTHS DEALS

PA DEAL
1 x Carlsbro GRX7 mixer amp
1 pair of Carlsbro A115 speakers each cabinet has a 15 inch woofer and two tweeters.
1 x pair of stands and speakers leads
total.....£899

KEYBOARD DEAL
1 x Korg 01/W (keyboard of the month)
1 x Carlsbro K115 100 (watt keyboard amp)
1 x sustain pedal + lead
1 x frame keyboard stand
Items on their own £2027
Deal price £1850

RECORDING DEAL

16 TRACK SYSTEM
Fostex E16 complete with Studiomaster Proline gold 16 : 8 : 16 console, all wiring, looms supplied.
Total package £4369.00

RECORDING EQUIPMENT

4 TRACK
Fostex X26 plus free compressor £299
Fostex X28.....£POA
Fostex 280.....£599
Tascam Porta 05 high speed £332
Tascam Porta 03.....£321

8 TRACK
Tascam TSR8.....£1850
Fostex R8.....£1495

16 TRACK
Fostex E16 .....£2999
Fostex G16.....£4347
Tascam MSR16 .....£3899

24 TRACK
Tascam MSR24.....£POA

DAT
Tascam DA30.....£POA

Also a large range of mixing desks, digital effects & processors, microphones, stands etc

CALL FOR DETAILS

DRUM MACHINES

Yamaha RY30 .....£425
Boss DR550 .....£185
Alesis SR16.....£285
Alesis HR16B £250
Akai XR10 .....£319
Korg S3 .....£585
Cheetah MD16 .....£290
Cheetah MD16RP £399
Alesis D4 .....£399
Roland R5 .....£369

MODULES

Korg M1 REX £1299
Ensoniq SQR.....£750
Cheetah MS6 .....£299
Yamaha TG55 .....£489
Yamaha TG33 .....£450

YAMAHA RY30

SIMPLY GENIUS, AT LAST A DRUM MACHINE THAT HAS ALL THE SOUNDS YOU NEED FOR MODERN DANCE MUSIC. NOT DESIGNED FOR THE OLD FASHIONED... **WICKED !!!**

YAMAHA TG33

NOT JUST ANOTHER SOUND MODULE. THIS UNIQUE INSTRUMENT OFFERS YOU 128 PRESET VOICES, 32 NOTE POLYPHONY, 16 DIGITAL EFFECTS, DESK TOP OR RACKMOUNTED.

THE DIGITECH VOCALIST

The Vocalist is one of the few really useful items that has come out for singers. This unique tool offers 4 part harmonies and covers all styles of music using different chord configurations. The harmonies sound identically like a real voice and do not sound like chipmunks on the piss.

Price £849

SAMPLERS

Akai S950.....£1089

Akai S1000 .....£POA

CHEETAH SX16 STEREO
SAMPLER gives you 5 seconds of stereo sampling and up to 43.5 seconds in mono. **ONLY £628**

GiG SOUNDS

STREATHAM
86-88 Mitcham Lane,
Streatham, London
SW16 6LY

CATFORD
20-22 Rushey Green,
Catford, London SE6

STREATHAM
Tel: **081 769 5681**
or **081 769 6496**

CATFORD
Tel: **081 690 1848**
or **081 690 8621**

MAIL ORDER – *FREE* Delivery if over £75 (UK Mainland Only)

Cash • Cheque • HP • Brown Sauce

demo takes

THE DYING HOUR: 3am. The darkest part of the night. The time when potential suicides become actuals; the time the murder rate peaks; the time the human body most easily succumbs to fatal illness. A suitable time for the fearless Skum to face the terrors of the MT readers demos postbag. . . I've been away; places to go, people to kill - you know how it is. But it seems I've been missed. The demos have been piling up and readers who ought to know better have been demanding that I attend to them.

Given the lateness of the hour, what could be more appropriate than to begin with a band calling themselves **The Watchmen** - a band who've seen fit to name themselves after those self-appointed guardians of law, order and The American Way of comic art? Surely here there would be something to measure up to the horrors of the night - something powerful and reassuring. Something. . . from

Poole in Dorset? Let's look closer. With scant regard for such things as "secret identities", The Watchmen readily announce themselves as Brett Green (keyboard programming, guitar and production) and Andy King (vocals, drum and keyboard programming, arrangements and occasional guitar). I hit play and I'm brought face to face with a real horror - a band who still think trying to sound like Go West or Level 42 is a hip idea.

In 'From Here to Eternity', the first of three tracks, the horrible synth brass comes courtesy of Kawai's K1 or K4, silky smooth pads flow from a Roland D10, polite rhythms from an Alesis HR16 shyly invite you to dance. I have to concede that the recording ain't bad - it's lacklustre even for a four-track (Yamaha MT2X), but it would be adequate to show off the songs - if there was anything to show off. The vocals are also unimpressive in themselves, yet that could have been enjoyable enough in the context of a decent tune. The remaining tracks, 'Danceteria' and 'Time Flies', only serve to compound the felony. It's rather like trying to sell candyfloss at a rugby league match. . .

It's hard to be constructive with my criticism without suggesting that the less-than-deadly duo go right back to the drawing board. The plague of copycat dance beats, the tide of re-discovered "rock" and the wealth of recycled oldies currently swamping the sad world of pop music is bad enough. To find someone managing to fit in so well with this dismal picture without actually belonging to any of these categories is more than scarred flesh and spilt blood can endure. Where's the stop button?

Back in the shady comic world of Dr Manhattan they're still asking the question "Who watches The Watchmen?". I'm left to wonder "Who listens to 'em?".

I like a survivor - a man like **Rob Norman**, say. Not content with going the distance with me some months back, he's back for more with an untitled tape of eight songs. The first he's called 'April Dancer' after Stephanie Powers' character in *The Girl from U.N.C.L.E.*. This is the first healthy indication that he's got absolutely nothing in common with The Watchmen. The second comes when the pounding bass drum and clinical acid synth burblings of 'April Dancer' step out of the monitors and into the night. If nothing else, the track is an object lesson in proving that you don't need a Roland Bassline to get *that* acid sound, since the old TB303 isn't listed alongside the Korg Mono/Poly, Roland Alpha Juno 2 and D110 synths, Kawai Q80 sequencer, Yamaha R100 reverb and Casio DA2 DAT. (I presume the Mono/Poly has subbed for the Bassline.) If the music has been driven straight to DAT by the Q80, it would account for the outstanding cleanliness of the recording. It's a splendid way of recording but, then, if Monsieur Norman (he's from Edinburgh) had wanted to add vocals to his music he'd have had to think again.

The music carries on: 'Patagon' goes a long way towards proving Rob's not obsessed with dance (no bad thing) but then 'Logo Stuff' reinstates the "acid" Mono/Poly, adds some decidedly jazzy bitonal stuff and pulls it back again. There's some good rhythmic experimentation going on here too - tracks in 5/4 and 9/8 that don't sound out of place against a decidedly '90s demo can't be all bad. Then there's that ambient noise stuff that Keith Emerson woul probably have called "Spatial" back in the early '70s.

It all goes to show how much can be achieved - both technically and musically - with a modest selection of gear when it's carefully chosen and applied.

I enjoyed the letter too, Rob: "How do you think some of the poor sods must feel after one of your tirades? Imagine it; stranded in the 20th Century without a bit of talent or integrity, then held up to public ridicule by a scoundrel. I'd be suicidal. They say that at the moment of death all the impressions you have ever made, the consequences of your every thought and action are revealed to you. . . Of course, I'm wasting my time preaching moderation to one as far gone as yourself. Anyway, I feel much better now."

So do I, Rob, so do I. And I may keep the tape - after all, I did manage to sit through all eight tracks. ■ *Skum*

UNITOR 2

PHOTOGRAPHY: JAMES CUMPSTY

Synchronisation is never the easiest of matters to deal with, but users of Creator/Notator sequencers have it easier than most if they adopt C-Lab's own SMPTE synchroniser. Review by Tim Goodyer.

YOU'RE USING C-LAB'S Creator sequencer or Notator scorewriting program and you're looking to move into the big boys' world of SMPTE (Society of Motion Picture and Television Engineers) synchronisation. The problem is that you're not sure which synchroniser to go for. You want something that will do the job, sure, but you want it to integrate well with the software you're using. On top of that, you've seen that the current batch of Macintosh synchronisers seem to offer all sorts of "extras", like additional MIDI ports and patchbays. Where are the equivalent units for the poor ole ST? Are you being left behind by progress?

For once you can relax. Not only have C-Lab's boffins largely anticipated your need, but the unit

AKAI

TSC

THE SYNTHESIZER COMPANY

AT TSC THE CHOICE IS YOURS

TSC THE SYNTHESIZER COMPANY NO. 9 HATTON STREET . LONDON NW8 8PR . TEL: 071 258 3454 . FAX: 071 262 8215

➢ you're searching for has been available for years - longer than the Mac boxes you were worrying about. Not only that, but you actually already have the software you need embedded within Creator or Notator. Unitor, as C-Lab have christened their synchroniser, has recently been superseded by Unitor 2. And that's where this review comes in. . .

Briefly, then, Unitor 2 is a SMPTE/EBU synchroniser and MIDI interface expander. Sorry, no patchbay.

Unitor 2 - as it comes out of its cloth carrying case - is a black plastic box (roughly 8" x 3.5") which takes the place of the Creator/Notator dongle in the Atari's ROM Port. The dongle then fits into a similar port on the front of Unitor. This is the only visible difference between this version of the unit and its predecessors - previously there were two versions, Unitor C and Unitor N, and the appropriate one of these took the place of your dongle. No, this didn't mean you ended up with two dongles (and therefore the opportunity to sell on a copy of the program with the dongle you no longer needed) as the dongle was part of the "price" of Unitor. The new arrangement is more logical but leaves you with two pieces of hardware to lose instead of one. Classic swings-and-roundabouts stuff.

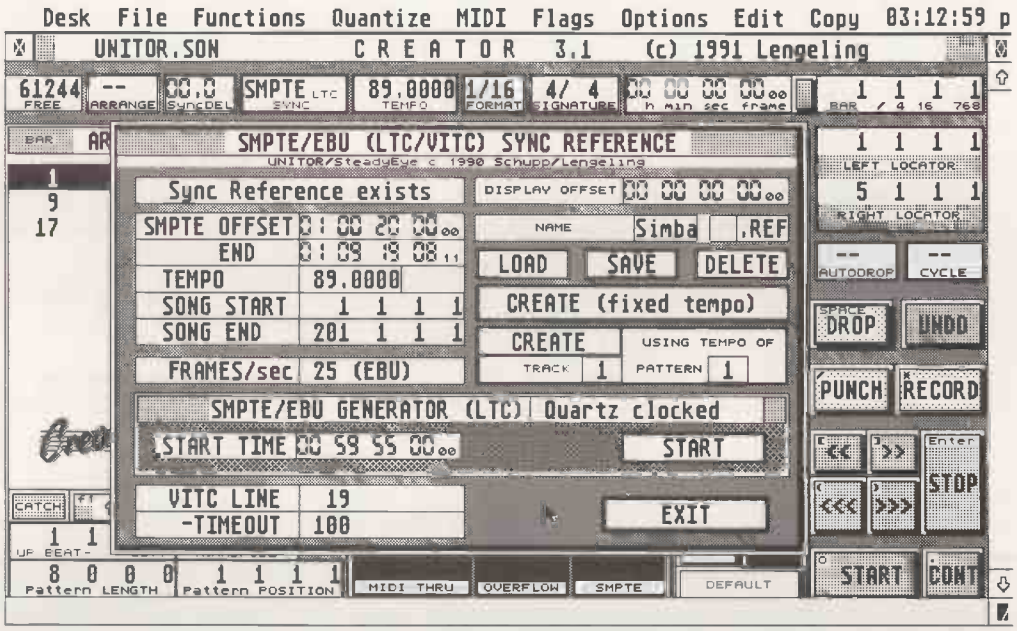
Along the left-hand (outside) edge of Unitor there are two MIDI In sockets (marked In I and In II) which function in addition to the Atari's In, two MIDI Outs (Out E and Out F) which function in addition to the Atari's Out, a 15-pin D-connector (marked Multi-port) and quarter-inch jack sockets for SMPTE In and Out.

ANY PORT

THE ADDITIONAL MIDI Ins and Outs operate simply enough. When assigning instruments within a Creator/Notator Pattern, you now have the option of using MIDI Outs E and F, effectively giving you access to a total of 48 MIDI channels. The missing Outs C, D and E (the Atari's own Out being designated the A port) are to be found on C-Lab's Export unit. Unitor's MIDI Ins can be merged together with the Atari's In and filtered and submitted to Creator/Notator's real-time Transform functions if required.

The D-connector is for use with other C-Lab peripherals, Human Touch and Steady Eye, which allow manual timing input and phase-synchronous operation with video respectively. The SMPTE jacks connect directly to your multitrack and are set up to output at -6dBm and accept input levels between -20dBm and +6dBm. The manual gives guidelines on setting levels for 2" and 1" machines, ½" and ¼" machines and cassette multitracks. It's reassuring to know that Unitor hasn't been aimed at professional users to the exclusion of those with more modest studios.

So much for the hardware. To operate Unitor you'll need to open the Synchronisation window under the Options menu (or hit S on the Atari's keyboard). Here you'll find all the setup facilities you need - and in a more convenient layout than you'll find on a stand-alone hardware unit. All four frame rates are available (24, 25, 30 and 30 Drop Frame). For use with European TV standards you won't need to change the default setting of 25 frames per second, but if you're moving into the film industry you'll need to use 24fps.



OPERATOR

BEFORE YOU CAN actually get on with the business of putting code to tape, you'll need to create a Sync Reference within Creator/Notator from your sequence. This is performed within the SMPTE Sync window. If you're dealing with a constant tempo or you've contained your tempo changes to a single tempo track, this is as simple as selecting a Track number (this needs to be the tempo track if applicable) and clicking on Create. You can name this reference if you wish, otherwise the word "Created" appears in the Reference box.

You can set a SMPTE Start Time for Unitor - this tells Unitor's clock what time to begin running from. The default setting is 00:59:55:00 (00 hours: 59

minutes: 55 seconds: 00 frames) and there shouldn't ordinarily be any need for you to set it up differently. Finally you need to set a SMPTE Offset in the appropriate box. This tells Creator/Notator how long after the start of the timecode it should begin to play. Any arbitrary offset is adequate - the manual suggests 20 seconds. Now you can go to tape.

A few words of warning: you should try to keep the signal path between Unitor and your multitrack as "clean" as possible, as any alteration of the timecode is likely to make it less reliable. Worst offenders in this area are noise-reduction systems (especially dbx) and EQ. In keeping with industry practice, Creator/Notator's manual advises you to stripe code onto the highest-numbered track of your multitrack. Although this does make it more susceptible to tape "edge damage", it minimises spilling of the code onto adjacent (audio) tracks. The manual also directs you to put the code down without the sequence running - which you do by running the tape and clicking on Start. The SMPTE code should run for some period over the length of the piece of music; stopping the sequencer is taken care of as part of Creator/Notator's Arrange function.

To run Creator/Notator under control of the multitrack, you must exit from the Synchronisation window and put the software into SMPTE mode - by pressing Y on the Atari keyboard. Now, running the tape from the top will cause the sequencer to run until the Arrangement tells it to stop. What's most valuable about SMPTE, however, is that you can also run the tape from anywhere within the length of the code and the sequencer will pick up the correct position almost instantaneously. If you're using MIDI timecode without Song Position Pointer, you'll need to run the tape from the top each time otherwise any music on tape will run from your start point but the sequencer will start from the top regardless.

Back in the Synchronisation window, you can choose to have the sequencer run from some point other than the default of the start of Bar 1 if required, by entering an alternative position into the Song Start Box. Similarly, the default setting of Bar 201 for Song End can be altered to stop the sequencer before the stop point in the Arrange mode or if you want to run the same Pattern until your Song End marker.

EDUCATOR

DERIVING A SYNC Reference from a single Creator/Notator Pattern is the simplest way of doing the job, but Unitor offers other options for dealing with other problems. Learn SMPTE/Internal (under the Options menu) will construct a Sync Reference from a Creator/Notator Song when there are tempo changes contained in different Tracks. Learn SMPTE/MIDI (also under the Options menu) allows you to play SMPTE code and MIDI tempo information into Unitor simultaneously. Unitor is capable of building a Sync Reference from a copy of both sets of information. You might need to resort to this if you have already recorded SMPTE code from another SMPTE sync unit, but wish to lock Creator/Notator to it using Unitor.

Sync References, once created, can be edited. Creator/Notator's manual is pretty helpful on this one, giving a guide to how a Reference may be constructed for music already on tape without timecode and whose tempo is unknown. Generally, this sort of editing is going to be pretty tricky and is best avoided if possible. If you've ever edited a tempo track, you'll have some idea of the potential problems.

Once you have created a suitable Sync Reference, you can save it as part of a Creator/Notator Song file so that it will automatically be loaded into the sequencer with the rest of the sequence data or you can save it as a separate .REF file.

VERDICT

WHEN YOU FIRST start to use Unitor, it's hard to believe that you're actually dealing with something as complex as SMPTE timecode - Creator/Notator's software makes operation *that* simple. In contrast with most software capable of doing a useful job, the learning curve is both short and shallow.

The main advantages offered by Unitor to Creator/Notator users are that the degree of integration between sequencer and synchroniser is far higher than that of most hardware synchroniser/sequencer pairings. As an example of this, the display on Creator/Notator's main page gives an indication of the security of the SMPTE code coming off tape. If there's no display in the box, the code is good; poor code is indicated by a bar-graph which reads higher for greater errors. In case of serious discontinuity in the code, an error message appears on screen.

Another useful addition to the software is the Fit Time Calculator. This takes some of the hard work out of the maths when calculating tempi to fit time windows and so on. It also allows you to directly transfer the tempo resulting from a calculation to the tempo window in Creator/Notator.

It's strange that in a review of Unitor, almost all of the attention should be directed towards software that isn't part of the unit itself - yet this accurately reflects both the level of integration of the unit into C-Lab's studio system and the price of the hardware unit, as measured against other professional SMPTE synchronisers. Then there are the extra MIDI Ins and Outs to take into account. . .

Of course, you might suspect that, in the interests of developing an all-in-one approach to MIDI sequencing and synchronisation, C-Lab had sacrificed the standard of one or other of the individual functions. Well, let's just say that I know of one development company working in high-level DSP technology for the pro-audio industry who currently use Creator and Unitor purely as a source of SMPTE code - because it's the best they've found. ■

Price *£390 including VAT.*
More from *Sound Technology plc, 17 Letchworth Point, Letchworth, Hertfordshire SG6 1ND. Tel: (0462) 480000/480500. Fax: (0462) 480600.*

ILLUSTRATION: ANDREW KINGHAM

Dial M for Music

BULLETIN BOARDS - ESOTERICA FOR COMPUTER BUFFS; MIDI SONG FILES - BOOMING BUSINESS FOR PROGRAMMERS. PUT THEM TOGETHER AND YOU'LL FIND BULLETIN BOARDS ARE A HUGE RESOURCE OF FREE MIDI SONG FILES. TEXT BY IAN WAUGH.

IT'S AMAZING WHAT you can do with a modem - and I'm talking about the printable options, here. The old adage about having the world at your fingertips is actually true, although they tend not to mention the threatening letters from BT and the hole in your bank account. But used wisely, comms has a lot to offer the musician and it needn't cost an arm and a leg.

If you're new to comms, a few words of explanation are in order, although a complete guide is beyond the scope of this article. Old hands can skip a few paragraphs.

COMM TRICK

COMMS IS SHORT for communications and in this context it refers to two (or more) computers communicating with each other. To join in you need a modem and some comms software. The modem you have to buy (unless you're a North East ram raider) but there's a fair amount of comms software in the public domain for most computers.

The modem connects to your computer's serial port and plugs into your phone socket. If you don't have a plug-in BT socket you'll have to get one fitted. Most modems have a thru socket to plug your phone into so you can use both phone and modem without unplugging one ➢

THE CASIO DA-7. AT HOME IN THE STUDIO, PERFECT FOR THE STREETS OF LONDON. IDEAL AT £399.99.

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.

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 in LP mode for the DA-R100) for top quality recordings every time.

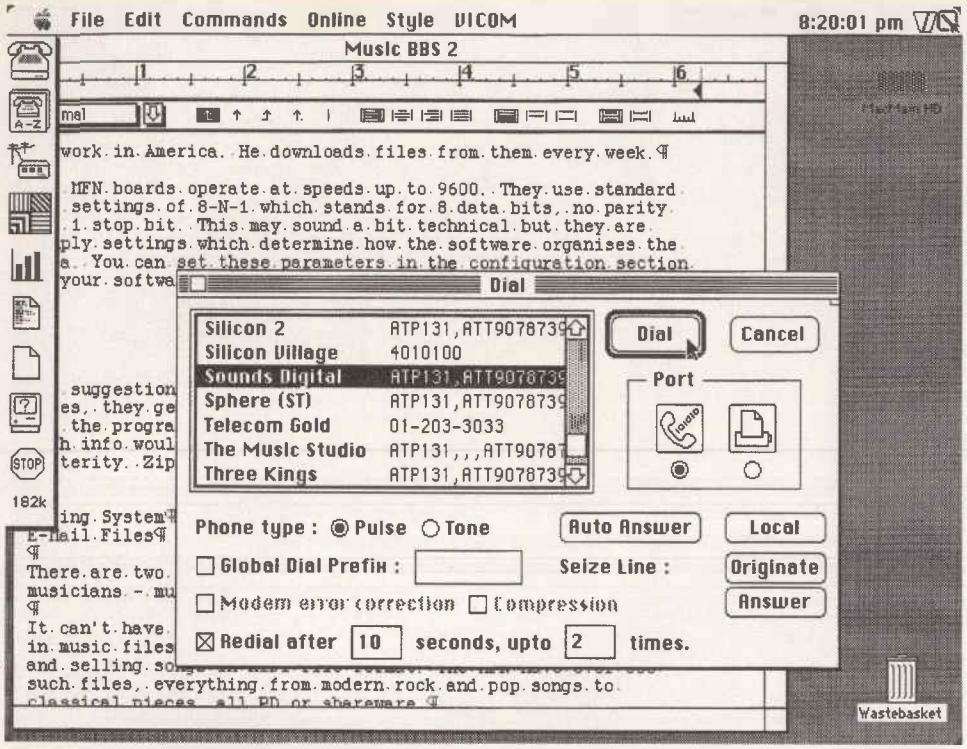
DA-R100

DA-7

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 £399.99 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.



Ready to dial Sounds Digital BBS using the Mac.

➢ or the other. Alternatively, you can use a BT socket doubler.

Don't skimp on the modem. You want something which will operate at 2400baud at least and these tend to cost around £150. The faster you can transfer data, the less your telephone bills will be. Put another way, the more data you'll be able to transfer for the same amount of money. If you intend to transfer a lot of data, go for a 9600baud machine - though these typically cost in excess of £500.

Most modems are auto-dial, which means they can dial numbers under instruction from the software. They can also answer a call from another computer and respond to the speed and protocol settings. You may be able to pick up a manual-dial modem or one which only supports V23 or V22, for example, much cheaper, but the trade-off will be a lack of flexibility. It'll also be more cumbersome in use and leave you with a larger phone bill.

Comms software varies from program to program and computer to computer, but they all do the same job, which is to control the transfer of data between systems. The main features to look for are a phone book for storing regularly-used numbers and protocol settings and fast transfer protocols. Most services offer half a dozen or more transfer options although, when all else fails, good ol' XModem is a reliable standby. If the software only supports one protocol, XModem will be it. Other protocols are faster and more reliable, however.

More sophisticated functions include the use of macros which can automate the log-on sequence and take you to specific areas of the service you're connected to. A buffer will let you scroll through any messages and save them to disk after logging off, saving valuable time online.

THE BOARDS

THERE ARE TWO main types of on-line systems - commercial services and Bulletin Boards. CIX (Computer Information eXchange) and CompuServe are probably two of the most well-known commercial services. They make their money by charging for the amount of time you spend online (that's on top of your phone bill). They both make a vast storehouse of information available to you but they are expensive to use on a regular basis, especially if you don't discipline yourself.

BBSs are usually run by comms enthusiasts. Most are completely free, although they tend to impose a limit on the amount of time you can log on in a 24-hour period. This is usually between 30 and 60 minutes. Some BBSs do charge a subscription fee, however. You may have to pay this before you're allowed access to the board, although with some boards the subscription gives you extra privileges such as access to non-public areas and permission to download more software and stay online longer.

Most BBSs cater for specific computers. The most popular by far are PCs although there are many ST and Amiga BBSs. The Mac and Archimedes also have their BBS operators although not in great numbers.

Several boards cater for a range of machines and you can still log on and take part in a predominantly PC BBS with an ST or Mac, for example.

Virtually all BBSs are divided into areas for different interests such as graphics, music, comms and so on. Many have special conference areas in which users can participate in discussions, ask questions and seek answers to problems they may have.

The greatest draw, however, is undoubtedly the files area, which may contain literally hundreds or thousands of public domain programs, free for the downloading.

ZIP IT

IN ORDER TO save disk space and minimise the time taken to download data (you'll realise how important this is when you get your phone bill), most files on a BBS are compressed with an archiving utility. Obviously, it's important to make sure you have the unarchiver. There's nothing more frustrating than downloading some software only to find you lack the unpacking utility to unarchive it and you've used up all your online time. All good BBSs have a help or info section which will tell you what unarchivers you need and where on the board to find them.

One of the most popular archivers on PC BBSs is PKZip. ST users will be familiar with LHarc and Arc and Mac users with Stuffit. However, there are others. You can generally tell which archiver has been used by the file's extension. For example, a zipped file will have a .ZIP extension, a LHarced file a .LZH extension and a Stuffed file a .SIT extension. Some non-archived text files may be given a .TXT or .DOC extension and so on.

Unarchiving a file is generally straightforward, although it depends on which computer and unpacking utility you're using. PC users will know this with the tortuous command-line interface for PKZip. ST users have a far friendlier GEM-based front end in STZip. The GEM-based version of the LHarc unarchiver is easy to use, too.

It's worth checking out a couple of archiving utilities. As well as using them to pack programs before uploading them to a BBS, you can use them to save disk space by packing programs and files you want to put into storage.

If you haven't got a modem, archivers are available from all good public domain libraries. ➢

axe mail

INSTANT DESPATCH FOR CREDIT CARD HOLDERS

Access VISA AMERICAN EXPRESS Switch

HOTLINE 0206 765652

PAY BY CREDIT CARD FOR EXTRA DISCOUNTS!

PHONE US WITH YOUR CREDIT CARD NUMBER FOR IMMEDIATE DESPATCH, OR PAY MONTHLY WITH MUSICARD OR MUSICLOAN.

	PRICE	CREDIT CARD
KEYBOARDS AND MODULES		
Akai S950 Sampler	£1199	£1149
Akai S1000 Sampler	£2599	£2499
Akai MX1000 Mother Keyboard	£1099	£1079
Akai S1100 Sampler	£3250	£3150
Akai S1000 61 Note Sampling Keyboard	£2990	£2890
Ensoniq EPS16+	£1849	£1785
Ensoniq SQ1+	£1235	£1195
Ensoniq SQR	£825	£799
Ensoniq SQ2	£1375	£1295
Ensoniq SD1	£1995	£1895
Yamaha SY999	£2450	£2400
Yamaha SY77	£1429	£1399
Yamaha SY55	£679	£639
Yamaha SY22	£549	£529
Yamaha TG77	£1250	£1199
Yamaha TG55	£449	£425
Yamaha TG33	£449	£425
Roland JV80 Synth (new model)	£1245	£1235
Roland JV30 (new model)	£789	£779
Roland S750 Sampler (new model)	£2790	£2750
Roland JD 800 Programmable Synth	£1699	£1599
Roland JX1 Performance Synth	£499	£450
Roland SC55 Sound Canvas, Sound Module	£485	£475
Roland Studio MV30	£1195	£1150
Roland D70 Super LA Synth	£1359	£1349
Roland U220 Sample Playing Module	£535	£529
Roland U20 Sample Playing Keyboard	£795	£750
Roland W30 Workstation	£1499	£1450
Roland E70	£1299	£1250
Roland E15	£499	£479
Roland E5	£390	£375
Korg 01/FD	£1795	£1775
Korg 01	£1695	£1650
Korg WS1 Wavestation	£1299	£1275
Korg M1 Workstation	£999	£985
Korg T3 Total Workstation	£POA	
Korg T2 Total Workstation 76 Key	£POA	
Korg T1 Workstation 88 Key	£POA	
Korg M1 R Rack M1	£999	£899
Korg M3 R Soundstation	£799	£750
Roland PC200 Mother Keyboard	£195	£185
KEYBOARD STANDS		
Ultimate support stealth stand	£63	£60
'X' Keyboard Stand	£25	£23
3 Tier Keyboard Stand	£125	£120
SOFTWARE		
ROLAND R8/R8M Library Cards		
01 Contemporary Percussion	£45	£43
02 Jazz Brush	£45	£43
03 Sound Effects	£45	£43
04 Electronic	£45	£43
05 Jazz	£45	£43
06 Ethnic Percussion	£45	£43.00
07 Mallet	£45	£43
08 Dry	£45	£43
09 Power Drums USA	£45	£43
ROLAND U220/ U20/ D70 Library Cards		
01 Pipe Organ & Harpsichord	£45	£43
02 Latin & Effects Perc	£45	£43
03 Ethnic Instruments	£45	£43
04 Electric Grand & Clavi	£45	£43
05 Orchestral Strings	£45	£43
06 Orchestral Wind	£45	£43
07 Electric Guitar	£45	£43
08 Synthesiser	£45	£43
09 Guitar & Keyboards	£45	£43
10 Rock Drums	£45	£43
11 Sound Effects	£45	£43
12 Trombone & Sax	£45	£43
YAMAHA SY77		
CARDS Sax, Drums, Strings, House + Latin	£99 each	£95 each
DISKS Best of DX, One man band Recording 77	£30 each	£28 each
YAMAHA SY55		
CARDS: Sax, Drums, House, Latin, Rock Pop	£79 each	£77 each
SY22		
RAMS: Vector project, Pop House, Dance Band	£95 each	£90 each
ROMS	£69 each	£65 each
EFFECTS		
Korg A5 Multi effects	£229	£219
Akai AR900 Digital Reverb	£289	£279
Zoom 9000 Multi FX (new model)	£259	£249
Zoom 9000 Power Supply	£20	£18
Zoom 9002 Multi Effects	£299	£289
Zoom 9030 Multi Effects	£499	£489
Yamaha FX500	£250	£240
Yamaha FX900	£595	£500
Yamaha EMP100	£199	£189
Yamaha R100 Reverb	£179	£169
Alesis Quadraverb +	£335	£325
Alesis Midiverb 3	£239	£229
Alesis D4 Drum module	£399	£379
Alesis Quadraverb GT	£459	£449
Alesis Microverb III	£159	£155
Art Multiverb LT	£179	£178
Boss DRP II Drumpad	£55	£45
Boss SE50 Multi FX unit	£349	£339
Boss BE5 ME programmable Multi effects	£250	£240
Boss AW2 Autowah	£55	£53
Boss BF2 Flange	£96	£94
Boss CE5 Chorus	£55	£53
Boss CH1 Super Chorus	£69	£67
Boss CS5 Compressor	£79	£77
Boss DD3 Digital Delay	£108	£106
Boss DS2 Distortion	£47	£45
Boss DS2 Turbo Distortion	£63	£61
Boss FW3 Foot Wah	£63	£61
Boss GE7 Graphic EQ	£79	£77
Boss HM2 Heavey Metal	£55	£53
Boss MT2 Metal Zone	£63	£61
Boss MZ2 Metalizer	£96	£94
Boss DD2 Turbo Overdrive	£79	£77
Boss OS2 Overdrive Distortion	£55	£50
Boss PS2 Pitch Shifter	£127	£125
Boss PH2 Super Phaser	£79	£77
Boss SD1 Super Overdrive	£47	£45
Boss FC50 Midi foot controller	£125	£123
Digitech "The Vocalist" VHM5	£899	£879
Digitech GSP21 pro	£649	£629
Digitech DSP128P	£299	£279
Digitech DSP16	£275	£265
Digitech GSP5	£269	£250
Digitech GSP7	£395	£370
DOD 7 band EQ	£65	£63
DOD overdrive +	£39	£37
DOD Classic tube	£35	£33
DOD American Metal	£45	£43
DOD Metal Maniac	£45	£43
DOD Stereo Chorus	£59	£57
DOD Stereo Flanger	£59	£57
DOD Compressor/Sustainer	£45	£43
DOD Analoque Delay	£97	£95
DOD Wah Vol	£79	£77
GUITAR SYNTHS		
Roland GR50/GK2	£899	£850
Korg Z3ZD3	£849	£799
DRUM MACHINES AND SEQUENCERS		
Yamaha QY10 sequencer/expander	£249	£245
Yamaha RY30 Drum machine	£399	£379
Boss DR550	£169	£167
Roland CR80 Human Rhythm player	£399	£375
Roland R70 programmable drum machine (new model)	£499	£489
Roland Pad 5	£139	£130
Roland Pad 80	£465	£455
Roland SPD8 Total Percussion Pad	£339	£325
Alesis D4	£399	£379
Alesis SR16 Drum Machine	£299	£289
Alesis MMT8 Sequencer	£289	£279
Roland SB55 Sequencer	£435	£425
Roland MC50	£499	£485
Kawai Q80 Sequencer	£449	£429
Akai XR10 Drum Machine	£299	£285
Akai MPC60	£2299	£2199
Yamaha MDF2 Datafiler (new product)	£299	£289
Alesis Datadisk SQ	£325	£315
RECORDING		
Tascam 488 8 Track portastudio	£995	£985
Tascam 424	£459	£449
Tascam 688 8 Track Midi Studio	£1899	£1850
Tascam Porta 2 Hi Speed Porta Studio	£499	£489
Tascam Porta 05 Hi Speed Porta Studio	£299	£295
Tascam Porta 03 New 4 Track	£225	£219
Tascam MM1 Mixer	£699	£685
Fostex R8	£1500	£1450
Fostex X18 (new model)	£250	£240
Fostex X28 Multitracker	£399	£379
Fostex X26 Multi Tracker	£299	£289
Fostex 280 Porta Studio 8 Ch 4 Track	£550	£539
Yamaha MT 120 4 Track Recorder (NEW MODEL)	£389	£379
Yamaha MT3X 4 Track Recorder	£549	£535
Aiwa DAT	£POA	
Sony DAT	£POA	
Tascam DAT	£POA	
Alesis 1622 Mixer	£699	£650
Yamaha NS10M Speakers	£129 each	£115 each

ARE YOU OVER 22 AND IN FULL TIME EMPLOYMENT? HAVE YOU A BANK ACCOUNT AND CHEQUE BOOK OR CREDIT CARD? THEN WE CAN GIVE YOU CREDIT. PHONE OR WRITE FOR DETAILS.

Credit available subject to status APR 35.3% variable. Written details on request. All our prices include VAT.

Post This Coupon To Secure Any Goods Advertised Here

Send Me Immediately.....

Name.....

Address..... MT/3/92

.....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

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

MUSIC BOARDS

DOWN TO THE nitty gritty - what's on the BBSs for you?

While many BBSs have a music and/or MIDI area, there are some devoted almost entirely to music. Three specialist music BBSs in particular have decided to link up to offer a local service to users in the Midlands, East Anglia and the North West. They are The Music Studio UK ((0926) 403904) in Warwick, run by Paul Urmston; Sounds Digital ((0842) 762136) in Norfolk, run by Wally Beben; Compass ((0695) 571117/8) in Liverpool, run by Barry Phillips. These numbers are the BBSs numbers, not voice lines.

Collectively, the boards call themselves the MFN - MIDI/Music Files Network. They are open 24 hours a day except for a short period when they shut down for housekeeping and to swap data between each other - which they do every night.

As well as keeping each other supplied with the latest music files, Paul Urmston has direct links with Australian and US MIDI and Music conferences and the MIDI/Music Distribution Network in America. He downloads files from them every week.

The MFN boards operate at speeds up to 9600baud. They use standard BBS settings of 8-N-1 which stands for 8 data bits, no parity and 1 stop bit. These are settings which determine how the software organises the data during transfer. You set these parameters in the configuration section of your software along with the baud rate.

"ON THE SOUNDS DIGITAL BULLETIN BOARD, FOR EXAMPLE, MIDI SONG FILES ARE DIVIDED INTO AREAS SUCH AS CONTEMPORARY, DRUM PATTERNS, CLASSICAL, RAGTIME AND JAZZ."

E-MAIL FILES

THERE ARE TWO types of files on the MFN which will be of particular interest to musicians - MIDI files and music utilities.

It can't have escaped your notice that there's currently great interest in MIDI Song files, and there are many specialist companies producing and selling songs in MIDI File format. The MFN have over 350 such files, everything from modern rock and pop songs to classical pieces, all PD or shareware.

The intriguing thing about these files (and this applies to any standard MIDI file) is that they are not only transportable between different software programs but also between different computers.

The MFN standard MIDI files have been zipped and saved with a .ZMD extension. You should be able to unzip them on any computer which has an Unzip program. This includes the ST and Amiga as well as the PC and, I believe, zipped files can also be unzipped on the Archimedes. For the record, it's worth mentioning that some archived files don't like certain versions of unarchiving programs and you'll inevitably find a program which just won't unpack on your machine. That's the way it is with computers. If you do have a problem, check with the BBS Sysop to see what version of the unpacker you should use.

MFN files are as wide and varied as you can imagine. On Sounds Digital, for example, they're divided into areas such as contemporary, drum patterns, classical, ragtime and jazz. Pieces include the likes of Steve Miller's 'Abracadabra', Free's 'All Right Now', Phil Collins' 'In The Air Tonight' and Dire Straits' 'Walk Of Life'. There are also film and TV themes such as *Alf* and *Raiders of the Lost Ark*.

There are lots of ragtime tunes and classical pieces including all three movements of Beethoven's *Moonlight Sonata* and the three movements of Bach's *Brandenburg Concerto No. 5*. I can particularly recommend 'Rhapsody in Blue' which is certainly a labour of love and deserves to be heard.

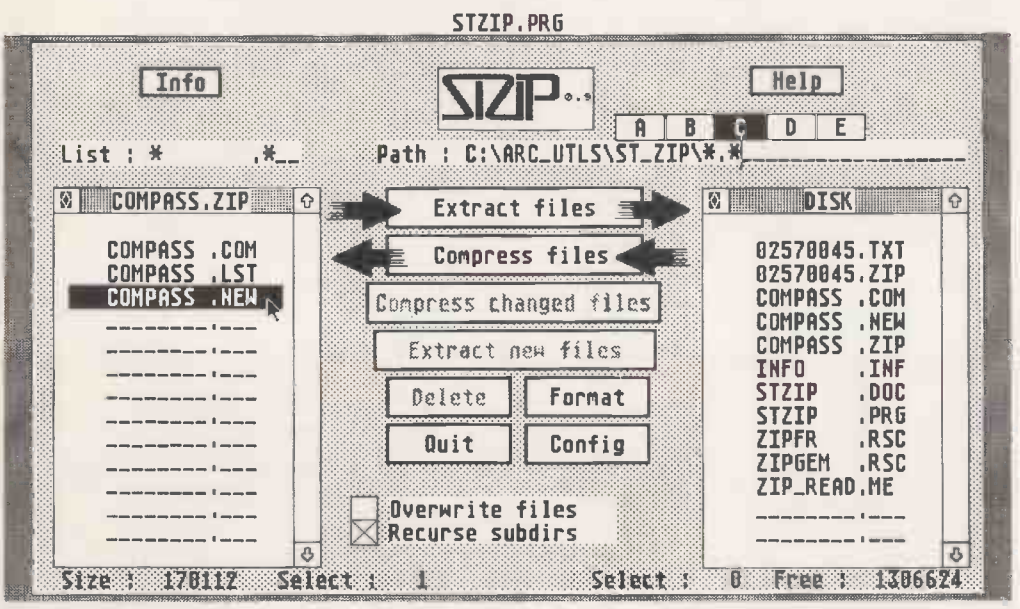
Very few of the pieces come with read me files. It's always nice to know who arranged them and what equipment they used (if you upload any files, do take the time to include a read me file). Some pieces contain embedded program change commands - which is fine if they match your equipment, otherwise it's into edit mode to remove them or to the Output Filter page to filter them out. Many of the files have been configured to work with Roland's MT32. If you don't have this or a CM module you'll have to assign sounds to the various music parts to suit your own equipment.

THERE'S MORE

AS WELL AS general music files, the MFN have around 200 music and utility files for the Amiga, around 200 for the PC, almost 100 for the ST and over 30 for the Commodore 64. The utilities include every conceivable kind of file from algorithmic composers to voice files. There are also over 200 Soundblaster .CMS files, over 30 Cakewalk .WRK files, over 60 voice banks for the SoundQuest Voice Editor (most for the MT32), 50 Sound card utilities and some samples and sample software utilities.

The total Sounds Digital file count according to the January files list is 1690 but the amount of software grows on a daily basis, so there will be even more files available by the time you read this. Compass has 5000 files, though not all are music related.

Of course, the great thing about BBSs in general is that they have programs of every description - wordprocessors, DTP utilities, graphics, clip art and so on. Need a utility to convert a graphic file to GIF format in a hurry? Chances are there's one on a BBS.



Using STZip on the ST to unzip a file.

MAIN LINING

WHEN YOU GO online, the BBS will ask you questions about yourself. Most ask for your address and phone number along with the machine you're using and your areas of interest. The Sysop may check this to see that you're genuine but usually you will be allowed full access to the board after 24 hours.

You will be asked to choose a password so the system can recognise you whenever you log on. Pick something you'll remember and/or write it down. If you log on to several different BBSs, make sure you know which password you use for each of them. If you're not dealing with sensitive data or information, you could use the same password for them all - but far be it from me to encourage you into sloppy security habits.

Next, read any messages about the BBS and how to use it. Most BBSs have a file designed to familiarise newcomers with the board's operation and to help them find their way around. Many have a text file containing a list of all the programs it contains. This is an essential download if you want to save on your phone bill. The unarchived Compass files list is almost 400K long. The Sounds Digital files list is (at the time of writing) over 180K. A zipped version is only 49K long and its contribution to your phone bill will be only one quarter that of the unzipped version.

If you want to read any text files or the discussions in a conference area, it's a good idea to download them and read them off-line to save your phone bill. If you want to post a message of any length to the Sysop or another board user, you can prepare it off-line and upload it when you log on. Some comms software has special facilities to help with this.

Download files onto a freshly-formatted disk. Uncompact the files and check for viruses (thought they'd gone away didn't you?). I don't personally know anyone who downloaded a virus from a BBS but it has happened. If you do find a virus, tell the Sysop at once. That's the sort of community spirit we like to encourage, citizen.

Online time costs money. I'm gonna keep saying this till you take it in - you'll thank me later. Even if you only log on for a few half hours a week, the telephone bills soon mount up.

Do yourself a favour, if you regularly phone long distance, subscribe to Mercury. There's an annual charge of just under £9 but you'll find you can save up to 25% on your calls. And you get a fully-itemised bill. It's not designed for local calls, however. You can make enquires on a freephone number: (0800) 246000.

If you're concerned about the cost, work out how much a program will cost to download. For example, at 2400baud it may take around eight minutes to download 100K's worth of data (which may expand to around 400K on unarchiving). Depending on the telephone service you use (BT or Mercury) and the distance of the call, this might cost you between 18p and 80p (an eight-minute off-peak long distance call via Mercury will cost around 35p). Compare this with the £2.50 or so a public domain library will charge for a disk.

Finally, you may wonder where all the software comes from. Well, it's uploaded by the Boards' users. Most BBSs maintain an upload/download ratio for each user which only allows you to download a certain amount of software before insisting you upload something in return. It's fair, and BBSs only survive by the active participation of their users. You know it makes sense so do the decent thing. Have fun. See you on-line! ■

COMMS GLOSSARY

Baud Rate: Often assumed to be the data transfer speed. It is actually the number of times the line changes condition per second. It may be the equivalent to the bps rate but at higher speeds the bps may actually be a multiple of the Baud rate.

BBS: Bulletin Board Service.

BPS: Bits Per Second, the rate at which data is transmitted.

Download: Transfer a file from a Bulletin Board to your computer.

E-Mail: Electronic Mail, messages transferred to users through a BBS.

Log off: Disconnect from a BBS.

Log on: Dial and establish contact with a BBS.

Modem: MOdulator DEModulator. It converts data into a series of pitches/pulses for transmitting down a phone line. A Modem at the other end converts it back to its original form.

Online: When your computer is connected to another via a modem link.

Protocol: An agreed format used to transfer data between computers. There are many different protocols and both transmitting and receiving computers must set to the same one. The most common and popular ones are:

XModem: The standard. Supported by virtually all BBSs and comms software.

YModem: Faster and more reliable than XModem. It can transfer several files in one go.

ZModem: Faster and more reliable than XModem and YModem. It can resume data transfer if the link is broken, useful for long files.

ASCII Transfer: Used for text files.

Sysop: Short for System Operator.

Upload: Transfer a file from your computer to another.

V Numbers: Strictly, these are hardware definitions but they are used to describe Modem speeds. For example, a BBS may list the speeds it supports like this: V21/V22/V22bis/V32.

V21: 300 bps
V22: 1200 bps
V22bis: 2400 bps
V23: 1200/75 or 75/1200 bps
V32: 9600 bps

CALL US IF YOU WANT TO

HURRY

ROLAND A80

MOTHER KEYBOARD

£995 inc VAT

~~£1895~~ RRP

MUSIC CONNECTIONS

MULTI-TRACK RECORDING

MULTI-TRACK RECORDING (4-24TRACK)
AS MAIN DEALERS FOR : FOSTEX - TASCAM - STUDIOMASTER - SOUNDCRAFT SPIRIT, WE CAN HELP YOU THROUGH THE RECORDING MAZE AND ENSURE YOU GET THE SYSTEM THAT'S RIGHT FOR YOU!

WITH THE BEST SERVICE AND PRICE OUR ENGINEER CAN INSTALL YOUR SYSTEM AND WE WILL KEEP YOU GOING EVEN IF THERE IS A BREAKDOWN!

EVERYTHING YOU NEED!

MULI-TRACK RECORDERS IN STOCK
TASCAM TSR8, FOSTEX R8, TASCAM MSR16, MSR16S, FOSTEX G16S, TASCAM MSR 24S

DIGITAL MULTI-TRACK
ALESIS A-DAT 8 TRACK DIGITAL MULTI-TRACK

MIXING CONSOLES SOUNDCRAFT SPIRIT - SUPERB QUALITY & AFFORDABLE!

MACKIE DESIGNS
NEW CR1604 - IN STOCK, STUDIO QUALITY 16/4 MIXER (loads of features/options) • ONLY £799 inc VAT.
1202 - 12- 2 MIXER • ONLY £315 inc VAT

STUDIOMASTER
PROLINE 16/4/8 GOLD, 16/8/16 GOLD, MIXDOWN 16/8/16, SERIES 2 16/16/2, DIAMOND 12/2, 16/2.

TASCAM
3700 AUTOMATED 24+32 INPUTS, 3500, 2516 AWIDE RANGE OF OTHER MIXERS: FOSTEX 812, ALESIS 1622.

WE WILL MAKE SURE YOU GET THE BEST DEAL ON THE PRICE & SERVICE. PLUS PATCH BAYS, MONITORS, POWER AMPS, SIGNAL PROCESSORS, WIRING LOOMS, GRAPHIC EQ's, EFFECTS, MICS, DAT MACHINES, TAPE, DE-MAGNETISERS.

DAT RECORDERS

BEST DEALS- INSTANT DESPATCH

SONY DTC 750- BEST DEAL
SONY DATMAN- £PHONE

ALL IN STOCK + BULK DAT TAPE

CASIO DA7 - £PHONE
NEW TASCAM DA-30 & DAP-20

SIGNAL PROCESSORS

BOSS CL50 • YAMAHA FX500
ART LT • ART MULTIVERB III • ALPHA
BOSS SE50 • ALESIS MICROVERB 3
QUADRAVERB PLUS • MIDIVERB 3

QUADRAVERB GT • EMP100
SPX900 • ZOOM 9030, 9002
YAMAHA FX 900 • LEXICON
PHONE FOR BEST DEALS – SAVE £££s

PORTA STUDIOS

PORTA 03 • FOSTEX X18 • FOSTEX X26 • FOSTEX X28 • FOSTEX 280 •

•TASCAM 424 • TASCAM 488
•TASCAM 688 • YAMAHA MT120

BEST EVER STOCK
BEST EVER DEALS
BEST EVER STORES

COMPUTERS & SOFTWARE

ALL THE LATEST SOFTWARE AND COMPUTERS AT BEST PRICES LET US HELP YOU CHOOSE A PACKAGE OR BUY SEPARATELY-
ALL IN STOCK
ATARI 1040STE COMPUTERS
ATARI SM124 • SM144 MONITORS
C-LAB:
CREATOR V3.1 • NOTATOR V3.1
CREATOR & NOTATOR UPDATE KITS
UNITOR II • HUMAN TOUCH • ALPHA NOTATOR
EXPORT • AURA • MIDIA •
STEINBERG:
CUBASE V2.0 • CUBEAT •
ALL LATEST VERSIONS

APPLE MACINTOSH SOFTWARE:
OPCODE VISION • MOTU PERFORMER • STEINBERG CUBASE • MOTU COMPOSER • APPLE MAC HARDWARE: MOTU MIDI TIME PIECE • MOTU VIDEO TIME PIECE • MOTU MIDI MIXER • JL COOPER SYNC-LINK • JL COOPER MAC NEXUS • C-LAB UNITOR 2 • STEINBERG MIDEX+

CALL US AND SAVE £££s

DRUM MACHINES

ALESIS SR16 • YAMAHA RY30 •
ROLAND R8 • R8M • ALESIS D4 •
KORG S3 • BOSS DR5550

SAMPLERS

AKAI S950 • AKAI S1000 KEYBOARD •
AKAI S1100 • ENSONIQ EPS 16R+ •
ENSONIQ EPS 16 + KEYBOARD 8
EMAXII • NEW ROLAND S750 + BIG LIBRARY

ACCESSORIES & BOARDS IN STOCK FOR MOST MACHINES • HUGE ENSONIQ EPS 16+ AKAI LIBRARY

ACCESSORIES

•S1000/S1100 8MEG BOARDS •
S1000/S1100 2MEG BOARDS •
S950 750 KB BOARDS • S1000 SCSI INTERFACES • EPS 16+ 1MEG UPGRADES • EPS 16+ FLASHBANK • EPS 16+ SCSI INTERFACE •
HARD DRIVES - ALL SIZES

Access VISA AMERICAN EXPRESS

MUSIC CONNECTIONS

Chelmsford
0245 354777

SAVE £££'s

Chelsea

SCOOP

UNDER HALF PRICE

KORG S3
RHYTHM WORKSTATION
£499 inc VAT!!

• 16 BIT DRUM MACHINE WITH LOADS OF PERCUSSION & INSTRUMENT SAMPLES • 8 TOUCH SENSITIVE PADS • BUILT IN 16 BIT STEREO MULTI-EFFECTS PROCESSOR - REVERB CHORUS - DELAY-FLANGE- TREMELO PHASE! • 8 TRACK SEQUENCER WITH 100 PATTERNS, 30 SONG CAPACITY SO YOU CAN MIDI UP YOUR KEYBOARDS • FULL SMPTE GENERATOR/READER • 6 INDIVIDUAL AUDIO OUTPUTS • 2 EXTRA PCM SOUND CARDS (DANCE & JAZZ) INCLUDED WITH LOADS SAMPLES AND SOUNDS.

BREATHE NEW LIFE INTO YOUR MUSIC!

*YOU HAVE ALWAYS WANTED TO HAVE COMPLETE CONTROL OVER YOUR MUSIC- THIS **KORG S3 PACKAGE** WORTH OVER £1000 IS A PROFESSIONAL RHYTHM WORKSTATION WITH FABULOUS SOUNDS & LOADS OF FEATURES*

MUSIC CONNECTIONS
202 New Kings Road,
London SW6 4NF
Tel: 071 731 5993
Tel: 071 736 4771
Fax: 071 731 2600

Chelmsford

KEYBOARDS & RACKS

WE OFFER PROBABLY THE BEST SELECTION OF THE LATEST KEYBOARDS & RACK MODULES IN THE COUNTRY

AKAI ON DEMO:
AKAI S950 • S100 & S1100 SAMPLERS • S1000 KEYBOARD
ENSONIQ ON DEMO:
ENSONIQ SD-1 MUSIC PRODUCTION SYNTHESISER
ENSONIQ SQ-1+ PERSONAL MUSIC STUDIO
ENSONIQ SQ-2 76 KEY EXTENDED VERSION OF SQ-1
ENSONIQ EPS 16 PLUS 16 BIT SAMPLING KEYBOARD
ENSONIQ EPS 16R PLUS - RACK VERSION EXTRA MEMORY
KORG ON DEMO:
NEW KORG 01WFD & 01W WORKSTATION IN STOCK ALSO
KORG M1 MUSIC WORKSTATION
KORG T2 WORKSTATION
KORG WS1-EX WAVESTATION
KORG WS - AD RACK
KORG SG-1D SAMPLING GRAND
OBERHEIM MATRIX 1000
ROLAND ON DEMO:
ROLAND U20 RS-PCM KEYBOARD
ROLAND JD800 SYNTH
ROLAND FP8 DIGITAL PIANO
ROLAND EP7E DIGITAL PIANO
ROLAND EP5 DIGITAL PIANO
ROLAND A80 KEYBOARD CONTROLLER
ROLAND S750 DIGITAL SAMPLER
ROLAND SC-55 SOUND CANVAS
ROLAND PC-200
YAMAHA ON DEMO:
YAMAHA SY 99 • SY 77 • SY55 • SY22 MUSIC SYNTHESISERS
YAMAHA TG 77 • TG 55 • TG 33 TONE GENERATORS
YAMAHA KX-88 MIDI MASTER KEYBOARD

HALF PRICE KORG T2EX
£1495 inc VAT
~~£2999~~ RRP
FABULOUS 76 NOTE SYNTH WITH LOADS OF GREAT FEATURES!
CALL US NOW

MUSIC CONNECTIONS
Chelford Court,
Robjohns Road,
Chelmsford,
Essex CM1 3AG
Tel: 0245 354777
Fax: 0245 355007

Southampton

NEW PRODUCTS

TASCAM 8 TRACK DIGITAL RECORDER
ALESIS 8 TRACK DIGITAL RECORDER
YAMAHA MDF2 MIDI DATA RECORDER
YAMAHA TG100 TONE GENERATOR
YAMAHA RY10
E-MU PROTEUS 3
KORG 03R/W
KORG 01/W PRO 01/W PROX
ROLAND JV-80 MULTI-TIMBRAL SYNTH
ROLAND JV-30 MULTI-TIMBRAL SYNTH
ROLAND JW-50 MUSIC WORKSTATION
ROLAND SC-155 SOUND CANVAS
MACKIE CR12-02 12 CHANNEL MIXER
KORG 01W SYNTH
ALESIS 3630 COMP/LIM
ALESIS D4 DRUM MODULE

CALL US FOR INFO!

USED & EX DEMO

ROLAND MC 300 SEQUENCER	£299
YAMAHA DD10 DRUM BOX	£30
KORG DDD5 DRUMS	£99
ROLAND D50 GOOD CONDITION	£500
ROLAND TR505 DRUM MACHINE	£139
KORG WS-1	£795
KURZWEIL K1000 76 NOTE KEYB/D	£749
ROLAND JX8P	£POA
ROLAND R8M	£399
ROLAND D110 MULTI-TIMBRAL RACK	£295
YAMAHA RX5 DRUM MACHINE	£195
KORG M1 VGC	£799
KORG WS1	£799
ROLAND TR505 DRUM MACHINE	£125
ROLAND D20	£499
KORG DW 8000	£295
YAMAHA FB01 SOUND MODULE	£125
MATRIX 1000	£295
ENSONIQ EPS16+R	£995
ROLAND D10	£395
KORG SG1X PIANO	£795
FOSTEX X15 PORT-STUDIO	£125
AKAI EX8 DRUM MACHINE	£125
BOSS BE5 GUITAR MULTI-FX	£99
ROLAND JUNO 6 SYNTH	£180
YAMAHA TG55	£400

SPECIAL OFFERS

ROLAND JX1	£265
KORG M1	£799
YAMAHA SY77	£1299
EMAX II RACK	£1195

PIANOS

EMU PROFORMANCE
KORG SG1X
ROLAND FP8
RHODES MK80

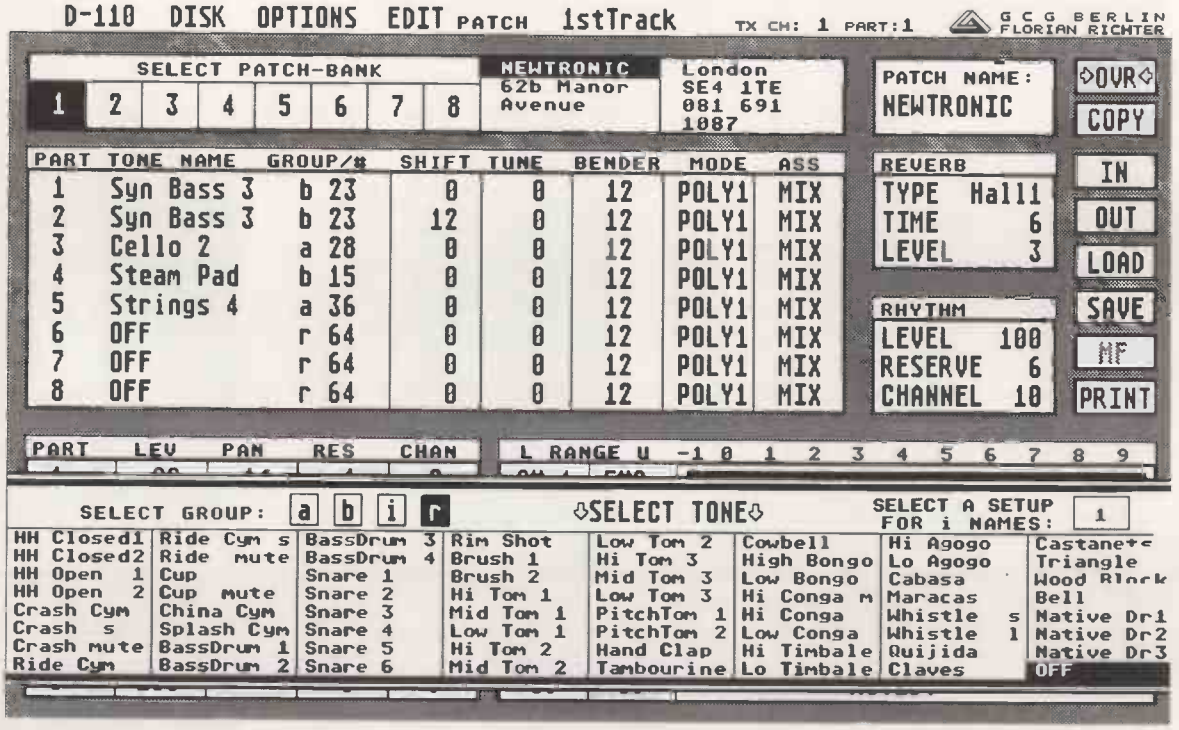
MUSIC CONNECTIONS
Kingsgate,
St Marys Street,
Southampton,
Hampshire SO1 1NF
Tel: 0703 233444
Fax: 0703 233266

Visit our
BRAND NEW
Southampton
Superstore
NOW OPEN

Chelsea Southampton
0703 233444

ALL PRICES INCLUDE VAT - OPEN 6 DAYS A WEEK - NEXT DAY DELIVERY ON CREDIT CARD ORDERS !

D-SERIES SOFTWORKSTATION



The parameter-access style of programming employed on most modern synths makes it difficult to get the most out of a synth without the aid of a computer-based editor and librarian - like this one for Roland's D-series. Review by Gordon Reid.

WHILE I'M NOT in possession of all the figures, I suspect that Roland's D-series synths, with more than 300,000 units sold, are the most successful (semi-) pro-orientated synths ever launched. This remarkable success has inevitably spawned a very competitive third-party support industry, including voice cards, editors, librarians, RAMs and ROMs. With such a proliferation of existing goodies already available, it's difficult to offer something new. One possibility is to come up with something every D-series user wants - and to then throw in some extra facilities at no extra cost. This is the approach adopted by German company Geerdes, because their D10/D20/D110/MT32 Softworkstation editor/librarian (which also runs with the D5) includes 1st Track - a fully-featured, 24-track MIDI Sequencer which will run concurrently with the editor/librarian in an integrated environment Geerdes call Softworkstation. If I wanted to attract custom, I reckon a free sequencer would be a good way to go about it.

1ST IMPRESSIONS

THE EDITOR AND manager (librarian) plus sequencer that comprise the Softworkstation come on a single disk which is dongle copy-protected. The program requires a minimum of 1Mb of RAM and a hi-res monochrome monitor to run. Personally, I dislike programs which only run in mono - I don't own a

monochrome monitor. Even using a selection of hi-res emulators I was unable to run the Softworkstation on my colour monitor. (That you're reading this at all is by the grace of the guy who loaned me his SM124.) Is the insistence on mono justified? Certainly some of the editor/librarian screens are very busy, and running in mono is easier on the eye.

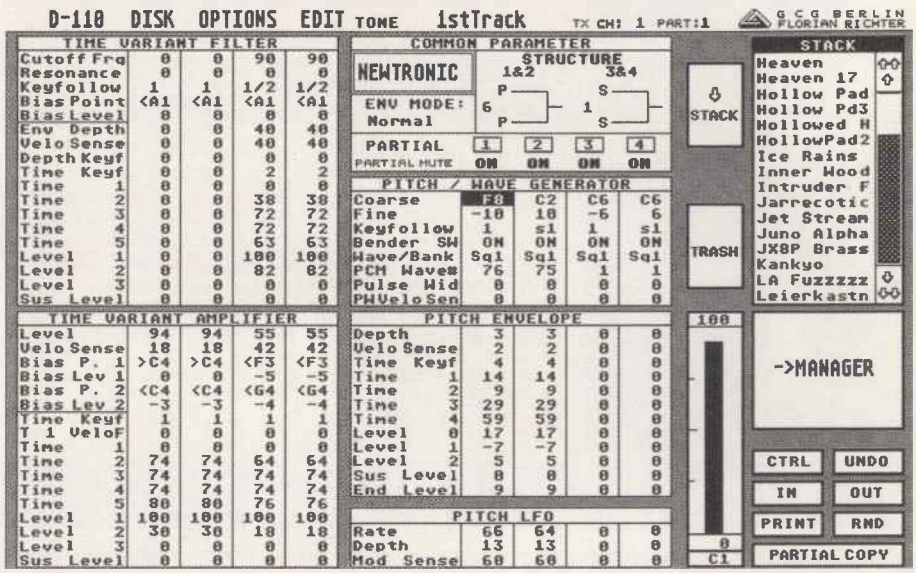
The program disk and dongle are supplied in a small ring binder with two manuals. The editor/librarian manual totals 36 close-typed pages; the sequencer manual is somewhat longer and better laid out at 46 pages. Unfortunately, soon after the intro (which includes a useful description of the differences between the various D-series synths) the editor manual runs into trouble: explanations of new ideas are glossed over or omitted entirely, Germlish pervades the manual and there is no reference within it to the D5. To compound all of the above, many screen shots in the manual differ from the screens that you see on your monitor. Yes folks, it's the dreaded "the software's been updated since they wrote the manual" syndrome. Thankfully, importers Newtronic have promised a new manual, commissioned by them, and written entirely by a Brit, which will be available by the time you read this.

THE PROGRAMS

THE EDITOR/LIBRARIAN SECTION of the Softworkstation is structured into five sections: Tones (Manager, Database and Editor); Timbres (Manager and Editor); Patches (Manager and Editor); Rhythm Setup; and Overall settings. The program uses the tone/timbre nomenclature of the D-10/20 synthesisers, so if you're an MT32 owner, you'll have to translate this review accordingly.

If you like your programs simple and self explanatory, this one isn't for you. But once you overcome the initial obstacles, the operation of the Tone Manager is fairly straightforward. Eight boxes each contain eight Tones (a Tone bank), and five of these may be loaded into memory simultaneously. This arrangement is then duplicated: the first set of boxes, called "actual Tones" provides the slots into which you load your tone data (either from the synth or from disk); the second set, named Setup, provide the metaphorical blank piece of paper onto which you write your new Tone banks. Bank creation is straightforward: select, click, drag. . . And besides moving Tones between boxes, you may also duplicate or swap them between banks. Receiving to and sending from the synth, plus loading and saving to/from disk, are carried out via a box called ActualDisplay. Nothing exceptional here, except that the Softworkstation can save Tones to the synth even when the memory protect is on. Create your own nightmare scenarios out of that. Unfortunately, I discovered a nasty bug that limited my ability to receive and transmit banks to and from the D5. Newtronic have, of course, been notified of this, and it should be rectified by the time you read this. But, in common with many dangerous substances, the Softworkstation also offers some powerful options for users tough enough to handle them. Examples of these are Random, which creates a bank of eight variations on a single Tone and Crossfade, which creates eight random re-combinations of any two selected tones. I particularly liked Crossfade, and the results of this were often useful additions to my patch-banks.

The second half of the Tone Manager is the Tone Database. This enables you to save the information regarding 2,300 Tones in a single information file, and then sort and recall the individual sounds according to 53 search criteria - number of partials, type of sound generation, a given string of up to ten



characters, and 50 user-defined code names. Of course, the actual sound data is not held in the database - this simply tells the computer where to find the Tone data within the files that you have already saved. Tones may be freely added to, or deleted from, the database, the only restriction being that at least one search criterion must be defined when you add a Tone to the database. This is a chore, but once you have hundreds or even thousands of Tones on disk, you'll appreciate the benefits of well-designed sort codes and the ability to find a specific Tone from among thousands of others.

TONE EDITOR

THE NEXT MODULE within the Softworkstation is the Tone editor. The layout of this adopts the "as many parameters on the page as possible" convention. In fact, the editor gives you simultaneous access to every parameter contained with a D-series tone. To Geerdes' credit, the layout of this information (nearly 250 parameters) is clear and straightforward, and you can quickly get down to some serious editing. Each synth parameter is named, and four columns are then shown alongside - a column for each partial. Modifying values is accomplished by clicking on the appropriate figure and using the left and right mouse buttons to increment/decrement the value. Unfortunately, the polarity of the buttons (left/up; ➢

"You'll appreciate the benefits of the database's well-designed sort codes and the ability to find a specific Tone from among thousands of others."

The UK's finest selection of Sample CDs and Synth Sounds

HitSound Producer Series Volume One - Pascal Gabriels Dance Samples

Over 1000 Samples, 72:23 minutes

Pascal Gabriel is one of the leading lights on the current dance scene. He has worked with such well-known names as **Bomb The Bass, S-Express, Coldcut, Jimmy Somerville, Erasure, EMF,** and many more. This CD is different to any other available. It is **NOT A COMPILATION** of sounds from last year's records, but a resource of new sounds to help you make the **HIT RECORDS OF NEXT YEAR**. People are describing it as **'fabulous', 'fresh', and 'superb value'**. 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! - Why wait!

"...house gold dust...breaks new ground..." - MT, Dec '91.

"...off-beat, quite distinctive, and highly usable. Better still you almost certainly won't have heard them before...useful and memorable...a revelation...uniformly excellent...the basis for many a hit. - SOS, Jan, '91.

Used by **Pet Shop Boys, Propaganda,** and **Technotronic** ("Fxxxing unbelievable!")

→ → 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!*

Volume Two - Danny Cummings' & Miles Bould's Rhythm of Life

Around 55 minutes of grooves, 20 minutes of single hits

If your shrink fires the word 'Percussion' at you, and you know your onions, then you're likely to respond - 'Danny Cummings'. Currently on tour with Dire Straits, the star's got a well-deserved reputation the size of an overweight elephant. Here he is joined by the emerging talent of Miles Bould with devastating results. This CD shows why **George Michael, Pet Shop Boys, Tina Turner, Julia Fordham, John Martyn, ABC,** and many more have chosen these guys to give them the groove. We presented them with 8 backing tracks and recorded their performances to multi-track. After extensive editing and remixing, in some cases incorporating Roland's RSS processing, we have compressed these sessions onto one CD. Now you can give your productions the ultimate groove. Get this CD and get a taste of the best in percussion. There's nothing else in it's class.

→ → FEATURING → →

- *Around 55 minutes of percussion grooves in 8 styles.*
- *Unparalleled performance and recording quality.*
- *RSS Samples plus Mixes*
- *PLUS an extremely comprehensive collection of single hits*
- *And Much More!*
- *Superb value at Just £49!*
- *Instant Inspiration!*

Volume Three - Dancin' Dave Ruffy's Drum Samples

Over 263 hits and 140 loops, 70:53 minutes

There are a number of drum sample CDs on the market. Their quality varies, we felt they were all somewhat out of touch with current trends in drum sounds. This CD is the result of exhaustive recording sessions with top session drummer David Ruffy and features modern acoustic drum sounds. Dave's worked with some of the best in the biz - **Sinead O'Connor, Mica Paris, Yazz, Nenah Cherry, Prefab Sprout, Aztec Camera,** and **World Party** to name but a few. Not only does this CD feature what we believe to be the finest and most modern set of drum samples - but also some brand new loops that are really far too good to make so widely available. If you've a sampler and you ever use drums - you need this CD!

→ → FEATURING → →

- *Snares, Kicks, Hats, Toms, and Cymbals*
- *Performance Velocities - 4 or more!*
- *Miking Variations*
- *Modern Usable Drum Sounds*
- *RSS Samples*
- *PLUS over 140 brand new hot drums loops - too good to sell!*
- *Live & Sequenced Loops!*
- *And Much More!*
- *Superb value at Just £49!*

BRAND NEW! - Volume Four - Coldcut's Kleptomania Volume One

Over 1165 Samples, Over 73 minutes

Coldcut are regarded by many as the UK's most innovative dance artists/remixers. Aside from their own successful recording career and Kiss FM radio show, many will know them for launching the careers of both **Lisa Stansfield** and **Yazz** - now established as international stars. Apart from one or two classics this CD once again conforms to our policy of placing originality as our top priority. If you're serious about making dance music you're sure to be on the look out for hot new samples to make 'The Music of Now', not a rehash of the past. As with our Pascal Gabriel CD - If you want inspiration, originality and the freshest sounds around. Look no further.

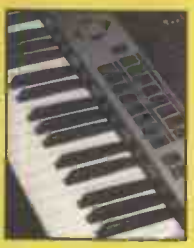
THE PERSONAL LIBRARY OF THE UK's LEADING REMIXERS!
NON-STOP ZANY ACTION - £49 fully inclusive

→ → FEATURING → →

- *The finest selection of ultra-rare loops ever compiled - over 400 unbelievable loops!*
- *Male & Female Spoken & Sung Vocals*
- *Coldcut's Exclusive - Hed & HPN Samples*
- *Superb range of mega scratches!*
- *Media snatches, FX, Robot Vox*
- *Full selection of drum & perc samples*
- *Hits, Stops, Breaks, Synth & Bass samples*
- *BEYOND DESCRIPTION - HIGHLY USABLE! - Superb value at Just £49!*
- *"Say Kids! What time is it?"*

HitSound CDs 1, 2 & 3 - Pure Gold Synth, Old Gold Synth, Guitar

3 Superb CDs



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." - SOS, Sept 1991.*

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

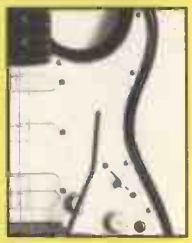
Volume Two – Old Gold Synth - *"This volume is a (Gold)mine of glorious sounds that, whilst certainly biased towards dance music, should be useful to anyone with a sampler and a little imagination." - SOS, Sept 1991.*

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." - SOS, Sept 1991. "...devastating results...Handle with care: highly recommended." - Music Technology, Oct 1991.*

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." - SOS, Sept 1991.



Each volume costs £35, or select all three for just £90.

Valhala International Gold ROM Cards - Programmed in the UK!

Here's what the Press have to say:

"...if you want to be inspired to greater heights of musical ecstasy, look no further!...The amazing thing about these Valhala cards is that they sound completely different...all the voices here really do sound new...I am now assured that trying to do my own programming is a complete waste of time. To create anything like what we have here would take days and days of work...Well of course if you are at all serious then you'll buy all three!...don't take my word for it - try them out yourself! - *M1 Card Review, SOS, Dec '91.*

"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.*

International Gold Cards Currently Available:

KORG - M1/M1R (4 - £50 each), M3R (4 - £50 each), T-Series (2 Disks - £45 each), WaveStation (1 - £50),. KAWAI - K1 (2 - £45 each), K4/K4r (2 - £55 each) ROLAND - D50 (2 - £45 each), D10/5/20/110 (2 - £45 each), YAMAHA - SY22 (1 - £60), SY55 (2 - £60 each), SY77 (1 - £65/45). ENSONIQ - VFXsd (2 disks - £40).

Valhala Studio Series ROM Cards - For Korg, Roland, Yamaha, & Kawai Synths

Sounds programmed in the States by Valhala. Categories as follows:
ROLAND D50/5/10/20/110 ROMs - Top 40, New Age, Orch, FX, PCM, Digital, Analog. - £45 each. KORG M1/3R ROMs - Top 40, Orch, New Age, Rock - £50 each.
YAMAHA SY22/55/77 ROMs - Top 40, Orchestral, Rock, New Age - £60 each - SY22/55, £65 - SY77. KAWAI ROMs - Top 40, Orchestral. - K1 - £45, K4 - £55 each.

Valhala ORGANizer Series Organ ROM Cards for Roland D-Series Keyboards

A new range of cards packed full of superb Organ sounds. All cards are £45 each.

Sreamin' B3 - Superb imitation Hammond sounds - D50/5/10/20

Wurlitzer/Theatre Organ - The Mighty Wurlitzer - D50/5/10/20.

Classical 1 & 2 - Two volumes of classical organ sounds, only available for the D50/550.

RAM CARD PRICES

M256 - £55	MCR03 - £65	K1 - £35
K4 - £45	MCD32 - £59	MCD64 - £79

Please call for further details

MasterBits Sampling CDs - Sampling Collections 5/6/7/8/900, Climax Collections 1-3, Uberschall 1-2

Sampling Collection

Sampling Collection 500
M1 - D50 - K1 - K5 - K1000 - MiniMoog - TR808 - HR16 - Linn 9000 - Plus!

Sampling Collection 600
MicroWave - T1 - Proteus - K4 - VFXsd - VS - Xpander - Plus!

Sampling Collection 700
WaveStation - SY77 - SY22 - TR909 - TR606 - Prophet V - Elka Synthax - Plus!

Sampling Collection 800
VFX - PX1000 - HX1000 - R8 - Matrix 1000 - MKS70 - Plus!

Sampling Collection 900 - Just Released!
Emu Procussion - JD800 - SY99 - 01/W - Plus loads more!

Each volume costs £29. Buy the set of five for just £125.

Climax Collection

Climax Collection Volume One - Just Vocals
664 Samples - A range of vocalists and styles featured - from Motown to Opera! Sustained, Percussive & Freestyle Vocals.

Climax Collection Volume Two - Classic
551 Samples - Orchestral samples recorded with the Gothenburg Symphony Orchestra. Typically 3 performance styles from every instrument in the Orchestra, full range of pitches at intervals of a minor third.

Climax Collection Volume Three - Guitar - New
A wide range of guitar samples including HM and Soul. Single notes plus highly processed licks.

Each volume costs £45. Buy all three for just £125.

Uberschall Collection

Volume One - Guitar samples from hard rock to funk - Synths - Samplers - Mellotron - Holophonic effects and much more! - 787 samples.
Volume Two - Drums - Holophonic samples - percussion - FX - Synths - 921 samples.
Each volume costs £45 or buy both for just £80.

Klaus Schultze Sampling CD

Numbered Limited Edition featuring countless rare synths plus RSS samples - Call for full details! - £75.

DAT-RAM - Volume 2 now released!

MASTERBITS SOUND SHOW DEMO CD - £10 (refundable)
Features demo songs for MasterBits, HitSound & Uberschall CDs

More Sampling CDs from Sample It!, MegaMidi, McGill & Sonic Images

10 CDs from SAMPLE IT! - 5 BRAND NEW VOLUMES

Breaks, Grooves & Rhythms 1 & 2 - Superb selection of newly created loops that sound as if they're off vinyl!, Volume 2 features TR-Loops and Kraftwerk-style electro loops!
Sample Wave Sounds & Textures 1 & 2 - Prophet VS, Vocoder samples and more.
Classic Synths & Beatboxes 1,2, 3 & 4 - Featuring such classics as the Jupiter 8, MiniMoog, Prophet V, TR808, TR909, and many many more. Call for details on each volume.
FX's & Bizarre Samples 1 & 2 - A collection of natural and synthesized effects - sonic icing for your music.
CDs cost £39 each.

MEGAMIDI DANCE SERIES 1

Features:
17 'Song Kits' featuring 200 riffs
75 Loops from acid house to live funk!
170 drum and 120 percussion samples!
Guitar licks & Orch Hits!
Scratching, Sci-Fi FX!
Over 110 vocoder, robot and computer noises!
Loads of hooks and vocal samples!
All on one brand new CD from France.
Just £55 fully inclusive - Available now!

Please call for details of our 11 McGill and 6 Sonic Images Sample CDs

Superb Editing Software for the ST from EMC - Einstein Music Software

The most up-to-date range of synth editors on the market today, also offering superb value for money. Synths supported include - SY55, U20/220, D10 Series, K4, M1, M3R, Proteus 1/2, D70, JX1, D50, K1, VFX, OB8, LXP5, PCM70, etc. with programs being added all the time!

"Impressive...it's a competent, comprehensive program which can be highly recommended to anyone...it could well be selling for two to three times the amount - it really represents excellent value for money. Buy it before they read this and put the price up." - Music Technology SY/TG55 Review, May 91.

SY/TG55 Editor/Manager - £55
U20/220 Editor/Manager - £55
D70 Editor/Manager - £89
K4 Editor/Manager - £55
LXP1/5 Editor/Manager - £55
M1/M3R Manager/Combi Editor - £55
SY22/TG33 Editor/Manager - AVAILABLE NOW - £55
D10/20/5/110 Series Editor/Manager - £55
Proteus 1/2 Editor/Manager - £75

Please call for full details and prices! All programs run under M.ROS and SoftLink and require a hi-res mono monitors and at least 1 Meg (except the K1 Manager) of RAM.

Musitronics Expansions for the D50 and U-Series

D50/550 M.EX Multi-Timbral Expansion

Make your D50 8-part mutli-timbral! Plus enhanced MIDI features!
With dual RAM banks - £245
Without RAM banks - £199

D50/550 Speed System - £45

Speed up your D50 by over 40%!

D50 PCM.EX PCM Expansion - £245

Add 50 new PCMs including piano & drums with the ability to add unlimited new PCMs.

D50 POWER PACK - £399 Ltd. Offer!

M.EX with RAM, PCM.EX & Speed System at this special price!

SCP Sample Card Programmer for Roland PCM Cards - Coming Soon! (Please)

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:

Access VISA MasterCard AMERICAN EXPRESS

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' and 'The Sound Foundation' are tradenames of AMG. All prices and specifications are subject to change without prior notification © AMG 1991.

AMG

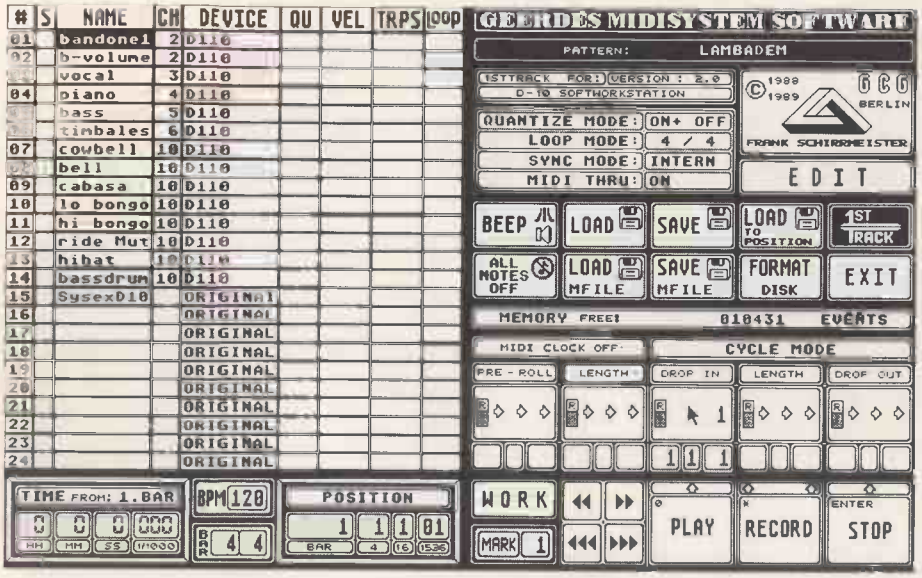
The Advanced Media Group

✆ 073088 383

O Samples O Synth Sounds O Software O Hardware

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

➢ right/down) is the reverse of every other package I've ever encountered, and is a pain. However, it is also possible to click both mouse buttons and then drag a parameter value bar up and down onscreen. This saves much time, but unfortunately a bug in the program caused the bar to extend beyond its box, thus obscuring other parts of the screen. It remained this way until the program was rebooted. Another programming shortcut enables you to modify all four partials simultaneously by using the increment/decrement buttons while pointing at the parameter name itself. All four partial columns then count up or down together.



Graphic screens are available where appropriate, and clicking on a button named Ctrl allows you to display graphics for each of the TVAs, TVFs, TVA Biases and Pitch envelopes. These can then be modified in the time-honoured way, by picking up the edit point on any curve and dragging it to the required position. This is very useful, particularly in the TVA/TVF screens where all eight curves are displayed simultaneously, enabling you to get a firm "analogue" grip on the Tone you're modifying.

A PCM wave selector is also provided. This enables you to choose your PCMs by name, rather than by having to rely upon PCM numbers only. PCMs can be dumped from the selector directly into the four partials before returning to the main editor screen. The editor also includes a randomiser (for which the number of parameters effected, and the range to which they are modified, may be user defined) and a partial copier, which enables you to move elements of one sound into another without having to go through the time-consuming and boring task of recreating a partial from scratch.

> "1st Track is simple, intuitive and boasts functions that you wouldn't normally expect in a package costing £49, let alone in a freebie."

MANAGERS & EDITORS

ALTHOUGH EACH Of the Timbre, Patch, and Overall Managers and Editors have their own edit screens and separate chapters in the manual, they're minor programs next to the Tone editor and librarian. Let's face it, a D10 Timbre, while being the fundamental building block of multitimbral setups, is only a Tone with four parameters stuck on it. But the Timbre manager and editor performs a useful service, if only because it can display 128 Tones (for example, the complete A-bank and B-banks) simultaneously. Eight Timbres can then be modified simultaneously and re-transmitted to the synth or saved to disk.

There are two patch editor/managers within the Softworkstation - one for the D10/D20, and the other for the D110. No patch editor is supplied for the D5 but, since this was the synth with which I was reviewing the software, I tried using the D10 program (selected from the configuration menu in the main menu bar) and see what happened. Happily, all went well. Selecting Performance mode on the synth enabled the software to transmit and receive performances happily, with the proviso that the synth's chord play, chase, harmony, and arpeggio functions were ignored, and the software's reverb parameters (which don't exist on the D5) were similarly discarded. A single Softworkstation patch setup is comprised of 16 banks each of eight patches; within this you can individually edit the patch name, mode, balance, and all the other parameters associated with D-series patches.

D110 patches differ dramatically from D10/20 patches. Accordingly, the D110 patch manager and editor is quite different to its D10/20 counterpart. While I can make no statements regarding its operation, the D110 patch manager appears to contain all the necessary parameters and controls. The screen dump contained in the manual shows that the key ranges for the eight multitimbral parts are displayed graphically within the patch manager main screen - a neat touch, which helps you to create powerful splits and overlaps very quickly.

The Overall Settings page ties up the remaining functions of the synths. These differ between models, but the program has been written so that all synths can be addressed by one program, each synth using or ignoring parameters as appropriate. For the D110 this module appears to be a waste of time, since it duplicates the functions of the patch editor, but for the D5 it fills a gaping hole in the timbre editor - the creation of multitimbral setups.

RHYTHM SETUP EDITOR

THE DRUM EDITOR is the last module in the Softworkstation editors. This enables you to re-allocate drum sounds to keys and adjust the volume and pan of each. There is no graphic representation but, nevertheless, the editor is an operational piece of cake. You change sounds by clicking on the old sound, and audition the current sound by clicking on the key name. Saving and loading to/from disk, and transmitting and receiving to/from the synth are performed as usual. There's little else to say about the drum editor; it's clear, it's simple, and it works.

On the subject of rhythms, the Softworkstation can also receive rhythm patterns and tracks from the D10 and D20. This is a useful library function, but no editing of these patterns or tracks is possible on the computer, restricting the usefulness of the facility.

1ST-TRACK

NEWTRONIC SUPPLY 1ST-TRACK as a stand-alone package (at a cost of £49) and having spent some time with it during this review, I could happily recommend it as an entry-level sequencer. Of course, it's not going to stop anybody from using EditTrack, Cubase, or Creator, but then £49 isn't going to break the bank either. 1st-Track is a 24-track sequencer operating in both pattern and track modes, with a wide range of advanced editing features, and enough bells and whistles to make it interesting in its own right.

The main screen shows all 24 tracks simultaneously and allows you to quantise, velocity adjust, transpose, and loop each track separately. The parameters for these operations are shown onscreen at all times and may be modified while the track is playing. All such operations are non-destructive. One of the most useful features of 1st-Track is the "marker". Identical in operation to the locate points on a genuine tape recorder, markers differ from other sequencers only in the number available: 80 of them - unprecedented for an entry-level package. This means that you can mark not only choruses and verses (or whatever) but every instrument's entry point, plus many other key events within the track. Loading and saving of tracks is straightforward and conventional, but it is also possible to load songs into current files at any position. This makes it possible to build live performances from individual tracks. Mind you, you'll need the RAM of an expanded Mega-ST if you're going to develop this facility in any serious way.

1st-Track also contains a complete MIDI event editor that may also be used as a step input facility. All the usual facilities are here and an added bonus is Catch mode, which chases the MIDI event table while a track is playing, enabling you to locate specific events, or even problems, quickly and easily. The final set of sequencer facilities are contained within the Multi Tool Box. This contains many of the sequence editing capabilities you'd expect to find in a more expensive package. These include copying between tracks, moving, deleting, transposition, velocity adjustment, channel replacement, muting, and a MIDI byte editor. These facilities can be limited to certain tracks, areas within tracks, or even MIDI channels and event types within tracks.

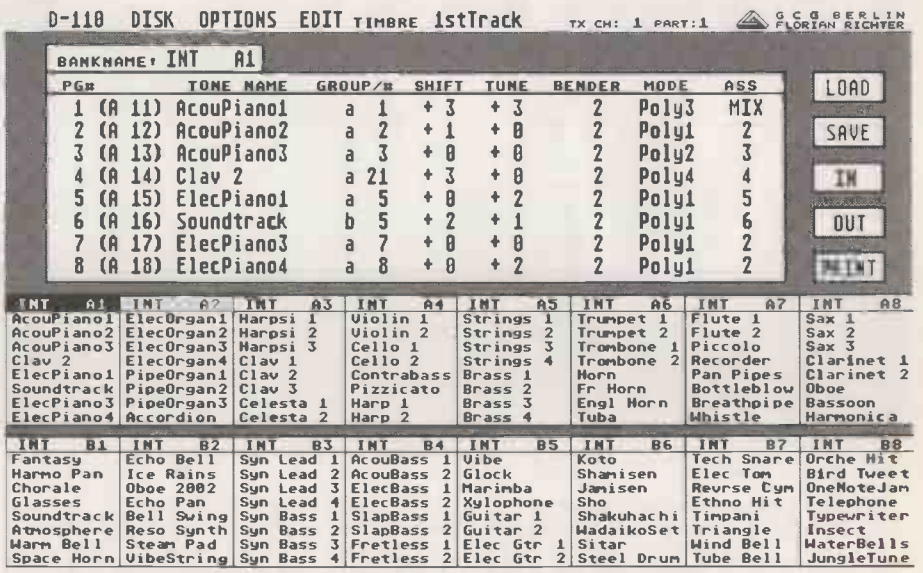
The latest version of 1st-Track also supports SysEx and MIDI File Standard, and may be synchronised to an external MIDI clock.

VERDICT

THE ROLAND D-SERIES synths demand powerful editors because their built-in operating systems are such a pain in the. . . With their Tones, Timbres, patches, multitimbral setups, rhythm setups and effects, they need a piece of software that is simpler and quicker to use than the onboard operating system, and makes the relationship between the various sections of the synth much clearer. Accordingly, the Geerdes Softworkstation is packed with features which will, in all probablility, help you to discover new capabilities within your synth - if you delve deeply enough. Once understood, the editors are powerful and relatively straightforward to use, but you must be prepared to think of your Atari as a computer, rather than as a musical tool to get the best out of them. OK, the manual is a disaster and there are bugs in the editors but, except for the Tone manager loading problems (which must be rectified immediately by Geerdes before any other D5 owner buys the package), these don't stop you using the program.

The 1st-Track sequencer is a pleasure to use. It's simple, intuitive and boasts a wealth of functions that you wouldn't normally expect in a package costing £49 (let alone in a freebie). The latest version of the 1st-Track manual arrived while this review was being prepared and, in stark contrast to the editor manual, it deserves credit for being clear and easy to use.

Should you buy the Softworkstation? If you have a D-series synth which you've been using as a performance synthesiser, and you want to move into the world of multitimbral sequencing, this package, with its combined editors, librarians, and sequencer, could be tailor-made for you.



Alternatively, if you consider yourself to be a "power user" and if money is no object, the Softworkstation may also be near the top of your list when you reach for your cheque book. But the price for this power is high - £149 is almost three times the asking price of some other manufacturers' D-series editors.

One final word. Before you buy this package, make sure that Geerdes have delivered the new manual and sorted out the bugs. If the editor/librarian can be improved to the standard of the sequencer, it will then be possible to give the Softworkstation a firm thumbs-up. ■

Price *£149 including VAT.*
More from *Newtronic, 62B Manor Avenue, London SE4 1TE. Tel/Fax: 081-691 1087.*

MULTI-TALENTED

TALK "CLASSIC" SYNTHS AND YOU CAN'T AVOID THE MINIMOOG, YET THERE ARE OTHER MOOGS HIDING IN ITS SHADOW WHICH DESERVE A LITTLE OF THE MINIMOOG'S LIMELIGHT - ONE OF THESE IS THE MULTIMOOG.

TEXT BY PETER FORREST & TIM GOODYER.

NO MATTER HOW you look at it, for Moog at least, the Minimoog was a hard act to follow. Everything had worked out so well: the ergonomics, the architecture, and above all the sound. Such was its success that it was difficult for any manufacturer - including Moog themselves - to better it. But they had, at least, to try. One of the resulting instruments was the Multimoog.

Briefly, the Multimoog is a two-oscillator monosynth with aftertouch- or pressure-sensitive keyboard. The keyboard is one of the ways in which Moog thought they'd be able to tempt people to trade in their Minimoogs. For something like a bassline, aftertouch may not cut much ice but for lead lines and sync or filter sweeps, pressure sensitivity can be used to devastating effect.

Many of Moog's instrument release dates are shrouded in the mists of time (for me at least), but the Multimoog appeared somewhere amongst the other early pressure-sensitive monosynths. Moog produced a sister to the Multi in the Micromoog, which appeared in '75, and the Multi appears to have followed closely behind. The Micromoog doesn't share the Multi's ➢

Now open 6 days a week

Andertons MUSIC CO.
making you sound great!

Now open 6 days a week

TOO GOOD TO MISS!

Alesis HR16 Rhythm S/H £149	Korg S3 Rhythm Work Station....£549
Alesis MMT8 SEQ S/H £119	Korg Polysix S/H £179
Art LT Multi FX.....£159	Roland R5 Rhythm £285
Alesis D4 1 only Demo £359	Roland JX1's £289
Art Pro Verb 110v S/H £79	Yamaha DX7 inc manual S/H.....£469
Custom Sound 200w Slave	Yamaha RCX1 Remote ~~£100~~ £99
Stereo.....£179	Yamaha DX27 S/H £169
Kawai R50E Rhythm ~~£259~~ £159	Yamaha RX15 Rhythm S/H.....£89

★ Roland JV30 + JV80 NOW IN STOCK ★

UK'S LOWEST PRICE ON THE FOLLOWING

Hammond XB2 Midi Keyboards.....Under £1000
Emu Proteus MPS .....1 Only Phone Now
Roland JX1 Synth .....Phone Now
Casio CPS 700 Piano & Stand Now.....£369
Ensoniq EPS 16+ Keyboard .....Phone Now
All Available on credit terms (subject to status).

★ PHONE NOW AND MENTION THIS ADVERT ★

PRICE MATCH

ANDERTONS MUSIC CO
HAYDON PLACE • GUILDFORD
SURREY GU1 4LR
TEL: (0483) 38212
FAX: (0483) 38211

1964 28 YEARS 1992

the power of
OPCODE
at your local opcode dealer

TURNKEY, LONDON
2001, ASH
A1 MUSIC, MANCHESTER
ABC MUSIC, ADDLESTONE
ABC MUSIC, KINGSTON
BRIXTON EXCHANGE MART, LONDON
ARGENTS, LONDON
CALLHAVEN COMPUTERS, LONDON
CARLSBRO, DERBY
CARLSBRO, LEICESTER
CARLSBRO, SHEFFIELD
DAWSONS, WARRINGTON
DAWSONS, NORTHWICH
HESSY'S MUSIC CENTRE, LIVERPOOL
KEYBOARD SHOP, SHEPHERDS BUSH
McCORMACKS, GLASGOW
MUSICAL EXCHANGES, BIRMINGHAM
MUSICAL EXCHANGES, COVENTRY
PROJECT MUSIC, HOUNSLOW
RAINBOW MUSIC, DUNDEE
SOFTWARE CIRCUS, HOLBORN
SOUND CONTROL, GLASGOW
STIRLING MICRO SYSTEMS, LONDON
SYCO, LONDON
THATCHED COTTAGE, ROYSTON
TSC, THE SYNTHESIZER COMPANY, LONDON

MCMXCIX

opcode software

THE MOST POWERFUL, PRODUCTIVE, AND INTUITIVE HARD DISK RECORDING, MIDI SEQUENCING, SYNTH AND SAMPLE EDITING TOOLS AVAILABLE FOR THE MACINTOSH COMPUTER.

FOR MORE INFORMATION
MCMXCIX
708A
ABBEY ROAD
TUDOR ESTATE
LONDON
NW10 7UW
FAX:
081 963 0624

MCMXCIX 081 963 0663

THE DANGEROUS CD COMPANY

PROBABLY THE LARGEST SAMPLE LIBRARY EVER MADE ON ONE CD
An Encyclopedia of loops
Essential for every producer, artist, DJ, programmer & musician.

A CATASTROPHIC EXCLUSIVE FOR YOUR SAMPLE LIBRARY.

- The very hottest grooves and irresistible rhythms, fresh new unused loops and previously unheard sounds, you won't find more loops on any other sample CD.
- Also datastreamed for Akai S1000 / 1100.
- The Dangerous CD Company presents

DANGER 1

- A superb collection of digitally mastered samples onto one CD
- 200 loops (all BPM's listed) fills, basses, strings, stabs, effects, drop-ins, percussion, dance kits from hardcore to hip hop, from tribal to ambient and much much more.
- 10 years of sample collection & creation. Owning this CD will change your creative output, perfection is our trademark, satisfaction guaranteed, we dare your imagination.
- Matched levels for fast sampling, perfect tracking, detailed indexes.

Also now available

DANGER 2

- Over 1000 catastrophic new samples, 200 hot loops and many more latest sounds.

Soon to come
DANGER 3 & 4

If your time is valuable then spend it making music!

If you require further information or trade enquiries call 081 368 8271 (24 hrs) or Fax 081 361 5833 (24 hrs).
In most cases we can guarantee next day delivery.
Existing customers will be kept up to date with all new releases.
Please add £5.00 for P & P overseas. All disks at £49.95

To. The Dangerous CD Company P.O. Box 2545 London N11 1TS England
Please send .....Copy/copies of Danger 1 at £49.95 each
Please send .....Copy/copies of Danger 2 at £49.95 each
Please debit my ACCESS.....VISA.....MASTERCARD.....
Number ...../...../...../..... Expiry Date ...../.....
I Enclose Cheque /postal order for £ .....made payable to The Dangerous CD Company
Name (caps).....
Address.....
.....Postcode .....

Tel: 081 368 8271 Fax: 081 361 5833

Please note: The Dangerous CD Company samples have not appeared on any other sample CD.

➢ pressure sensitivity, has a single oscillator, but also a sub-octave splitter (like the Roland SH1). The filter can be pushed into self-oscillation and made to track the keyboard to generate a sweet, resonant sine wave. The Multimoog was the "go faster" version of the Micro, sharing its styling and a lot of the same basics, but possessed of a great deal more besides.

For one thing, there are 44 notes on the Multi's pressure-sensitive keyboard instead of the Micro's 32. For another, there's a second oscillator - essential if the Multimoog was to come near the Minimoog's sonic potential (the Minimoog has three oscillators, if you press the LFO into service as a VCO). The oscillator instability which had been the curse of early Minimoogs is dealt with in both instruments by using circuitry which runs well above ordinary room

"THE MULTIMOOG IS NOT QUITE AS SWEET-SOUNDING AS THE MINIMOOG, BUT SEEMS SOMEHOW MORE 'IMMEDIATE' - MORE '80S AND CERTAINLY MORE '90S."

temperatures - and heating the circuit. This requires a warming-up period of a minute or so before the synth is stable, but is unaffected by subsequent fluctuations in ambient temperature.

The pressure sensitivity uses a rotary control for setting the amount of effect which pressing the keys produces. Unlike some of the other pressure-sensitive monos, the system can only really handle one "pressure effect" at a time, but the Multimoog scores in that the options are all pretty musical: you can pitchbend or modulate either Oscillator A (for Oberheim-type lead guitar effects), the filter (for extra brightness or growl), both oscillators, or all three. You can also alter the sync relationship of the oscillators or you can make Oscillator A's waveform more of an equal mix of sawtooth and square wave - subtle but effective.

More modulation potential exists in the form of the mod wheel. This can call on any one of six sources to modulate four of the same destinations as the keyboard (except this time it's the other oscillator's waveform which becomes progressively more full-sounding) and can cross modulate with the pressure sensitivity. Instead of the Minimoog's pitch wheel there's a pitch ribbon. With this you have to start a bend at the zero-point (halfway along the ribbon) and return to it in order to get a smooth bend. It's not as convenient as the CS80's ribbon, which treats your first point of contact as the zero-point. One trick unique to the Moog ribbon is that of playing a trill by hammering on and off the ribbon at the required interval from the zero-point.

There's just one control for setting the octave for *both* oscillators, although this is offset somewhat by being able to detune Osc A up or down a fifth, and further by another fine control. As well as 2' to 32' positions, there's a setting called Wide Freq. This sweeps the entire frequency range with the associated rotary control. As on the Micromoog, there's a sub-oscillator which, in this case, also syncs to Osc B via another rotary control.

One excellent feature is that the rotary waveform selectors aren't click-stopped, so there's a gradual change from sawtooth through to square and then pulse waves. The disadvantage with this is that you can't readily switch in an *exact* wave setting. But even this is more than made up for by the ability to use the knob as a performance control. And you can do it with both oscillators at once.

A three-position slider labelled Norm Drone Off switches the oscillators out altogether (for filter and/or noise effects) or gives a constant drone. The drone is quite effective when used with glide - which also has an on/off switch and glide-time rotary control.

Rather than the usual ADSR format, the Multimoog's transient generators are AR (Attack/Release) envelopes with switchable sustain. There's no sustain level as such - switching sustain in simply holds off the decay phase until key release. It's worth bearing in mind here that the Minimoog itself used an unconventional arrangement which involved attack and decay times, a Filter Amount control and a sustain level - the decay time setting served as both decay and release times in the ADSR format. It's fairly clear, however, that the Multimoog and Micromoog's envelopes owe their design to this. For speedy changes, there's also a defeat switch to cut release times - handy for making basslines instantly snappier, for example. Used intelligently, these switches - along with a couple more we'll come to presently - go a long way to compensating for the Multimoog's lack of programmability by facilitating quick yet drastic patch changes.

One surprise the Multimoog has in store comes with the VCF envelope Amount control. A lot of synths enable you to invert the filter envelope with a switch, so that whatever envelope is set works as a negative voltage, lowering the filter cut-off point. But on the Multimoog, in the same way as the waveform is totally variable, so the filter can be swept from positive, through neutral, to negative, with none of the discontinuities that a switch provides. It's a nice feature to have around.

Another nice feature capable of producing what can only be described as nasty sounds lies in the Multimoog's Filter Mod By Osc slider switch. This switch is marked Off/Weak/Strong and places the input of the filter under varying amounts of control from the oscillators' output, and can be used to produce ring-modulation effects. The behaviour of the filter itself is modified by another slider switch marked Filter Mode. Again there are three settings which assign 0.5v/oct or 1v/oct in Normal or Full modes, and pushes the filter into self-oscillation in Tone mode. The effects of using Filter Mod are enhanced if either Full or Tone Filter Modes are selected.

Until you encounter these two switches the Multimoog performs quite predictably and musically. Once these are called into play, however, it assumes a role more commonly associated with larger, even modular, synth systems.

Like so many of the modulation and interconnection facilities on the Multimoog, these features make it a

synth ideally suited, not necessarily to live performance, but to studio performance. This could involve playing it in real-time, or playing it with a sequencer via a MIDI/CV interface, possibly with extra control input in real-time.

On the rear panel there are inputs for control voltages for the filter, the two oscillators, and the destination to which the pressure sensitivity is routed. Short of a modular synth, VCS3 or Matrix 12, there aren't many synths with this sort of flexibility. Talking of interfacing, there are input and output sockets for CV and S-trigger too, so it's possible to hook a Multimoog up to a MIDI system, using a MIDI/CV interface like the Groove Electronics M2CV or Roland's old MPU101. You'll have to find Cinch-Jones plugs to slot into the trigger sockets, however, unless you open it up and fit a jack as an alternative.

The rear panel also hosts a couple of sockets for footswitches for modulation and glide - but, as on the Minimoog and Polymoog, they're smaller than standard jacks (but larger than 3.5mm jacks). There's an audio input, which allows an external signal to be processed by the Multimoog's filter and modulation sections. Uses of this are many and varied, and include chopping up a rhythm guitar and doing "interesting" things with voices. It's the sort of facility which continues to ensure analogue synths a place alongside today's digital master-pieces.

As with so many old (analogue) synths, interfacing the Multimoog with the outside world can be traumatic, and setting up a sound without a memory facility is an art in itself. But it's all worth the trouble because of the sound it produces and the fact that the Multimoog makes it easy to do things that more modern synths just don't encourage you to do.

Against the other two-oscillator Moogs, the Multimoog has more to offer than the Prodigy - its keyboard size and sensitivity, its modulation possibilities, and the provision of noise, sample-and-hold and the ability to process an external sound. It has advantages over the Source, too - it doesn't have memories, but it does have knobs, and one of the prime advantages of old analogue synths must be that they can be edited in real-time.

As with any instrument, the all-important question is what does it sound like? The simple answer in this case is - like a Moog. It's not quite as sweet-sounding as a Minimoog, but seems somehow more "immediate" - more '80s and certainly more '90s. But the business of comparing analogue synths is a bit like wine tasting. The only real test is a blind test, where instruments are assessed on their sonic merits in the hands of a capable player. I've only once played the Multimoog and Minimoog side by side, and felt that the Minimoog had the edge - but that's a personal judgement. The two are different, certainly, and if there isn't quite the warmth or bass solidity of the Minimoog, or that feeling of being somewhere between clarinet and soprano sax, there's a lot which the Minimoog doesn't have. You can find examples of the Multimoog on record with After the Fire, whose Peter "Memory" Banks made extensive use of the synth's pressure sensitivity. The Micromoog, meanwhile, found favour with Thomas Dolby (in his *Golden Age of Wireless* period) and Japan's Richard Barbieri (on most of their best-known LPs).

With its black moulded plastic facing, metal back, and chipboard base and sides (with fablon woodgrain side panels) it's not as pretty as the Minimoog, but it's still a pleasant-looking instrument with just a hint of the styling of the old modular Moogs. As with the Prodigy, the white slider-switches feel delicate but, like the rest of the hardware, are actually very sound. The pressure sensitivity is effective and reliable - it's operated by a cushioned bar that stretches the length of the keyboard and sends a control voltage proportional to applied pressure.

If you've been brought up on DX7s and M1s, and you're looking to explore analogue synthesis, the Multimoog will offer you considerable power in a manageable and expressive instrument. If you're ready to get some serious mileage out of analogue technology, then the Multimoog might be an ideal choice. The superb Moog sound is there, and the possibilities both for weird modulation effects, bleeps and blurts and for dynamic changes of sounds are practically endless. These changes can be subtle or violent, sudden or almost imperceptibly slow.

Whether you'd enjoy the Multimoog is down to how you want to play the keyboard and whether you want the control offered by that "analogue institution", the knob. The Multimoog's got 22 of these, and, as Roland acknowledged with their JD800, they're a useful innovation. ■

"THE MOOG SOUND IS THERE, AND THE POSSIBILITIES FOR MODULATION EFFECTS, BLEEPS, BLURTS AND DYNAMIC CHANGES OF SOUNDS ARE PRACTICALLY ENDLESS."

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

THE MUSIC CORPORATION

Overnight Delivery
Professional Service
90 Minutes From London

link mall, dolphin centre, poole, dorset, bs15 1sq
(0425) 470007 (0425) 480569 (0202) 684560

All Prices Are INCLUSIVE OF VAT

£499

KAWAI K4r

Rack mounted version of the K4 synthesizer with separate outputs.
For Only **£299**

KAWAI K4

- 8 Channel Multitimbral
- Sampled Waveforms
- Digital FX
- 61 Drum Progs
- 32 Multi-Patches
- 64 Programmes
- 128 16 Bit Voices.

£675

YAMAHA TG-55

Rack mounted version of the SY-55 without the sequencer but with separate outputs.
For Only **£399**

YAMAHA SY-55

- 16 Channel multitimbral
- 8 Track sequencer
- 34 Programmable digital FX
- 61 Drum samples
- Velocity sensitive
- Sampled waveforms
- 128 16 Bit voices
- Aftertouch.

Roland MV30

£999

16-Track sequencer with 8-track internal RS/PCM sound source plus compu-mixer.

Casio DA-7

£399

Portable DAT with Digital I/O, Full subcode, Built in Mic pre-amp. Absolute, remaining & prog. time display. Sony, Teac also available.

NEW & USED EQUIPMENT

Roland U20	£659
Roland U220	£469
Roland JX1	£299
Roland R8M	£399
Roland TR606	£69
Roland MC300	£299
Rhodes Model 760	£899
Kawai K1	£299
Kawai K1r	£259
Korg WS1 Wavestation	£899
Korg M1	£899
Korg T2 EX	£1499
Korg 01W	£1199
Korg EX8000	£199
Yamaha SY77	£1199
Yamaha SY22	£499
Yamaha QX3	£399
Yamaha TX802	£599
C-Lab Notator	£289
Fostex X28	£339
Alesis D4 used	£279
Alesis SR16	POA
Alesis 1622 Mixer	£499
Emu Procussion	£549
Emu Proteus I	£549
Casio VZ8M	£189
Casio CZ5000	£299
Ensoniq EPS 16+	£1399
Ensoniq VFX	£999
Akai S900	£799
Akai S1000	£1899
Soundtech 31 Band Mono eq	£89

NEW-Emu Performance System, Roland JV30 & JV80, SY99

44mb Removable Hard Disk

£699

Hard Disk storage in easy to use 3U rackmount unit. Suitable for Akai, Emu, Roland, Ensoniq, Apple & Atari etc. Price includes 44mb cartridge & cable.

Yamaha TG-77

£999

16 Voice Multitimbral module, 4 Stereo FX, 8 Outputs, 2 Stereo Pairs, Full real-time midi implementation and FM & AWM synthesis.

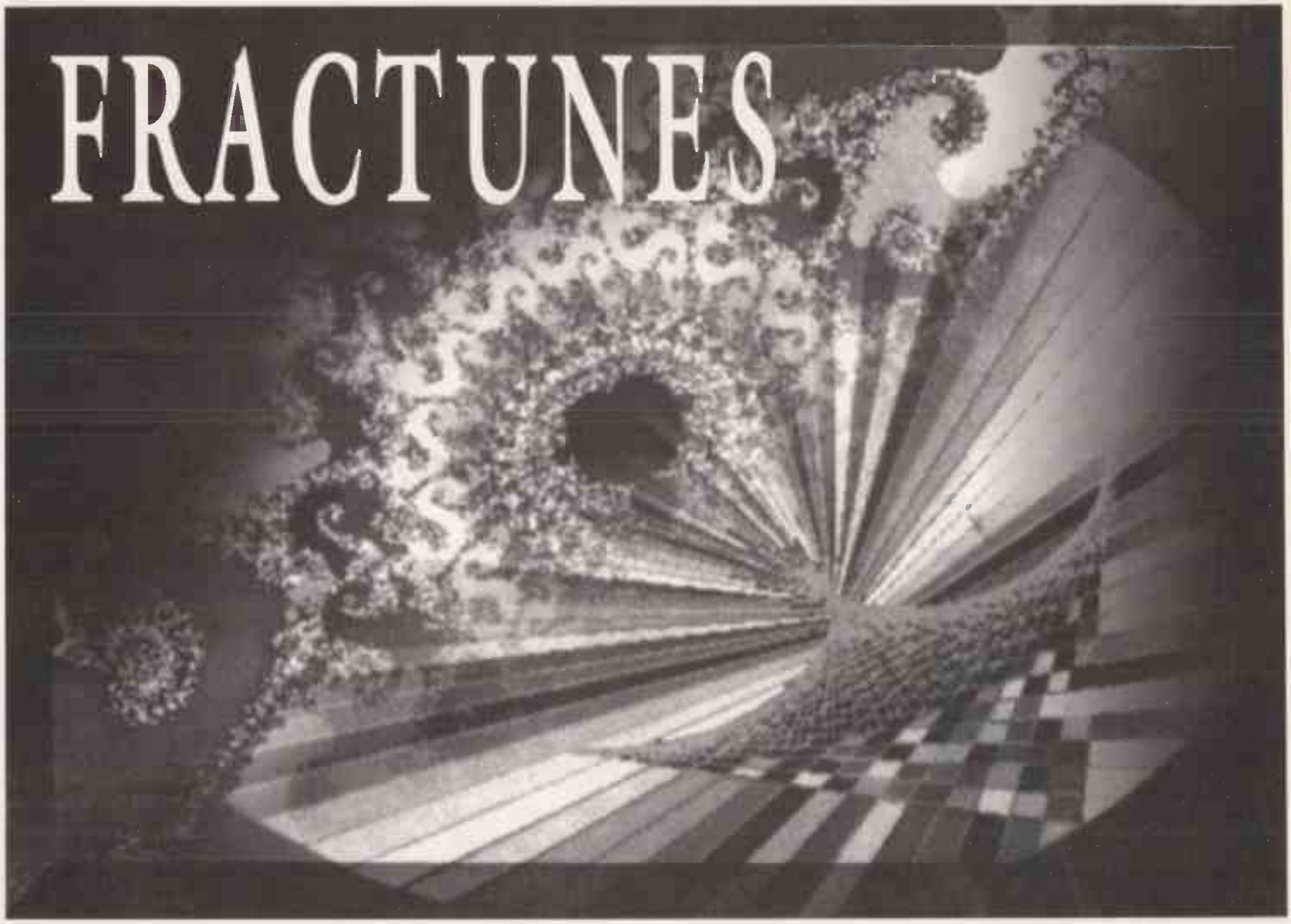
Akai

We always stock the **ENTIRE** range of Akai equipment including the S950, S1000, S1100 and S1100 EX Samplers, A-DAM Digital 12-track, DD1000 Direct to Disk editing system and the New MX1000 master keyboard. Call us now for **the best** prices.

Try your next purchase in the privacy of our digital recording facility under the guidance of professional recording engineers (Please call for an appointment)

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

FRACTUNES



Using images generated using fractal mathematics and modifying them with information derived from your music, FracTunes represents a personalised visual accompaniment to your compositions. Review by Ian Waugh.

FRACTALS CERTAINLY SEEM to be one of the flavours of the '90s. Fractal music programs seem to be iterating with the speed of, er, fractal generators. But if you've missed out on one of the most significant mathematical developments in years and are wondering what it can have to do with music, check out *The Sound of Chaos* in the July '91 issue of MT.

Bourbaki's FracTunes tackles the subject of "fractal music" from a different angle to Datamusic's Fractal Music. In fact, it doesn't compose music at all. Rather than use fractals to generate music, it uses music to generate images. Actually, it doesn't actually generate images, either, it alters the colour palette of pre-prepared pictures.

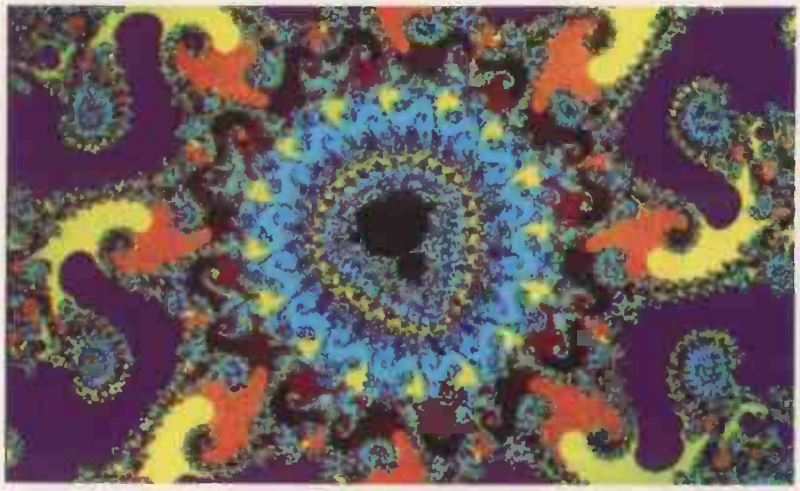
It shares similarities with Jeff Minter's famous Colourspace Light Synthesiser program (now available as Shareware for the Atari ST) except that FracTunes *does* react to music whereas Colourspace was a DIY job. But you can see some similarities behind the thinking of the programmers. FracTunes, incidentally, carries the subtitle "the 21st Century Light Organ".

FracTunes is so named because it was originally designed to work with fractal images created with FracTools and FracZoom, two other programs by the same software house. However, it will also work with any compatible PCX image which can be created by many popular paint programs. The complex nature of fractals, however, makes them particularly ideal palette-shifting fodder.

The program will run on virtually any PC although you need an EGA or VGA display and a hard disk. (There can't be any serious PC users without a hard disk these days, surely.) It's mouse-driven and this is definitely the way forward for PC music software, as Adrian Sutton showed in our October issue. MS.DOS hackers had better just get used to it.

You'll also need a sound system of some sort. FracTunes supports the Roland MPU401 standard, Sound Blaster and AdLib cards and the IBM Music Card.

The program is supplied on two 3.5" disks or four 5.25" disks - make sure you order the right size. ➢



➢ Installation is straightforward (for the PC) although you will need to know your sound card's port and interrupt. Not going to tax you too much, is it? You need a hard disk principally to store the data - the files are compacted and expand to over two megabytes, although you don't have to install all the files initially.

KEEP FRACTALS LIVE

WHEN YOU RUN FracTunes, an impressive fractal immediately appears on the screen. A click on a mouse button causes a pull-down menu to appear on the top of the screen and operation is fairly straightforward.

FracTune works in two modes: Live Play and Slide Show. In Live Play mode the screen responds to MIDI data arriving at the MIDI In port. That is, you play into it live or feed it the output from another sequencer and the colours of the image on screen change in response to the incoming data. The screen goes black and, depending on the notes you play and any other MIDI data such as pitchbend entering the system, different parts of the display light up.

At first glance this may not seem mind-numbingly exciting, but you are given a fair amount of control over the proceedings. The colour changes are effected by swapping colour palettes and the first thing you can do is load palettes of your choice to give the picture, say, a yellow or cyan cast. There are 12 palettes supplied and you can create your own quite easily and in a rather neat way.

The pointer turns into a cross and as you move this around the screen a box attached to the cross highlights the current colour it is on. Clicking calls up a palette defining the colour, which you can change using RGB values. Although easy to use, the number of possible variations are pretty overwhelming. I guess a colour freak could get lost in there for a week.

Next you can animate the images using strobe and pan effects. Strobing causes the colours in the palette to cycle through the regions in an image (depending on what you're playing). Panning causes the image to move off the screen to the left, right, up or down. You can activate both horizontal and vertical panning and strobing at the same time.

These effects can be controlled from the PC's ➢

PRO MUSIC

VISA

☎ 071 252 8573

Soloist

Only £4.95 each

Midi song files on disk for Cubase, Creator, Pro 24, Cubeat and standard midi song file format for Atari ST, IBM-PC and MC500 - only £4.95 each (min. 4 per disk). Great for vocalists / live performance or simply for rehearsing instrumental parts.

Soloist song files are the closest you can get to the actual record.

When You Tell Me You Love Me..Diana Ross	Respect.....Erasure
Black or White.....Michael Jackson	Big Area.....Then Jericho
You to me are Everything.....Sonia	Faith (In The Power Of Love).....Rozalla
When a Man Loves a Woman.....Michael Bolton	Looking for Linda.....Hue and Cry
Wonderful Tonight.....Eric Clapton	Mary's Prayer.....Danny Wilson
American Pie.....Don Mclean	Waiting for a Star to Fall.....Boy Meets Girl
Wind of Change.....The Scorpions	Tears of a Clown.....Smokey Robinson
Salt Water.....Julian Lennon	Eye of The Tiger.....Survivor
Everything I do.....Bryan Adams	Love Changes Everything.....Michael Ball
Promise Me.....Beverley Craven	Missing You.....John Waite
Holiday.....Madonna	Love To Hate You.....Erasure
Real Gone Kid.....Deacon Blue	Heartbreaker.....Dionne Warwick
Girls Just Wanna Have Fun.....Cyndi Lauper	Stop.....Erasure
Smooth Operator.....Sade	Your Song.....Elton John
Addicted To Love.....Robert Palmer	West End Girls.....Pet Shop Boys
Walk Of Life.....Dire Straits	Help.....Bananarama
Lets Hear It For The Boys.....Deniece Williams	Alone.....Heart
Love Is A Battlefield.....Pat Benatar	Baby I Love Your Way.....Will To Power
The Heat Is On.....Glen Frey	Can't Stay Away From You.....Gloria Estefan
Vogue.....Madonna	Everywhere.....Fleetwood Mac
Careless Whisper.....George Michael	Walking In Memphis.....Marc Cohn
What about Love.....Heart	I'm So Excited.....Pointer Sisters
Maneater.....Hall & Oates	From A Distance.....Bette Midler
Take My Breath Away.....Berlin	Manic Monday.....The Bangles
The Way it is.....Bruce Hornsby	Need You Tonight.....INXS
Boys of Summer.....Don Henley	Silent Running.....Mike & The Mechanics

Please telephone for full list of songs and news of latest releases.

Songwriter

Superb Synth Sounds on Atari St self loading disk.

Roland JD800 (64 voices) NEW.....£25.00
Kawai K4 (64 voices)....NEW.....£25.00

Proteus 1/1XR Vol 1 / 2.....£25	Yamaha DX7 II (224 voices).....£10
Roland D50 (192 voices).....£15	Yamaha DX100/27/21 (456 voices).....£15
Roland D110/20/10 (128 voices).....£15	Yamaha TX81Z (468 voices).....£15
Roland MT32 (256 voices).....£15	Yamaha CX5 (288 voice Cassette).....£10
Roland Juno106 (128 voice Cassette) .£15	Yamaha FB01 (96 voices).....£10
Korg M1 (100 voices).....£20	Ensoniq ESQ1 (240 voices).....£15
Korg DW8000 (64 voices).....£10	Kawai K1 (192 voices).....£15
Korg Poly 800 (64 voices).....£10	Casio CZ (320 voices).....£10
Yamaha DX7 (240 voices).....£10	Oberheim Matrix 6/1000 (1 Vol).....£10

Voice Crystal™ RAM cards

Top 40 sounds from the U.S. used by Jan Hammer, Kevin Gilbert (Madonna), Rick Wakeman, Keith Emerson etc.

	each		each
Roland JD800 (2 cards)	£60	Yamaha Blank 64K Ram	£79
Roland D70 (3 cards)	£60	Korg Wavestation (4 cards)	£70
Roland R8 (1 card)	£60	Korg 01/W (2 disks) NEW	£35
Roland U20 (1 card)	£60	Korg M1 (5 cards)	£65
Roland D50 (6 cards)	£55	Korg Blank Ram	£65
Roland D10/20/110 (3 cards)	£55	Ensonlq SQ1 (2 cards)	£65
Roland Blank Ram	£49	Ensoniq SQ2 (1 card) NEW	£74
Yamaha SY77 (2 disks)	£39	Ensoniq VFX SD1 (3 roms)	£45
Yamaha SY55/TG55 (2 disks)	£25	Ensoniq VFX, SD1 Blank Ram	£70
Yamaha SY22/TG33 (2 disks)	£25	Kawai K1 (5 cards)	£45
		Kawai K4 (3 cards)	£59

PRO MUSIC
80 MEETING HOUSE LANE
LONDON SE15 2TX

VISA

Call 071 252 8573 for further details or brochure

Prices fully inclusive of postage & packing Same day service for Access and Visa, Postal Orders and Cash. Allow five days for cheques to clear. Visitors by appointment only!

four minute warning

samples

W30/S330/S550/S50
S1000/S1100
S900/S950
S700/X7000

We have a large library of professionally recorded high quality sampled sounds on disk for all Akai and Roland samplers. Please phone or write for further details and a full listing of available disks. Avalon and Sound Designer disks also available.

S700	Seperate output adapter	£25
USERS	Box of 10 Maxwell quick disks	£23

synth patches

We have a large collection of patches for a variety of popular synthesisers on ROM, RAM and ST format disk. Please phone or write for a full listing of our available sounds.

RAM card wipe out!

Roland 256k RAM card **£39.95**
(for all D-series, U-series, R8, A50, JD800, comes loaded with 64 D50/550patches)
Kawai K1/r/m RAM card (+sounds) **£39.95**
Ensoniq ESQ1/M RAM (160 sounds) **£47**
Yamaha DX7/DX5/RX11 RAM card **£45**
(comes with 128 DXpatches)
Yamaha DX7mkII RAM card **£49**
(also works with TX802/DX11/DMP7/PF2000
RX5/RX7 comes with 256 DX7mkII patches)
Yamaha DX7 mkII 1024k MEGARAM **£141**
(as above, but with 1024 patch locations)

ST software

A range of high quality programs with an intuitive and highly graphical user interface, by Mississippi Software. All were designed with the sequencing environment in mind, and run as desk accessories over the top of your ST sequencer program.

FileMaster FD **£175**
Sample editor and soft synthesis for Akai S1000/S900/S950, Roland W30/S330/S550 and MMA Standard samplers.

Filemaster 3 QD **£65**
Sample editor and librarian for all quick disk samplers: Akai S612, S700, X7000 and Roland S10 and S220.

U220 **Unison 3** **£65**
Desk accessory editor librarian for Roland U20, U220 &U110

XE8 **XE8 Organiser** **£39**
Desk acc. editor librarian for Akai XE8 drum module

All ST programs require mono monitor and one megabyte memory.

memory expansions

S1000/S1100 8 Meg. board	£cheap - call
S1000 2 Megabyte expansion board	£call
S1000 SCSI Interface card	£89
S950 ¾ Meg.board (fit 2 for 2¼ Meg)	£125
Casio FZ1 1 Megabyte board	£175
Ensoniq EPS 4 times expansion	£165
Ensoniq EPS16+ 1 Meg expansion	£130
EPS/EPS16+SCSI interface board	£89
EPS 4x and SCSI in one cartridge	£220
Akai MPC60 ¾ Megabyte board	£125
Yamaha TX 16W 1.5 Meg (fit 3 for 6M)	£129
Ensoniq VFX 75,000 notes seq. exp.	£99
Ensoniq SQ1/SQ2 58,000 note seq	£99
Ensoniq ESQ1/ M 20k seq exp	£65
Yamaha C1 computer 2 and 4 meg	£call

Fitting service available. Call for details

All prices INCLUDE VAT 17.5% E & OE.
For further details on all these products, please telephone or write to:

Four Minute Warning
Dept. M3, 298 Horbury Road, Wakefield, West Yorkshire, WF2 8QX
Tel: 0924 386527

THIS AD SHOULD DRUM UP SOME ORDERS

Born in Trinidad, Richard Bailey's inimitable playing style has established him as one of Britain's most respected drummers and percussionists. He has worked with a wide variety of artists, from Bob Marley to Billy Ocean, and is well known on the jazz scene for his involvement with The Breakfast Band.

Firedance, his eagerly awaited debut album, is certain to attract major interest from all drummers, yet it's range, combining rock, funk, jazz and Afro/Indian rhythms with '80s drum patterns ensures it will reach a far wider audience.

An album for those who appreciate great music, available *exclusively* from Music Maker Records.

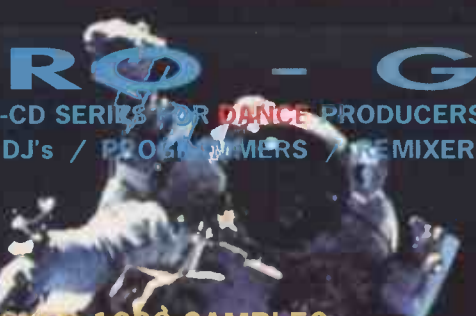
To listen to tracks from *Firedance* (album: £6.99, CD: £11.99 inc. p&p) just dial 0898666169.

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)

ZERO - G

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



OVER 1000 SAMPLES
DIGITALLY RECORDED ON EACH COMPACT DISC
SOUNDS LEVEL MATCHED FAST SAMPLING ^ 99 TRACKS ^ NUMBERED INDEXES
PRODUCED BY TECHNO-FREAK ED STRATTON ALIAS MAN MACHINE (RHYTHM KING) A/K/A JACK 'N' CHILL : An artist with a track record of HIT PRODUCED dance HITS that speaks for itself. These new CDs:

1988 "JACK THAT [illegible]" (with [illegible]) * No. 6 UK S[illegible] * "[illegible]ATION THE HEAT" (with V. Naslas) * No. [illegible] UK Singles [illegible]0 "MAN M[illegible] UK Dance Singles (Gallup) "DENKIMI SHAKU CHI[illegible]9 UK Da[illegible]
1991 "ANIMAL SH[illegible] UK Dance [illegible] INTO TIME" (debut album, solo) * No. 3 Dance [illegible]

In pursuit of this success [illegible] collected [illegible]ated a huge library of sounds for dance production and now h[illegible] the [illegible] standard compact discs : over 3000 samples ! and [illegible] This [illegible] "AMMUNITION FROM THE FRONTLINE" (MUSIC TEC[illegible] '9[illegible] [illegible] fact that many of the world's top producers and [illegible] bought V[illegible] back [illegible]gely requesting Vols 2 & 3. THESE ARE THE F[illegible]D MOST [illegible]ATIVELY INSPIRING DANCE SOUNDS AVAILABLE [illegible]
FULL DOCU[illegible] includes [illegible]sely useful sample-rate chart for fast tuning of any breakbeat precisely to any tempo [illegible].g. S1000)

Already much sought-after by the professionals...

> > > > DATAFILE ONE < < < <

* Over 60 Breakbeats * 100's Vocal hooks * Synth dub and sub basses * Tons of dance-orientated percussion including: * Classic TR808/TR909/TR727 drum kits * Techno/electro beats + pieces * Scratches * Over 100 original Drop-ins * Sci-fi FX/Aliens/Robots * Oriental vocals * Ethnic flutes/instruments * Ambient fx * Stabs * Many more unique one-offs.....

"Unreservedly excellent.....an unbelievably valuable addition to your sample library...the definitive dance 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, Volumes 2 & 3 should be unmissable" – INTERNATIONAL MUSICIAN AUG '91 "Incredible! The only word needed to describe the greatest sampling tool ever released to the public.....vocals so fierce you have to hear them for yourself...most of the voice samples I've never heard anywhere before...whether your a producer, remixer, engineer or a DJ with a sampler, this disc is a must for your sample collection" – DMR "DANCE MUSIC REPORT" USA

And now available, an equally deadly selection...

> > > > DATAFILE TWO < < < <

* Over 100 Breakbeats * Over 150 Soulful Vocal hooks / ad-libs / FX * Kraftwerk-style electro percussion * 40 choice basses incl. Juno 106 and SH 101 * Guitar breaks + FX * Sci-fi / Techno FX / robots * Roland R8 & Alesis HR16B kits * Complete human beatbox * Stabs * Ambient FX incl. Whalesongs / birds / film atmospherics * Industrial perc. / FX * Italo-house piano * Automotive FX / horn blasts * Drop-ins * One-offs....

"The same combination of rawness, cheekiness and honesty which made Datafile One so appealing. In fact, it complements Datafile One very effectively" – MUSIC TECHNOLOGY DEC '91. "The Datafile CDs provide the samplist with all the raw material needed to assemble house or techno tracks to a very high standard...given Ed Stratton's ear for what works, the Datafile CDs are a near-essential purchase if dance music's your game" – SOUND ON SOUND NOV '91. "A jigsaw puzzle that could be assembled in a large variety of ways with the pictures always making sense" – MUSIC TECHNOLOGY AUG '91 "Together these discs represent the most comprehensive dance sample resource currently in circulation – MUSIC TECHNOLOGY OCT '91.
"The vocals & FX are even more powerful...I saved plenty of my best stuff for 2 & 3...." – 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 COLLECTING AND [illegible] FOR HOUSE / RAP / SOUL PRODUCTION. [illegible] HOW IMPORTANT GOOD SAMPLES CAN [illegible] BIG DIFFERENCE TO YOUR CREATIVE OUTPUT. [illegible] THEM OR READ THE REVIEWS.

CALL : 0442 870681 FOR VISA/MASTERCARD ORDERS OR POST / FAX DETAILS :

TIME + SPACE, [illegible]

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 airmail/handling.)

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

(UK cheques : allow 7 extra days for clearance) or :Please debit my ACCESS —— VISA —— MASTERCARD

Number: _ _ _ _ / _ _ _ _ / _ _ _ _ / _ _ _ _ Expiry date: _ _ / _ _

Name (Capitals): Initials _____ Surname _____

ADDRESS (CAPITALS): _____

_____

_____ Postcode _____

TELEPHONE ORDERS: (0442) 870681 or FAX TO: (0442) 877266

WARNING: DATAFILE ONE was the world's first dance sample-CD (released May '91). At least one other sample CD has appeared containing stolen original ZERO-G samples. Do not fall into the trap of buying the same samples twice !

➢ keyboard and happen even when there is no music playing. You can control the speed of the effects, too. At a fairly high speed of strobe, the image can appear to be moving, especially if you use the palette to colour swirls and such in different shades of similar colours. It's all quite hypnotic.

SLIDE SHOWS

THE NEXT STAGE in your exploration will be to use Slide Shows. These are little programs which control palette switching, strobing and pan effects. They are written in relatively understandable English and saved as an ASCII file. Several examples are supplied and you can examine them and create your own using a wordprocessor or text editor.

There are around 50 words in the Slide Show language, all well detailed in the manual. Part of a typical program might look like this:

```
song = heavy
play
begin play loop
        delay = 96
        swap palettes
        strobe = right
        delay = 180
        swap palettes
```

Slide Shows can load new pictures, too, so you are only limited - to paraphrase an old computer cliche - by the size of your hard disk. FracTunes uses PCX files, which is a fairly common file format used by many paint packages so you can create your own screens, too. You aren't limited to the pictures supplied.

As well as using Slide Shows with incoming data, you can also use them with standard MIDI files. The program reads them and plays them and two rather tasty piano demo files are supplied. Here you have greater scope for customisation as you can tailor a Slide Show to a particular piece of music, especially by selecting suitable delays to complement the music. I don't think the demos really make the most of the potential here.

GRAVEN IMG

THERE ARE SEVERAL functions I haven't mentioned yet and these are all connected with IMG files. These aren't GEM IMG files which are created by programs such as GEM Paint, but files created by FracTools and FracZoom. They are, however, rather complex and contain within them data pertaining to their construction. This permits functions such as Maximum and Minimum Iterations and Iteration Range to be performed on them.

Other functions which are restricted to IMG files are Stained Glass, Dust Toggle, Colour Pour and Kaleidoscope. They appear to be the most interesting and spectacular of all the effects. Unfortunately, Bourbaki have chosen not to include a single IMG file with the program, so I can't tell you just how "spectacular" they are. Far Communications (FracTunes' distributor) were very helpful and sent me some sample files - but as the disk format wasn't compatible with my machine, the files had to be transferred from another computer, after which FracTunes wouldn't recognise them as IMG files. I confess to sore disappointment.

You can buy disks of IMG images and, of course, you could always buy FracTools or FracZoom but, c'mon guys, this isn't really on. Surely you could have included a couple of IMG files to whet our appetite.

The manual is well written and quite comprehensive. After a First Experiments section which gets you up and running very quickly, it runs through the menu options in more detail.

The words in the Slide Show language are well explained and I'd go so far as to say you could create your own Slide Shows without any previous programming experience. Purely for beginners, however, a few Getting Started examples would have been helpful.

Although you can alter the strobe and pan effects during play, you have to stop the music to load other pictures and change settings. It would have been better to be able to do this on the fly. We know the PC is not multitasking (but then neither is the ST) and the program can load new screens while playing so this would not appear to be an impossible request. That apart, Pause and Continue functions would have been useful.

When new screens load they scroll down the screen. An option to instantly switch screen would have been nice. All told, niggles are pretty petty.

VERDICT

I SUPPOSE THE ultimate question is - what is FracTunes for? Well, first and foremost - it's a very enjoyable program to experiment with. If you can tie in changes to the pictures to specific MIDI data using Slide Shows, the results are incredibly satisfying. The program is quite easy to use, the displays are easy enough to customise and you can use it with your own music. You can use the Slide Shows to create displays which are not MIDI-dependent, too.

Apart from using it purely for amusement, it could be used live and in concert. Remember the move to put MIDI data onto CDs? Well, here's one use for that data. Large PC screen displays in your favourite disko?

What about digitising images, say of musicians at work, saving them in PCX format and giving them the FracTunes treatment? Could do some interesting video work with that. Well, it sounds interesting to me.

Whatever else FracTunes may be, it's certainly entertaining. You can find out just how entertaining it is by sending for a demo disk - yours for only a quid! My advice is to do it now, and don't forget to specify the disk size you require. ■

Price *£70.50 including VAT plus £3.20 p&p*
More from *Far Communications, 5 Harcourt Estate, Kibworth, Leicestershire LE8 ONE. Tel: (0533) 796166.*

At KENTON ELECTRONICS, we install MIDI into pre-MIDI instruments using our own range of custom circuit boards – designed and built by us in "leafless" Surbiton!

OUR CUSTOMERS INCLUDE:
MARILLION – BEATS INTERNATIONAL – N'JOI – 808 STATE – PLUS MANY RECORDING STUDIOS, HIRE COMPANIES AND PROFESSIONAL PROGRAMMERS.

OUR RANGE CURRENTLY INCLUDES THE FOLLOWING INSTRUMENTS (please phone if yours isn't listed)

POLYPHONIC SYNTHS (In/Out/Thru)	MONOPHONIC SYNTHS (In/Thru)
OBERHEIM OB-X / OB-Xa / OB-8	MINIMOOG
PROPHET 5 rev 2 & rev 3 (all)	MICROMOOG
PPG WAVE	MOOG PRODIGY
KORG POLY6 / POLY 61	MOOG SOURCE
KORG TRIDENT MONOPOLY (In/Thru only	OBERHEIM OB-1
KORG CX3 / BX3 (In/Thru only)	SEQUENTIAL PRO-ONE
MEMORY MOOG	ROLAND SH-5
ROLAND JUPITER 8	ROLAND SH09
ROLAND JUNO 60 / 6	ROLAND SH-101
ROLAND VOCODER VP-330 (In/Thru only)	ARP ODYSSEY Mk 1 & 2
RHODES CHROMA	ARP 2600
YAMAHA PF15/10/YP40 (Out only)	YAMAHA CS-15
YAMAHA CS80/CS70M (In/Thru only)	ROLAND TB-303 (bassline)
SOLINA String Ensemble	

DRUM MACHINES (In/Out/Thru)	ORGANS (Out only)
LINNDRUM 1 / 2 / 3	YAMAHA FS/ FX/ FE series
LINN 9000 CLOCK CONVERSION	YAMAHA A/B/C/D/E series
ROLAND TR-808	TECHNICS E series + G series
ROLAND CR-78 (In/Thru only)	JVC 350 / 250
SIMMONS SDS 5 (In/Thru only)	HOHNER D98 & series
	HAMMOND tonewheel

A few examples are listed below – please phone or fax for other prices & details

YAMAHA PF15 / 10 / YP40 (MIDI OUT)
MIDI OUT on any channel for notes / velocity / program change / sustain pedal
Price: £146.88 inc fitting. Kit price: £123.38.

PROPHET 5 all rev 2 & 3 models (MIDI In/Out/Thru)
MIDI Out (any channel) for notes and program change
MIDI In (any channel) for notes (5 octaves; notes 36 – 96) – program change / pitch bend / mod wheel / aftertouch / velocity
MIDI volume / any controller / sustain / active sensing / all notes off / omni on-off / auto tune request / reset all controllers.
Aftertouch can control modulation, filter, pitch bend and resonance; Velocity can control: filter and VCA (volume); MIDI Volume can control; VCA (volume).
2 Assignable controllers can each control: filter and resonance; all setups are stored in non-volatile RAM.
Price: £246.75 inc fitting. Kit price: 193.88.

MINIMOOG (MIDI IN/THRU)
MIDI In (any channel) for notes (5 octaves; notes 36 – 96) – pitch bend / mod wheel / aftertouch / velocity /MIDI volume any controller / sustain / active sensing / all notes off / omni on-off.
Aftertouch can control: modulation, filter and pitch bend; velocity can control: filter and loudness (volume); MIDI volume can control: loudness (volume).
Any controller can control: filter; glide function is available via MIDI; all setups are stored in non-volatile RAM.
Price: £199.75 inc fitting. Kit price £158.68.

ROLAND TR808 (MIDI In/Out/Thru
MIDI In & Out on any MIDI channel (selectable and stored) for the eleven drum sounds each of which can be assigned to any MIDI note (0-127) and stored; output at two velocity levels – Normal at 64 and Accent at 127 – Input can be on the same basis or switched to velocity response;
MIDI clock / stop / start sent & recieved; MIDI continue received may be ignored or treated as start, program change used to assign MIDI notes to sounds; omni on/off; *MIDI* controller 16 selects whether receiving in accent or velocity mode; DIN sync available from TR808 sync socket when MIDI clock is being received; all setups and note assignments are stored in non-volatile RAM. Price: £188 Inc fitting. Kit price: £141.

MIDI to CV Converters

Now Available in 2 and 4 channel versions.
Please phone for details and prices.

WE ARE NOW ABLE TO SUPPLY MOST OF THE ABOVE MIDI SYSTEMS AS KITS FOR THE EXPORT MARKET – PLEASE PHONE OR FAX FOR DETAILS AND PRICES

ALL PRICES INCLUDE VAT.
Carriage extra where required.
Please apply for export rates.

ALL MIDI KITS FIT INSIDE INSTRUMENT (except bassline)

KENTON electronics
REAR OF 137-165 HOOK ROAD, SURBITON, SURREY KT6 5AR
TEL: 081-974 2475 FAX: 081-974 2485

LIMITED OFFER FROM C-LAB

Notator is the best sequencing and notation program for the Atari ST, combine this power with the MIDI and Synchronisation capabilities of Unitor 2 and you have the heart of the C-Lab Universal System.
For a limited period, C-Lab are offering the ultimate Notation, Sequencing and Synchronisation Package for the Atari ST – **The Sync-Pack. The Sync-Pack** consists of Notator V3.1, Unitor 2 and a Mouse Mat all in a C-Lab Briefcase.
The normal RRP of this package is £950.00 inc VAT. Until January 31st 1992, a selected number of Dealers will be able to offer this package for only £649.00 inc VAT... a saving of over £300! Add to this the introduction of TCM (Tape Control Mode) in Version 3.1 of Notator and C-Lab will not only control all your MIDI equipment but also the transport controls, record ready and many more functions of your Fostex and Tascam Tape machine*.
The participating Dealers are listed below. Remember, this offer is limited. Don't miss this unique opportunity to join the growing band of dedicated C-Lab users.
Sound Technology plc, Letchworth Point, Letchworth, Herts. SG6 1ND. Tel 0462 480000. Fax 0462 480800.

SOUND TECHNOLOGY ▶ plc ◀

SAVE OVER £300

*MTC-1 required for Fostex machines. LMTC-1 required for Tascam machines

PARTICIPATING DEALERS

Music Village – Chadwell Heath 081 598 9506 – Cambridge 0223 324 536 – Barnet 081 440 3449 · **Music Connections** – Chelmsford 0245 354777 – Chelsea 071 731 5993 · **Carlsbro Retail** – Mansfield 0623 651633 – Derby 0332 48156 – Leicester 0533 624183 – Leeds 0532 405077 – Nottingham 0602 581888 – Norwich 0603 617641 – Birmingham 021 643 4655 – Sheffield 0742 640000 – Stoke 0782 205100 · **ABC Music** – Esher 0372 466195 – Adelstone 0932 854877 – Oxford 0865 724820 – Kingston 081 546 9877 – Bristol 0272 238200 – Slough 0753 822754 – Exeter 0392 425125 · **Thatched Cottage Audio** – Royston 0223 207979 · **KGM** – Wakefield 0924 371766 · **Project Music** – Hounslow 081 570 4444 · **Holiday Music** – Leytonstone 081 558 2666 · **Sound Control** – Dunfermline 0383 733353 – Glasgow 041 204 0322 – Fife 0592 260293 – Dundee 0382 25619 – Edinburgh 031 557 3986 – Newcastle 091 232 4175 · **McCormacks** – Glasgow 041 332 6644 · **Dawsons** – Warrington 0925 32591 · **Eddie Moors** – Bournemouth 0202 395135 · **The Music Corporation** – Poole 0425 480569 · **SDL** – London 071 580 4000 – London 071 629 1234 – Sidcup 081 302 8811 · **Musical Exchanges** – Birminghom 021 236 7544 – Coventry 0203 635766 · **A1** – Manchester 061 236 0340 – Preston 0772 204567 – Stockport 061 429 8777 · **Turnkey** – London 071 379 5148 · **Sutekina** – London 071 836 0180 · **Rose Morris** – London 071 836 0991 · **Brixton Exchange Mart** – London 071 733 6821 · **Keyboards In Action** – Plymouth 0752 347595 · **Systems Workshop** – Oswestry 0691 655019 · **E.M.I.S.** – Bristol 0272 561855 ·

CRIMINAL RECORD?

When people first sampled other peoples' music to use as their own it caused trouble. Now people are sampling other peoples' music and selling it for other people to use as their own. Simon Harris, Norman Cook, Pascal Gabriel, Ed Stratton and Matt Black comment on the new movement. Interviews by Tim Goodyer.

THERE'S A LOT OF MONEY BEING MADE OUT of sample CDs at the moment. The popularity of sampling and the convenience of the CD medium - not to mention the falling cost of digital technology - have conspired to make sample CDs irresistible to the many musicians currently using samples. That the phenomenon is a recent one can be attributed to the fact that, until just a few years ago, the cost of both samplers and CD players ensured that they were exclusive status symbols.

Broadly speaking, these sample CDs fall into one of two categories: they either contain samples of other instruments (acoustic or electronic) carefully recorded and prepared to allow you to build up multisamples and keymaps so that your sampler can take over another instrument's role, or they contain pieces of other peoples' music - breakbeats and other assorted musical or vocal samples. The fatal attraction of a CD full of samples is that they take much of the hard work out of sampling - they relieve you of the laborious (and sometimes expensive) tasks of recording "real" instruments into your sampler, or searching out excerpts of (often obscure) records suitable for building a fresh piece of music upon. All that remains is to load up your sampler and get on with the business of making your music.

Just as samplers brought breakbeats from the DJ's turntable into the realm of recording studio hi-tech, CDs are now challenging good old-fashioned vinyl as the source of beats and breaks. It may come as a surprise then, to learn that sample CDs have a precedent in the form of vinyl sample LPs. Unlike the current wave of sample CDs, however, these albums were primarily aimed at DJs for use in nightclubs as well as in the creation of their own records and remixes. As such they contained breakbeats which had been looped to run uninterrupted for around three minutes - a feature retained on certain CDs but replaced on others by one- or two-bar samples designed to be looped in a sampler by the user. The evolution of sample LP to sample CD neatly serves to further highlight the convergence of interests of musicians and DJs.

One of the longest-running series of sample albums is that created by British DJ, producer, remixer and some-time recording artist Simon Harris, though it was not the first. Notorious amongst those which predate Harris' albums are two American series' - *Drum Drop* and *Ultimate Breaks & Beats* - now some 25 volumes old. A Belgian release called *High Fashion*, the work of DJ/remixer Ben Liebrand, appeared around 1983. Harris' *Beats Breaks & Scratches* was inspired by Liebrand's album and has recently found itself transcending the club DJ/sampling musician distinction through its release on CD - all eight volumes. It joins the popular Zero-G series from Ed Stratton, Music of Life's *Wild Style* breakbeats album, Pascal Gabriel's *Dance Samples* disc, Norman Cook's *Starmix* CD and The Original Unknown DJs' *Break Beats Vol 1 & 2* as part of the sampler's CD library. More obtusely targeted is Coldcut's DJ Food CD - this contains complete tracks which you are actually *encouraged* to steal and use to your own musical ends. ➢

Ed Stratton: "The rules I use are: that samples should be short, that they should be describable as sound effects or non-melodic samples."

FOR SERIOUS DEALS PHONE :

0202 395135

Access EXT. 125 VISA

EDDIE MOORS MUSIC LTD

THE SOUND INVESTMENT

679 Christchurch Road
Bournemouth BH7 6AE

THE LARGEST MUSIC SHOP ON THE SOUTH COAST

SYNTHESIZERS & KEYBOARDS

YAMAHA	
SY77 one only	£1225
SY22 demo	£499
TG77 expander	£999
TG55 expander	£425
TG33 expander demo	£389
DX11 used	£299
ROLAND	
JV30 / JV80 in stock	POA
D50 used	£499
U20	£699
U220	£499
FP8 piano ex-hire	£1299
SC55 expander	POA
D5 used	£349
Juno60 used	£249
KORG	
01/W - 01/Wfd in stock	POA
M3R expander	new low price
EX8000 expander used	
Ensoniq SQ2 used	£999
Ensoniq SQ1+ demo	£899
Emu Proteus full range	low prices
Kawai K1 used	£299
Kawai K1 mkII used	£375
Akai MX1000 mother keyboard in stock	

SEQUENCERS

YAMAHA	
QX3 used	£399
QX5 used	£179
QX10	£199
ROLAND	
MC300 used	£299
MC50	POA
SB55	POA
Atari packages always available	
Steinberg Cubeat V2.0	£139
Steinberg Cubase Mac & Atari	£299
Clab Notator	lowest price ever
Clab unitor used	£139

RECORDING EQUIPMENT

Alesis Quadraverb +	£289
Alesis Microverb III	£149
Alesis Quadraverb GT	£325
ART Multiverb LT	£149
ART Multiverb Alpha	POA
Korg A1 one only	£799
Yamaha FX500	£269
Yamaha EMP100	£199
Soundtech 31 band stereo graphic	£149
Fostex X26 now with free para eq	POA
Fostex X18, X28	in stock
Yamaha MT 120	in stock
Tascam 424, 488, 644, 688	POA
Tascam Porta 2HS	£499
Tascam Porta 05 HS	£299

Multi track deals always available on Fostex, Tascam, Studiomaster, Allen & Heath, phone for details.

ROLAND JX-1 SYNTHESIZER

- 61 NOTE TOUCH SENSITIVE KEYBOARD ● BUILT IN REVERB & CHORUS
- 32 SAMPLED SOUNDS & VOICE COMBINATIONS ● MIDI IN/OUT/THROUGH
- SYNTHESIZER PARAMETERS INC. CUTOFF FREQUENCY, ATTACK & DELAY
- THE JX-1 IS EXTREMELY EASY TO USE AND IS AN IDEAL WAY OF EXPANDING YOUR EXISTING KEYBOARD SET-UP

ORIIGINAL RECOMMENDED RETAILPRICE £549 EDDIE MOORS PRICE **£299**

KAWAI K4R MULTI-TIMBRAL SYNTH MODULE

- RACK MOUNTED VERSION OF THE K4 WITH INDIVIDUAL OUTPUTS

ORIIGINAL RECOMMENDED RETAILPRICE £869 EDDIE MOORS PRICE **£299**

KAWAI K4 DIGITAL SYNTHESISER

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

ORIIGINAL RECOMMENDED RETAIL PRICE £895 EDDIE MOORS PRICE **£549**

KAWAI K1R DIGITAL SYNTHESISER RACKMOUNT

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

ORIIGINAL RECOMMENED RETAIL PRICE £449 EDDIE MOORS PRICE **£259**

RHODES MK 60 DITAL PIANO

- 64 NOTE KEYBOARD & OCTAVE SHIFT ● IN BUILT FX ● FULLY WEIGHTE3D ACTION
- 8 HIGH QUALITY DIGITAL SOUNDS, INCLUDING : VIBRAPHONE, CLAVICORD, ELECTRIC & ACOUSTIC PIANO

ORIIGINAL RECOMMENOED RETAIL PRICE £1299 EDDIE MOORS PRICE **£549**

ROLAND KR55 PCM KEYBOARD

- 76 NOTE TOUCH SENSITIVE KEYBOARD ● 24 HIGH QUALITY SAMPLED VOICES
- FULLY COMPATIBLE WITH ROLAND U SERIES SOUND CARDS ● BUILT IN REVERB & CHORUS ● MIDI IN/OUT/THROUGH ● TUNE AND TRANSPOSE FUNCTION

THIS STUNNING KEYBOARD ORIIGINALY RETAILED AT £1320
WE NOW HAVE A LIMITED QUANTITY AVAILABLE FOR ONLY **£799**

DRUMS

Korg S3 demo	£399	Emu Procussion	POA
Roland R8M	£399	Simmons Trixer used	£499
Roland R8 demo	£399	Yamaha RX30	new low price
Alesis D4 used	£279	Yamaha RX7	£229
Alesis SR16	POA	Roland TR626	£149

DAT MACHINES

DA7 portable	£349
Teac DAP20 studio use only	£439
Sony DTC750ES	new low price
Yamaha DTR2	in stock
Tascam DA30 one only	£939

SAMPLERS

Roland S750 in stock	POA
Roland W30 used	£999
Ensoniq EPS16+ demo	£1399
Akai S950, S1000, S1100	in stock, low prices
Akai S612 & MD80 disc drive, used	£249
TMC 44Mb removable SCSI drive	£599

EXCLUSIVE OFFERS

ALL ITEMS ARE NEW, USED OR EX DEMO.

Korg M1 workstation	£899
Korg WS1 wavestation	£899
Roland MV30 studio M	£999
Yamaha TG77	£999
Yamaha SY55	£675

ALL PRICES ARE INCLUSIVE OF V.A.T.

➢ And there's no sign of the flood of sample CDs abating - Stratton intends to add to the Zero-G series, Gabriel has another disc up his sleeve, Coldcut are about to make some of their eclectic library public on a sample CD and there's talk of other - as yet unidentified - "name" artists eager to contribute. Meanwhile, Harris is confident that there's plenty left for him to do with *Beats Breaks & Scratches*. . .

"I remember buying a couple of those at Record Shack in Berwick Street", says Harris of Liebrand's album. "At the time I was DJing at the Camden Palais. And I thought 'What a good idea'. Virtually the whole of that was done on a LinnDrum, so on one side it was really 'Ben Liebrand playing with a LinnDrum' and on the other it was 'Ben Liebrand playing with whatever synth was in the studio' making stab noises and wind noises. I used that album to death - I put it all over the mixes I was doing for Capitol Radio and scratched it to death. Two or three years later I thought 'Why the hell hasn't anyone done another one?'. I'd ruined my copies and you couldn't get it any more, so it seemed the obvious thing to do."

Simon Harris: "I'm trying to give people the tools to be creative; I'm not trying to be creative myself in releasing these albums."

Surrounded by the trappings of a well-equipped MIDI studio, hot nights behind a couple of turntables seem a long way behind Simon Harris. Yet in the course of quizzing him about his CDs and the issue of sample CDs in general he repeatedly refers to the requirements of less wealthy musicians and DJs, and expresses his determination to give value for money. He's not too sure that everybody else does.

Beats Breaks & Scratches Vol 1 appeared in 1987 and contained beats programmed on the hip machines of the day - Roland's TR808, TR909 and TR727 - rather than breakbeats taken from other records. In contrast to the current trend of cramming as many samples onto a single disc as technology will allow, there were just 12 rhythm patterns accompanied by 30 one-shot samples including whistles, vibraslaps, scratches, and sound effects.

"I just built the rhythms on the 909", he explains, "and I borrowed Derek B's - who was then an un-famous Derek B - 808 and I rented a 727. I linked 'em all up together, took a single output into a little disco mixer and recorded straight onto my Tascam 32. Then I edited leader tape in between the tracks. On the b-side I thought I'd stick down a few of the scratches that I had on tape for my remixes. When I did a remix I'd always take with me a reel of tape with my bits and pieces on, and those were my 'bits and pieces' and a few noises from a Casio CZ5000."

Harris claims never to have anticipated doing any further volumes, but the success of the first - and that of the series as a whole - determined that he should.

"We just wanted it to be as cheap as possible to put together", he says. "It didn't cost anything - there were no artists' fees, no producers, no nothing. It started selling, but it didn't sell in huge numbers. To this day the first album has done about 15,000 copies because the sales have never eased off. The second album started off, picked up and stayed at the same sales rate. And the third one. . .

"In America, a lot of the DJs would take drum machines into their clubs and I thought it would be a good idea to give people those drum machines on a record so that they could mix it in the usual way, but with it already programmed with current rhythms. In a way it was something I'd done for myself, so that I didn't have to take a 909 into the clubs. The basic principle, the reason why the albums have all been so successful, is that they're non-artistic. They're not meant to show me off, they're not meant for people to sit down and listen to and decide whether they liked it or not. It was purely to give people access to technology they couldn't afford or that they couldn't program instantly. Basically I try to make them a useable demonstration of all the technology that you can muster up on the DJ front."

By the time of the second volume, Harris was using a Sequential Studio 440. "The only album that was limited in terms of it all being done with the same drum machines was the first one. All I wanted was an answer to the Ben Liebrand album: a more up to date one with electro rhythms and 808 sounds. Those were the days when not a lot of people knew what an 808 or a 909 were in terms of its sounds. There were just these sounds that appeared on Chicago house records and New York electro records. I moved onto breakbeats because they were the next big thing."

Big they were. And with them they brought the full impact of the possibilities and problems of sampling other artists' material - not merely that of taking the initial sample, but also selling it to other musicians to use. The situation was exacerbated by a flood of bootleg albums containing samples which were hot, but which gave little respect to the copyright laws.

"Americans have been doing that kind of thing for years", comments Norman Cook over the phone from his bathroom. "There was a thing called *For DJs Only* which gave you acappellas, and there was *DJs Greatest Bits* which were just pressed as 12" bootlegs. They're

all very illegal, that's why people often don't know who the original artist was.

"The worst example was *Acappella Anonymous* which was a bootleg of acappellas of famous New York garage stuff which was imported in huge amounts to Europe and Italy particularly, whereupon every Italian dance tune for the next year-and-a-half - including 'Ride On Time' by Black Box - came off this one album. If you play it you hear hit after hit. In the Black Box court case they said 'We didn't know who did the original, we just got it off this album called *Acappella Anonymous*'."

When the opportunities opened up by sample CDs became another Big Thing, Harris set about transferring the entire *Beats Breaks & Scratches* catalogue, making his exclusive production library readily available to anyone with a sampler and CD player.

"It was an obvious thing to happen, wasn't it?", he says of sample CDs. "CD is the ultimate manageable medium. It's not like sample discs where you're selecting things from a menu and then loading them into your sampler before you can hear them - you can listen to sounds, decide what you want and load them in. I can see the breakbeat thing still being around for many years to come, but probably in a totally different form. I still intend to be doing *Beats Breaks & Scratches* in the year 2090. Well, for a long time, anyway. And I hope that Ed Stratton's doing his stuff in many years to come too, because people have a right to buy whichever they want - or both."

Fair comment, but the issue of copyright hasn't gone away simply because the material is presented in a new format. All parties involved are acutely aware of the fact - if their attitudes differ.

"I was quite respectful of copyright", claims Pascal Gabriel, fresh out of the recording studio. "I had loads more drum loops than were used on the CD. Once I'd compiled it and listened to it I thought I might be on dangerous territory. If a drum loop is used in a record and it's covered with other instruments, it's quite easy to get away with using it, but to actually sell a drum loop that's not yours on a CD that people are going to buy on the back of your name is dodgy. The drum loops you hear on my CD are either from sessions I have done or from records that I've had some involvement with. I guess there are a couple in there that are slightly dodgy but they're the obscure ones."

"My attitude is that my samples came from so many different sources that, in a great many cases, I've got no idea where they came from", comments Stratton - alias Man Machine - from his Hertfordshire studio. "Some of them are off records and some I actually created or are taken from sessions I've engineered over the years. These are usually the best because they're unique - this is their first use.

"It's such a murky, murky area", he continues. "The rules I use are: that samples should be short, that they should be describable as sound effects or non-melodic samples. If there's anything that's come off anybody else's recording, I make sure it's very short or non-melodic - breakbeats mustn't have a bassline, for example.

"Every sample is unique and raises its own questions. A rhythm loop raises the question 'If somebody made a whole track out of what is essentially somebody hitting some drums for one bar - two seconds - is the whole track owned by the person who played that one bar?'. In my opinion, if there's no music, if it's only percussive, then it's really a loop of sound effects. I don't really agree that it's an infringement of copyright. I don't think there's been a case where anybody's been sued over a one-bar or even a two-bar loop that didn't contain any bass or melody - like a vocal sample where the sample is so clear that it's obviously a particular artist.

"I've got a set of vocal samples for Datafile 3, of a guy who imitates James Brown to the point that there isn't really any difference. You'd have to use pretty sophisticated equipment to analyse the sounds before you could tell who it was. But if someone's voice gets used more than anyone else's then they also get the benefit of being raised in the public eye. This is why, when it does happen, the person doesn't usually mind too much. Even Lolleata Holloway (the sampled artist in 'Ride on Time'), who was so upset about it, still did quite well out of it in the end."

Norman Cook: "In the Black Box court case they said 'We didn't know who did the original, we got it off this album called Acappella Anonymous'."

Stratton's judgement is largely based on his experiences as part of house act Jack 'n Chill: "For the sample we used on 'Beatin the Heat', which I sampled from *For a Few Dollars More*, we did a deal with Ennio Morricone's publisher before releasing the track. He got 5% of the whole of the publishing for that one little sample - that's totally fair."

➢ "I think you just have to use a bit of discretion and think how you'd feel if it was you being sampled. I've based my criteria on everything that's gone before; Simon Harris has been selling his stuff for years, and some of that's come off records, so I can do the same. In my opinion his stuff is much more dodgy than mine. It's become an instinct with me now - in the day of Jack 'n Chill there were a lot of things we'd have liked to use but we didn't dare. Looking at it now, I think we'd have got away with it. We were much more conservative then but over the years I've gradually learnt what's acceptable and what's not."

Pascal Gabriel: "If a drum loop is used in a record, it's quite easy to get away with, but to actually sell a drum loop that's not yours. . ."

Coldcut's Matt Black explains their position: "We've always said we're against wholesale biting of substantial pieces - a whole chorus or even a few words if they are extremely distinctive. You can't steal the heart out of something and make that your own. Our technique has always been to use small bits and make a mosaic - you can recognise some of the elements, that's part of the fun, but no one element is necessarily dominant.

"It's a very harsh thing and I can see both sides of it. Noise is free, but music isn't necessarily free. If I write a song and you steal my song, you've stolen my ideas and that isn't right. If I do a sample tune and you copy it exactly, that's not right either. But if I use a small piece of something, I've paid for the record and in a way I feel I'm entitled to use that raw piece.

"On the one hand you can say an artist and a record company paid for this to be recorded and you are stealing that work from them. The other side of it is that in the States now you have to get pieces cleared and you usually have to do a publishing deal as well. And I think, for large pieces, that is fair. But artists shouldn't look down on samplers because as George Clinton observed, 'De La Soul pay real well' (see interview in this issue). He's probably seen more money from his work being used by De La Soul and other people sampling P-funk than he himself has generated in the last ten years. It would be silly for an artist to say nobody can sample anything I do, but they do have a right to get involved if you get too greedy. Music's got to grow; artists of whatever generation realise that when they look back. As James Brown said 'Everyone's got to make a living. . .'."

"The whole copyright thing on the *Beats Breaks & Scratches* albums is dodgy territory", concedes Harris. "A lot of people know that where the samples have come from is old records that aren't necessarily ever going to sell again. I believe that if you can make a breakbeat from an obscure record famous, then it's up to the original record company to re-issue the original record - which will then sell bucketloads more than the *Beats Breaks & Scratches* album because it's primarily aimed at DJs. They're not aimed at the general public, so people aren't going to buy them instead of the original. None of my albums is going to chart in a million years.

"The one break I've never used - out of respect - is the No. 1 breakbeat of all time, 'Funky Drummer'. That is the one record that sells *because* of the breakbeat. People bought the James Brown *In the Jungle Groove* album because it had the 'Funky Drummer (Bonus Beats Reprise)' edited by Danny Krivit.

"Another thing is, when I make an album I grab something - a CD or an album or whatever - take the break and put it down without really working out where the hell I've got it from. I'm not an expert on music - Norman Cook is an expert, he can tell you exactly where a breakbeat comes from, who produced it, who recorded it. . . With me, I'll release a load of breakbeats on an album and I don't know where the hell they came from. All I know is when it's a good break and when it works technically - it must loop properly and stay in time."

The other side of the sampling coin is when the samplers become the sampled; the biters become the bitten.

"There was one time that it was upsetting for me", admits Harris. "I don't think any of us have really got any right to say 'You mustn't take this', because everybody's guilty of it now, there's no-one who *doesn't sample*. Everybody at some point goes into a studio and finds an odd snare from a Queen record or a James Brown record and decides it's going to work on their track. *Everybody*'s done it. Pete Waterman said 'I'm not going to sample anything; all samplers are bastards! Everybody should play guitars and pianos.'. And what's he done? He's released 'Get Ready For This', by 2 Unlimited, which uses a sample off of my Derek B record, 'Yeah, Yeah' from *Good Groove*. Yet he's the one who stands up and says. . . So everybody does it. I've got great respect for Pete Waterman, but nobody should stand up and say 'You mustn't sample'. I think that the most important thing is that people do it in a creative way. It's no good if you just go and make a copy of something based on samples from the original. I'm trying to give people the tools to be

creative; I'm not trying to be creative myself in releasing these albums. If I can help other people be creative, that's great. That's all I'm trying to do. I'm not precious at all about breakbeats now because I know everybody's gonna use them in a different way. I may use a break in one way but I know somebody else will use it in a far different way."

"I don't believe that anybody who puts together one of these CDs doesn't nick half of it off records anyway", Cook contends, "And thieves can't be worried about being thieved off. It's like musicians who say 'Home taping is killing music' - if you go round their house I bet you'll find they've got loads of other peoples' albums taped. There can't be two standards for it."

The loss of control effected by making your sample library "public" itself raises questions. Firstly, you have to consider a sample CD selling just one copy because it's been sampled by the remaining potential purchasers.

"It's a fact of life", comments Cook. "It's a risk you have to take."

Alternatively, what if someone other than the originator of a sample CD scores a chart hit with a previously unused sample gleaned from a sample disc?

Coldcut's Matt Black replies: "Obviously we'd feel a little bit gutted. But we've always said speed is of the essence, and if you're hot and move fast, then good luck." ■

Sample CDs raise many other questions, concerning such considerations as the exclusivity of personal sample libraries, the pre-selection of your samples by other parties, the technical aspects of compiling a sample CD and the future of the medium in terms of both music and technology. These issues will be addressed in next month's Music Technology.

Matt Black: "It would be silly for an artist to say nobody can sample anything I do, but they do have a right to get involved if you get too greedy."

SELECTED DISCOGRAPHY

THE ORIGINAL 'WILD STYLE' BREAKBEATS ALBUM
DJ Black Steel/Music of Life
Contains 13 approx 3-minute loops plus samples and scratches.

STARMIX
Norman Cook/Music of Life
Contains 11 approx 3-minute loops plus samples and scratches.

KLEPTOMANIA! Vol 1
Coldcut/Hit Music Productions (AMG)
Contains approx 400 assorted breaks including drum, percussion, heavy, weird.

PASCAL GABRIEL'S DANCE SAMPLES
Pascal Gabriel/Hit Music Productions (AMG)
Contains 71 1-bar or 2-bar rhythm and percussion breaks plus samples and scratches.

BEATS BREAKS & SCRATCHES Vols 1-8
Simon Harris/ Music of Life
Series contains 11-13 approx 3-minute loops per CD plus samples and scratches.

STRETCHBREAKS Vol 1
Simon Harris/ Music of Life
Contains 14 approx 3-minute timestretched loops.

BREAK BEATS Vols 1 & 2
(One CD; Vols 3-7 also available on vinyl)
The Original Unknown DJs/Warrior Records
Contains 29 approx 2-minute loops plus samples and scratches.

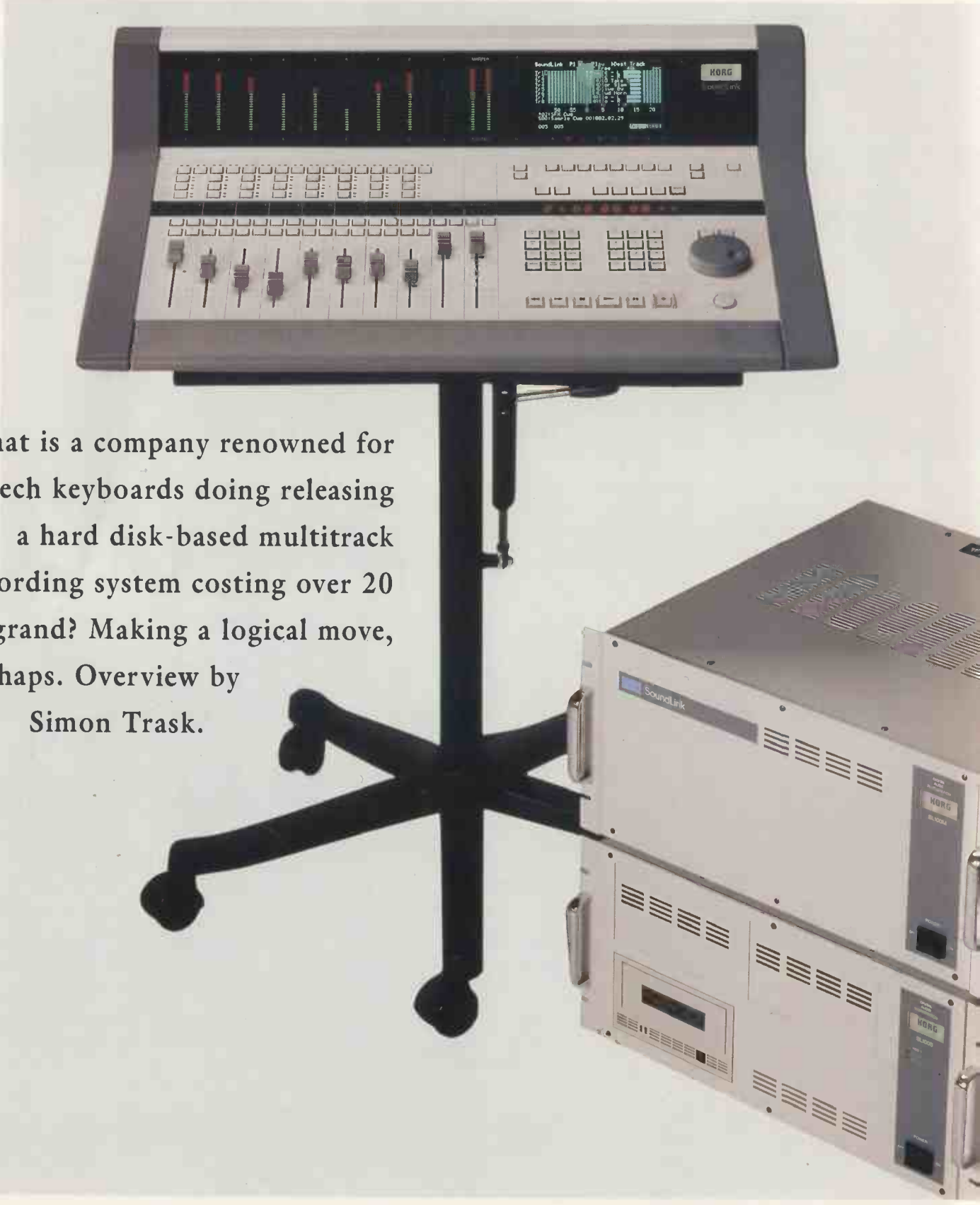
ZERO-G DATAFILE 1-3
Ed Stratton/Time & Space
Contains 52 (Vol 1)/100 (Vol 2) 1-bar or 2-bar breaks plus samples and scratches.

AUDIO QUEST 2 BREAKS GROOVES & RHYTHMS
Thomas Tibert & Erik Svahn/Audio Quest (AMG)
Contains approx 320 1-bar or 2-bar breaks.

X-STATIC GOLDMINE
(two CDs)
Thomas Tibert & Erik Svahn/(AMG)
Contains 512 breaks plus samples and scratches.

Contacts:
AMG: Tel (073088) 383
Music of Life: Tel 071-631 3846
Time & Space: Tel (0442) 870681
Warrior Records: Tel 071-490 5475

SOUNDLINK



What is a company renowned for hi-tech keyboards doing releasing a hard disk-based multitrack recording system costing over 20 grand? Making a logical move, perhaps. Overview by Simon Trask.

DROPPING THE PRICE of almost any commodity is a good way of promoting interest in it. From the early projections, the total cost of Korg's SoundLink hard disk-based recording system has fallen by some £7,000. The asking price for this state-of-the-art digital recording and editing system with integrated MIDI sequencing facilities now sits at £23,000 - and that's *including* VAT. What that buys you is the SL100C console, ST-SL100C stand, SL100M main rack unit and SL100S storage rack unit. The console is the operational centre of the system, and so it's important that Korg have the presentation and the user-interface right. The company have opted for a console layout which attempts to keep things as familiar and as visible as possible, without looking too cluttered and daunting. My impression is that they've struck a very successful balance.

The left-hand half of the console has been given a familiar mixing desk-style layout, with a fader for each track plus a MIDI fader and a Master fader. Other track-specific - or rather, channel-specific - controls include Mute and Solo buttons, Line/Track select button and Record select button. Located above these, running across the width of the eight channel faders, are 16 buttons for the 16 tracks in the onboard MIDI sequencer (more later), while running across the top of the front panel are the audio level meters.

Occupying the right-hand half of the console are tape transport-style controls, a Store Mark button for creating Marks on the fly (which you can subsequently use for cutting up sections of tracks, for example), a numeric keypad and infinite rotary wheel (for locating and editing), dedicated buttons for accessing SoundLink's modes and functions, an LED display (which can display the current location in a recording in bar/beat or timecode values), soft buttons, and cursor up/down and page up/down buttons for navigating around the software pages. The console has a black and white display built into it, but you can also plug in an external RBG monitor for a full-screen colour display of the currently-selected software page.

The stand allows the console to be angled forward for the optimum working position, while underneath the console a tray containing an IBM-compatible computer keyboard can be slid out whenever you want to type in a text entry, then slid back out of sight again. All in all it's a very neat arrangement.

The console's rear panel is positively bristling with connections. To begin with there are eight XLR A/D inputs (16-bit linear, 44.1kHz or 48kHz, 64 x oversampling) and ten XLR D/A outputs (individual channels and master L/R, 18-bit linear with eight x oversampling). There are also connections for timecode in/out, metronome out, VITC and house sync input, AES/EBU and S/PDIF digital ins and outs, a 9-pin serial RS422A connector for machine control of U-matics, and two sets of MIDI In, Out and Thru sockets (one handling standard MIDI performance data, the other dedicated to MIDI Time Code).

The SL100S storage unit comes fitted with a 680Mb formatted Hitachi hard drive, slots for another two optional drives, and an Exabyte 8mm tape streamer unit for backing up the data on the hard disk(s). An optional second storage unit has slots for another three hard drives, giving the system a maximum capacity of six 680Mb formatted hard drives; a fourth slot on the second unit is intended to hold a magneto-optical drive as another backup medium - but, as of writing, it hasn't been decided whether the drive is to be 5.25" or 3.5".

The single hard drive SoundLink comes fitted with provides enough storage capacity for 120 minutes of 16-bit 44.1kHz digital audio - so a fully-expanded Soundlink system would be able to handle 720 minutes, or 12 hours. Of course, if you were to allocate that time evenly across SoundLink's eight tracks you'd get 90 minutes per track. But SoundLink doesn't force you to work in any particular way - you could use up all 720 minutes of recording time on one track - the multitrack tape analogy doesn't hold up when you're working in the disk-based digital audio domain. In fact, disk-based audio recording has much more in common with multitrack MIDI sequencing than with tape, conceptually. For instance, although SoundLink operation and editing is based around a multitrack model, the flexible way in which you can piece together tracks using Sounds (recorded audio data) and Segments (sections of Sounds) is more like, say, Cubase. In fact, disk-based audio recording is the only form of audio recording which provides the same sort of flexibility in the audio domain that a sequencer gives you in the MIDI domain.

SoundLink can record eight tracks at once if need be, and of course play back eight tracks at once, too. Tracks can also be bounced down digitally - so you could bounce down as many as seven tracks onto the eighth track. Tracks appear as strips running from right to left across a Play head (a vertical cursor bar) located in the middle of the screen.

TRACK RECORD

RECORDING TO DISK is a completely dynamic process; tracks needn't be tied into any particular hard disk - in fact, any audio data stored on any hard disk in the system can be assigned to any track. SoundLink is also a non-destructive editing system, so it allows you to cut up recorded audio data (a Sound) into many different Segments ➢

➢ without affecting the data on the hard disk. This is because it defines Segments by means of address pointers into the Sound data on the hard disks.

One feature of SoundLink which could only be achieved using a computer-based recording system is recording multiple takes on the fly. You can get SoundLink to loop around a specified record section, drop in and out of record on each pass, and automatically store each take separately so that you can later go back and listen through to them to find the best one. Time-stretching of digital audio is something else you can do with SoundLink, and it works extremely well, too.

"Korg have built another bridge between the MIDI and digital audio worlds by allowing 01/W Songs to be transferred via MIDI into SoundLink and vice versa."

A Session groups all the data relating to a particular recording session, so loading in a Session automatically configures SoundLink for that session - that is, it loads in synchronisation and digital I/O settings, EQ, effects and mix automation, MIDI sequences, internal effects patches and all the pointers to the Sounds and Segments recorded and created on the session. Up to 100 Sessions can be held on the disks, while the total number of samples you can have on the hard disks (spread across all the Sessions) is 2000. When it finally comes time to back up the data - and so free up the hard disks for new work, you can use the Exabyte tape streamer, which uses very cheap 8mm videotape cassettes; an Exabyte backup can store *all* the data on the hard disks. However, sensible practice dictates that backing up to tape should be done at the end of every recording or editing session.

Onboard effects processing on SoundLink is provided by a scaled-down version of Korg's high-end A1 effects processor - scaled down in the sense that it provides just three programmable reverb effects: Room, Hall and Plate. The reasoning is that smooth operation in the digital audio domain is paramount, and changing between disparate effects could produce glitches.

If you want to patch in any more effects, this has to be done via the digital ins and outs. This means that you can only patch in effects processors which themselves sport digital connections (and, surprise surprise, the A1 does just this).

One of the most powerful aspects of SoundLink is mix automation. You can record fader movements and mute on/off hits (up to 30,000 fader and mute events), and draw on up to 200 EQ and 200 effect send Snapshots, 200 effects patches and 200 digital limiter snapshots, all of which can be placed with great precision into a recording (in fact, to 1/80th frame resolution). A neat feature of fader automation editing is that when you start recording over a section, SoundLink doesn't actually start recording your new fader movements until the physical fader passes over a recorded fader location - therefore avoiding the problem of fader "jumps".

It should come as no surprise, given Korg's involvement in MIDI-based music-making, that SoundLink should have a MIDI sequencer built into it - nor that this sequencer is basically the 16-track sequencer on Korg's 01/W synth with a few extra features which relate to the different environment of SoundLink. Most obviously, you can swap between bar/beat and timecode representations of position in the sequencer; in fact, this ability to switch between time- and beat-based location displays is something which Korg have implemented throughout SoundLink (even on the front panel of the console) in order to allow the flexibility of moving between the audio and video worlds.

More dazzling is a function which not only fits a MIDI sequence into a specified time but also preserves the tempo track by recalculating the tempo changes to fit the new "time frame".

Korg have built another bridge between the MIDI and digital audio worlds by allowing 01/W Songs to be transferred via MIDI into SoundLink and vice versa. MIDI Songs in SoundLink can be Started from any location within the Session; in effect, they're just more blocks of data to be slid around and positioned like the Sounds and Segments. Up to 20 Songs and 50,000 MIDI events can be recorded within a Session. If you want to use a computer-based MIDI sequencer with SoundLink, you can always turn to the MTC output on the console's rear panel and connect up a sequencer like Steinberg's Cubase or Opcode's Vision which syncs to MTC - though this won't provide the degree of integration between MIDI and audio which you get with the onboard sequencer.

VERDICT

SOUNDLINK IS NO hesitant first step into unfamiliar territory, but a solidly professional product which knows where it's at and knows where it's going - which unfortunately isn't presently into the clutches of MT. I've attempted to do no more than give an overview of the system here, based on an afternoon's encounter with it at Korg's UK HQ. Disk-based multitrack audio recording may still be an expensive business, but it is slowly working its way down the price spiral - witness also emerging new systems such as Digidesign's Pro Tools and Roland's DM80. But rather than make any immediate impact on the lower end of the recording market, SoundLink is more likely to give the likes of AMS and Digital Audio Research sleepless nights ■

Price *£23,000 including VAT*
More from *Korg UK, 8-9 The Crystal Centre, Elmgrove Road, Harrow, Middlesex HA3 2YR. Tel: 081-427 3397. Fax: 081-861 3595.*

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 Quadra & 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 system software 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 or peripherals by mail order.

The last ever Macintosh Classic FD computers in the UK are in stock now at **£675**

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

SOHO SOUNDHOUSE / TURNKEY
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 · AKG SHURE · dbx
KORG · ensoniq · ALESIS · SONY · ZOOM

SPECIAL OFFERS

RHODES MK60 weighted piano great acoustic & electric piano sounds **£549**

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 discontinued

Each channel has a long-throw (100mm) fader, 4 auxiliaries 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

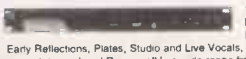
R.R.P. 1282 - £1299 1882 - £1799

£735 inc VAT £10 P+P — 12:8:2 NEW BOXED

£969 inc VAT — 16:8:2 £10 P+P

ATARI 1040 + C-LAB Creator + mouse + SM-124 Monitor £734

ART MULTIVERB LT 16 BIT SIMULTANEOUS EFFECTS PROCESSOR



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

£147 inc VAT including carriage — NEW BOXED

ATARI 1040 + C-LAB Notator + mouse + SM-124 Monitor £834

STUDIO RESEARCH KEYBOARD / LIVE RECORDING MIXERS

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

0% Int Free Credit

PACKAGE PRICES

6:2 **£199** INC VAT

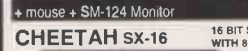
12:2 **£299** INC VAT

16:2 **£369** INC VAT

NEW BOXED

ATARI 1040 + Steinberg Cubase + mouse + SM-124 Monitor £804

CHEETAH SX-16 16 BIT STEREO SAMPLER WITH 8 SEPARATE OUTS

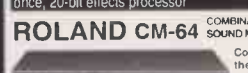


Scoop purchase makes this the cheapest 16 bit stereo sampler and is cheaper than most 12 bit mono machines. Sample up to 48kHz in stereo, playback through up to 8 separate audio outputs. 512k base memory with optional 2 Meg expansion, disk drive compatible with Akai S1000, S950, S900, Lynex disks (DD only). Optional TV modulator for graphic waveform editing. Scrub facility allows 'scratching' of samples with the mod wheel. End of line clearance. R.R.P. £799

£575 INC VAT £9 P+P — NEW BOXED

YAMAHA SPX900 5 effects at once, 20-bit effects processor **£499**

ROLAND CM-64 COMBINATION SOUND MODULE

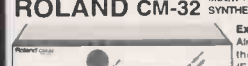


Combines the sounds of the D-110 and U-110. Unique Spec - sixty-three note poly, 15 part multi-timbral. Synth section offers 128 D110 sounds, editable from PC/Mac/Atari, and is up to 32 note poly. Sample-player section offers 64 U110 sounds including beautiful Vel Mix pianos, with 31 note poly, 6 parts. Accepts all 12 U110 sound cards. 32 piece Drum kit, over 40 sampled sound-effects (works with computer games) Reverb unit has 7 editable algorithms with individual pan switches These unbeatable units are only available from Soho Soundhouse / Turnkey and there won't be enough to go round. Don't wait! R.R.P. £789

EXCLUSIVE PRICE **£299** INC VAT +£9 P&P — NEW BOXED

ROLAND JX10 76 note keyboard with super analog synth - mint condition **£599**

ROLAND CM-32 MULTI-TIMBRAL SYNTHESIZER MODULE



Exclusive offer, Almost entirely based on the legendary D110. (Exactly the same sound spec except there are 33 drum sounds). LA synthesis gives you a choice of sampled and synthesized sounds, the same combination as the highly acclaimed D50. A huge library of sounds can be down-loaded via MIDI - expensive ROM cards are not necessary. 9 Part multi-timbral, 32 partial polyphonic. Edit or control from keyboard or computer (Mac, PC or Atari). We have the last available units. R.R.P. £369

EXCLUSIVE PRICE **£165** INC VAT +£9 P&P — NEW

CLASSIFIED

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

40% OFF • SECOND

SYNTHESIZERS	
Cheetah MS6	£269
Ensoniq VFX-SD	£1056
Ensoniq SQ-1+ new	£1199
Ensoniq SQ2 new	£1299
Ensoniq SQR+ new	£749
EVS1 + editor	£187
Kawai K1Mk2	£399
Kawai K1R	£257
Kawai K4R NEW	£299
Kawai Spectra NEW	£349
Korg M1 mint	£895
Korg M3R	£529
Steinberg Cubeat new	£79
Steinberg Pro24 viii	£70
Steinberg Midex Plus	£349
C-LAB Creator	£260
C-LAB Notator	£399
MOTU Performer	£RRP
MOTU TimePiece	£RRP
Atari Mega 4 + Mon	£599
Atari 1040STE + Mon + mouse + Pro24 VIII	**£529**
+ C-LAB Creator	£734
+ C-LAB Notator	£834
+ Steinberg Cubase	£804
+ Steinberg Cubeat	£645

Studiomaster MA36 MIDI Analyzer - £23

Korg T3 s/h	£1522
Wavestation	£999
Roland SC55	£425
Roland D5 s/h	£399
Roland D5 NEW	£469
Roland D70 s/h	£1299
Roland D10	£482
Roland D20 NEW	£699
Roland JD800	£1299
Roland JX1	£249
Yamaha SY77	£1233
Yamaha SY55 new	£586
Yamaha SY22	£549
Yamaha TG77	£939

EFFECTS

Art IEQ Midi EQ	£295
Alesis Quadrverb+	£305
Alesis Gate	£99

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

Alesis Limiter	£99
Alesis MEQ230	£229
Alesis microverb II	£99
Alesis microverb III	£205

JBL 2500 near field monitors £115 each

Yamaha TG33	£379
Yamaha QY10	£199
Alesis microcomp	£88
Alesis MIDIVerbIII	£217
ART SGE II	£452
Aphex Type C s/h	£169
Boss SE50 lowest UK price	
Lexicon LXP1/5	£346
Symmetrix 511	£POA
Yamaha SPX900..	£485
Yamaha SPX1000	£699
Yamaha FX500 s/h	£210
Yamaha R100	£129
Yamaha GSP100	£59
Yam GC2020B NEW	£176

SAMPLERS/PLAYERS

Roland S750	£POA
Cheetah SX16	£579
E-mu Emax II	£1408
SyQuest R45 H/Disk	£599
Akai S900 s/h.....	£699
S950	£1025
S950 750k card	£135
Akai S1000	£1999
S1000 + SyQuest	£2699
Akai S1000KB	£2175

S1000/S1100 8 meg expansion card £350

Akai S1100	£2701
Akai S1000 HD	£2231
S1000 2M cards s/h	£129
S1000 8 meg card	£350
E-mu Proteus/1	£575
E-mu Proteus/1XR	£752
E-mu Proteus/2	£910
E-mu Proteus/2XR	£1049
Roland W30 NEW	£1199
Roland W30 used	£999
Roland U20 demo	£649
Rhodes 760	£695
Roland U110	£399
Roland U220 used	£449
Roland U220 NEW	£469

PORTA STUDIOS

All Portastudios ow FREE mic, hi-phones, tapes, cables, demag, cleaner, tutorial, pau etc

Tascam 488 8 trk	£POA
Tascam 688	£POA
Tascam 644	£POA
Tascam Porta 2new	£399
Tascam Porta 05	£POA
Tascam Porta 03	£POA
Tascam 424	£POA

Roland U220s here at last - £469 NEW

MOTHER KBDS

Roland PC200	£129
Akai MX76	£999
Roland A80 NEW	£1169
Yamaha KX88	£1075
Cheetah Master 7P	£675
Cheetah Master 5V	£279
Cheetah Master 550	£349

PIANO KBD/MODS

Rhodes MK60 new	£549
Rhodes MK80	£1175

Fostex X26	£POA
Fostex 280	£POA
Yamaha MT3X new	£499
Yamaha MT100 II	£316

8/16/24 TRACK

A&Heath Spectrum	£3349
Akai ADAM	£8812
Fost R8 Seck1282	£1879
Fost R8 P.Line1648	£2231
TSR8 Seck1882	£2818
TSR8 P.Line 16/4/8	£2936
Studiomaster Desks :	

Yamaha SPX900 multi-effects only £499

Roland RD300S	£1015
Yamaha PF85	£749
Emu Proformance/1	£287
Emu Proformance/1+	£339
Mixdown 16/4/8	£1175
Mixdown 16/8/16	£1526
Proline 16/8/16	£1469
Proline 16/4/8	£1115

DRUM MACHINES

Yamaha RY30	£429
Alesis HR16	£175
Alesis HR16B	£176
Alesis SR16 new	£299
KORG S-3 new	£499
Boss DR550	£149
Roland R8 s/h	£399
Roland R8M	£389
Fostex R8	£POA
Tascam TSR8	£POA
Tascam MSR24	£4695
Fostex B16	£2056
Fost'x E16 GoldSeal	£2936
Fostex G16	£POA
Tascam MSR16	£POA

SONY DTC750 DAT player only £449

OTHER MIXERS

Roland R5	£234
Roland SPD8	£295
Roland PAD80 Mk2	£249
SimmonsTrxerNew	£589
Tascam MM1 20/2	£559
Fostex 2016 16/2	£POA
Fostex 454	£POA
Fostex 812	£POA
Alesis 16/2/2	£649
Seck 1282	£699
Seck 1882	£939

SEQUENCERS

Akai ASQ10	£699
MMT8 NEW	£280
Alesis Datadisk	£349
Kawai Q80	£439
Roland MC50	£435
Roland MV30	£1055
Cheetah MQ8 demo	£95

MASTERING / DAT

Sony DTC1000	£939
Sony DTC55	£539
Sony DTC750	£449
Sony TCD D3 NEW	£529
Tascam DA30	£POA

COMPUTERS &

Akai MX76 weighted MIDI keyboard £999

SOFTWARE

Cadenza 2.5 (PC)	£149
Cakewalk 4.0 (PC)	£115
Cakewalk Pro (PC)	£199
MusicQuest MIDIcard	£99
MusicQuest MQX16	£169
MusicQuest MQX16SC	£225
MusicQuest MQX32	£289
MT Pro (windows 3.0)	£289
Trax (windows 3.0)	£79
Encore (Mac or PC)	£429
Ballade 1.01 (Mac)	£99
Ballade 2.5 (IBM PC)	£169
Cpda Finale Mac/PC	£645
CASIO DA7 NEW	£420
Fostex E2 time/code	£POA
Tascam 103 3-head	£POA
ReVox A77 s/h	£
ReVox B77MkII	£819

SYNCHRONISERS

XRI 300	£186
JL Cooper ex repair	£139
Tascam Midizer	£1056
Sansui MDR7	£81
Fostex MTC-1	£

Philips Notebook PC Cakewalk Sequencer Midiator interface All for only £775 !

OpCode Vision 1.3	£410
OpCode EZ Vision	£99
OpCode Mac/MIDI I/F	£58
Macintosh Classic FD + I/F + EZ Vision	£775
Macintosh Classic 2+ I/F +Vision or Performer	£1399
St'berg Cubase New	£328

MONITORS

Groove GW2600 DJ mixer only £69

Yamaha NS10M pr	£175
JBL Control 1 s/h	£149
Yamaha A100 amp	£145
JBL Control 5 s/h	£175
JBL Control 10 e.d.	£610

D.J. PRODUCER

Numark 1975	£1034
Numark 1775	£750
Gemini PMX200	£175
Gemini PMX300	£210
Groove GW2600	%
Technics SL1200	£POA

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

SPECIAL OFFERS

ALESIS QUADRAVERB + Multi effects processor BRAND NEW **£305**

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

EXCLUSIVE OFFER **£199** inc VAT +£9 P&P — NEW BOXED

ALESIS MIDIVERB 3 NEW Simultaneous Multi effects processor **£217**

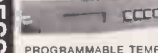
Roland D-20 The Original Synthesizer Workstation with 3.5" disk drive

The keyboard which made the workstation concept a reality, and still the best value for money for people requiring every song-writing tool in one box. The D-20 gives you a drum-machine, a reverb, a multi-timbral synthesizer, an 8 track sequencer and a 3.5 inch disk drive in a compact keyboard which can easily be taken on the road. Fully programmable synthesizer with built in Time Variant Filters, Amplifiers and LFO functions. • Mix PCM samples with fat analog waveforms to create rich and accurate sounds. • 128 Presets/64 user memories, using any combination of PCM and synthesized sound partials. • 8 on board digital reverb algorithms with decay and level parameters for each patch • 63 sampled drum sounds with separate drum machine sequencer including 64 preset and 64 user patterns. 8 track Sequencer with 10,000 event storage capacity, offers easy tape-machine style recording. We have secured the last ever batch of these best-selling workstations at an unbelievable price. R.R.P. £1275

£699 INC VAT ADD £9 carriage — NEW BOXED

YAMAHA SY22 vector synthesizer easy to program, sounds great, FX **£599**

JL COOPER PPS-100 SMPTE/MIDI Synchroniser



ALL SMPTE FORMATS • MIDI TIME CODE AND SPP POINTERS • PROGRAM CUES AND PROGRAMMABLE TEMPO CHANGES • UNIQUE RECORDER PUNCH IN/OUT CONTROL Although this unit lists at over £500 it is probably the most comprehensive and up to date unit at any less than £2000. At our price it costs less than the most basic FSK devices, making it cheap enough even for 4 track.R.R.P. £525

SCOOP PRICE **£159** INC VAT NEW BOXED

ROLAND U20 RSPCM keyboard 30 note poly, great ctrl kevbd. FX drums **£699**

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

32 audio channels • 16 note poly in stereo • 18-bit D A convertors • unique digital filering. (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 Emax II will convert all your old disks!

EXCLUSIVE OFFER 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

£1585 INC VAT NEW BOXED

ROLAND JX1 performance synth Quick and easy to use - 24 bit sounds **£299**

STUDIO RESEARCH 8 or 12 CH 500W PA SYSTEM

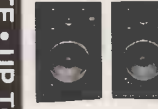
Studio Research 12:2PX MixerAmp 500w, 12 XLR/Line inputs, 3-band EQ and 2 aux per channel. Fan cooled. 2 X Studio Research (UK-made Fane drivers) 15 inch + horn cabs in bass-reflex enclosure. Unbelievable price.

£825 12 CH INCVAT £18 P+P — NEW BOXED

£699 8 CH INCVAT £18 P+P — NEW BOXED

KAWAI K4r multi-timbral 16 bit digital synthesizer, BRAND NEW. **£299**

MAXAMP 2 WAY STEREO POWERED MONITOR SYSTEM



Superb sounding stereo monitors with built in 30w amp. Decent sized two way ported enclosures (not to be confused with "micro monitors") give ample bass response ideal for small studios / portastudios Wooden finish, comes with speaker grills.

Money back if not 100% satisfied

£139 INC VAT £18 P+P — NEW BOXED

* 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.

ALL PRICES INCLUDE VAT

MAIL ORDER DEPARTMENT

VISA Access

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. Envi 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

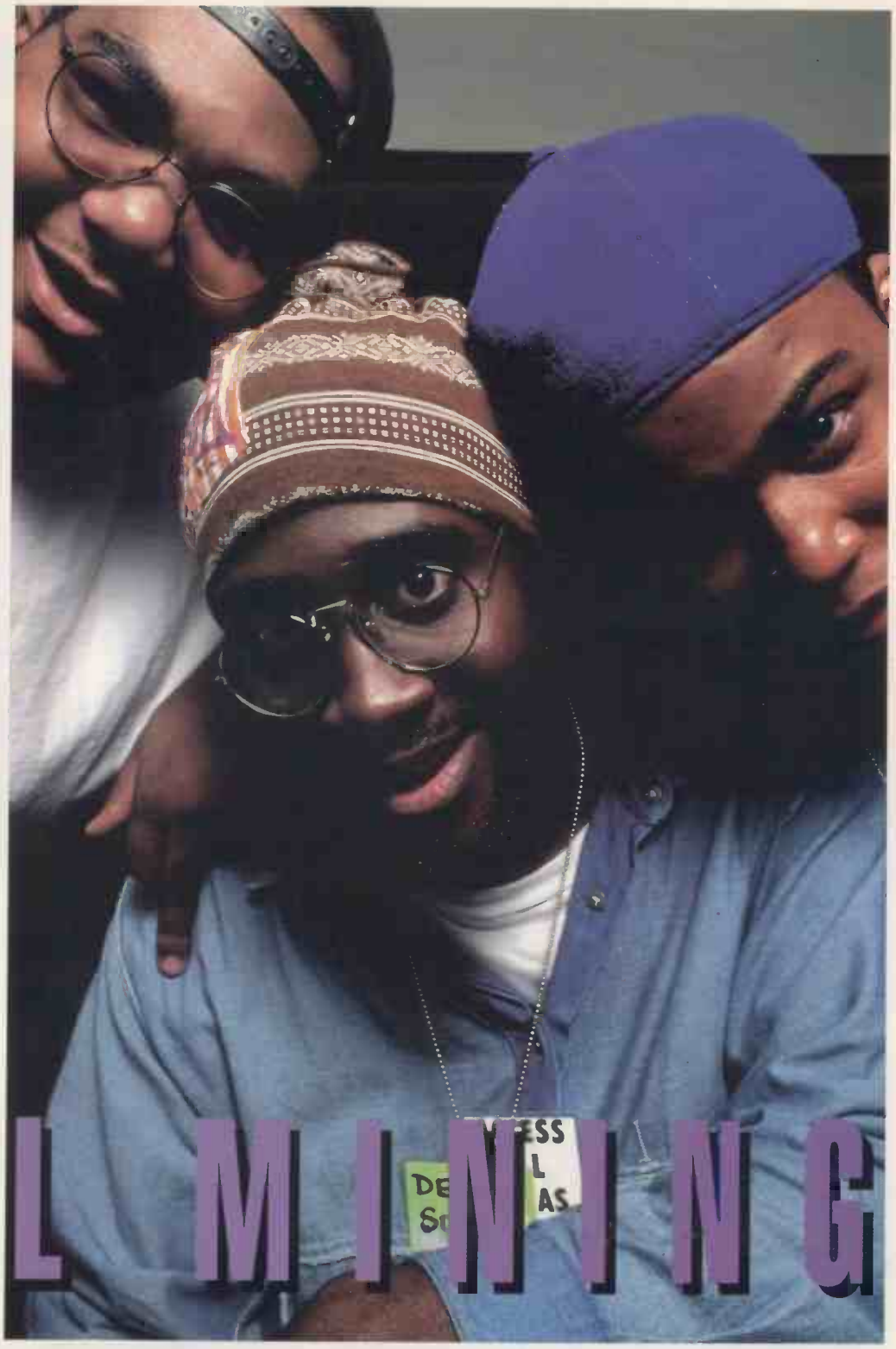
CREDIT CARD NO. | TOTAL £

De La Soul have confused critics and thrilled audiences with their quirky and unpredictable approach to hip hop. They've also attracted the largest lawsuits for

SOUL MINING

copyright infringement. . .

Interview by Mark van Schaick. Text by Tim Goodyer.



DE LA SOUL'S DEBUT ALBUM, *3 FEET HIGH and Rising* was arguably one of *the* albums of '89. In its idiosyncratic mixture of hip hop, stolen samples and dialogue, it managed to intrigue and entertain in equal amounts. Through large numbers of well-chosen samples, relaxed rhythm tracks and a laid-back, often humorous outlook on the ways of the world, the music of De La Soul is uniquely distinctive in the genre of hip hop. Through last year's follow up, *De La Soul is Dead*, the group reacted against the "Daisy Age" philosophy of *3 Feet High* and produced a sequel consistent in its ingenuity yet contrasting in its outlook.

Yet success aside, there was a high price to pay for their particular approach to making music: if one band has experienced the penalties of sampling more than most others, it is De La Soul. Their quirky debut single, 'Plug Tunin'' with its sample of Liberace, brought them instant success, but other samples brought them problems. The lift from Hall and Oates in 'Say No Go' brought them trouble, but this was nothing compared to the problems which befell the trio at the end of '89. The result of using an uncleared sample from The Turtles' 1969 song 'You Showed Me' should serve as a severe warning for the whole sampling movement, as the theft brought a lawsuit for $1.1m - the largest to date - against the group. The court cases are now over (settled out of court for a sum reported as being "in the low five figures") and the group as well as their US record label, Tommy Boy, have adopted a more cautious approach to releasing new material. As a result, four months passed between the ➢

In the last ten years, ***MIDI*** has turned the music **world upside down** and is rapidly impacting on other industries such as lighting and video production. ***MIDI*** (Musical Instrument Digital Interface) has made technology **far more accessible** and allows everyone the opportunity to create music - from writing through to final production.

So, whatever your interest in music, **professionally** or as a **hobby**, you'll be fascinated by what ***MIDI*** technology can do for you. *It's a whole new experience in making music!*

The ***MIDI Music Show*** is *the only show in* **the world** dedicated to ***MIDI***. So come along to the ***MIDI*** event of the year for an enjoyable and educational day out and keep abreast of the **very latest** in ***MIDI*** technology.

Ticket Hotline
081 547 1183

The Third MIDI MUSIC Show

24-26 April 1992
Novotel,
Hammersmith,
London W6, Great Britain
Nearest tube station - Hammersmith
(Piccadilly, Metropolitan & District Lines)
Friday 11am to 6pm
Saturday 10am to 6pm
Sunday 10am to 5pm

Sponsored by:
MAKING MUSIC
Britain's biggest musician's magazine and WHAT'S MIDI

The extensive seminar programme covering over 20 different subjects such as synthesizers, sequencing, editing, the MIDI Drum and Light Show, the MIDI Guitar and Wind controller, a Live Gig, and more are all FREE to exhibition visitors.

Friday is **High End Digital Day** with specialist seminars on High End recording, Digital recording systems and many more.

So, whether you are an expert or new to the subject, there's a seminar for you.

Pre-register to guarantee your place.

Arrange to meet your colleagues and business contacts at the MIDI Music Show meeting point

See, try and buy the latest products from 130 major companies from all over the world.

Westminster EXHIBITIONS

Westminster Exhibitions Ltd,
Surrey House, 34 Eden Street,
Kingston, Surrey KT1 1ER

To: Westminster Exhibitions Limited, Surrey House, 34 Eden Street, Kingston, Surrey KT1 1ER

Please send me _____ (qty.) priority tickets for the Third MIDI Music Show @ £5.00 each

I enclose a cheque for £ _____ Please send me details of the SEMINAR PROGRAMME ☐ ✓

Please debit my Access/Visa card, number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry Date _____ Signature _____

Name _____

Address _____

_____

_____ Postcode _____

FAST LANE TICKETS
Book now!
Avoid the queues, guarantee your place at the seminars and *SAVE MONEY.*
Admission at the door will be £6.00. Book your priority tickets now for ***only £5.00 each!***

★ Final date for despatch of tickets: 17th April 1992 ★

➢ completion and release of *De La Soul is Dead*, during which time the samples were cleared. Maseo, De La Soul's man behind the Technics turntables, has bitter memories of the legal wrangle.

"It was a load of bullshit on which I prefer not to look back", he says, shrugging his shoulders. "Especially the stuff with The Turtles. Luckily everything is cleared now, but these things wear you down. Right from the start I thought 'I won't participate in this. I have my pride, so take all the money you want, I don't want anything to do with it'. We dumped all samples at Tommy Boy and asked them to clear them. But initially they thought that *3 Feet High and Rising* wouldn't be as successful as it eventually became, so they didn't bother to clear the sample on 'Transmitting Live From Mars'. That's the case with other companies, you know? But when the record was happening they found themselves in trouble, because The Turtles had recognised their track, had no money, and off we went. I remember that Tommy Boy came back to us and asked us whether we'd given them these samples to clear. . . In the end everything has been dealt with without further involvement from my side - I really wasn't in the mood to meet those Turtle guys or their lawyers."

De La Soul - or Kelvin 'Posdnous' Mercer, David 'Trugoy' Jolicoeur and Vincent 'Maseo' Mason Jr - are all in their early 20s and started working together about six years ago. Since that time they've indulged themselves in the delicate art of sampling - although in the early days they were limited to doing it using two domestic cassette decks. After endless dubbing, they stuck the track 'Plug Tunin'' together, which landed, thanks to the remixes of Stetsasonic member and producer Prince Paul Huston (see interview MT, February 1990), on the desks of various record company A&R departments. In the end it was Tommy Boy Records - who are also Stetsasonic's label - that picked them up. Interestingly, after two such diverse albums, the group's working methods have hardly changed.

"We always start a new track on my own equipment, at home", Maseo explains. "I swapped my four-track recorder with Prince Paul. He gave me his Ross machine and I gave him my Tascam, because it was impossible to record SMPTE on it - it was rather old. Apart from that I have an Alesis HR16 drum computer - a fantastic machine - an old Sequential Circuits drum computer and a small sampler, really a small pedal. And until I have more money for a real sampler that will have to do", he laughs. "I'd obviously love to get an Akai S950 or 1000, and a Tascam 688 eight-track recorder, because of the MIDI facilities. A Roland TR808 would be nice, along with a bunch more of those typical hip hop instruments.

"But then I find that too much, and too complicated, equipment detracts your attention from creativity. You're more of an engineer in that scenario and I don't like that. I want to be capable of recording my samples at home, so I don't have to take my records into the studio.

"Paul started out adding loads of stuff to our demos. And more. That's something which we adapted a bit from him, stick everything in a track which you can fit in and find out in the mix what you don't want to use anymore. During recording there's no limit - none. You find out what your limit is when you start mixing and really have to commit yourself. A lot of peope say that we exaggerate with sampling, that we get ahead of ourselves. But because we get so engrossed in our music and because there are so many things we encounter which we want to sample in so many different ways, it's impossible for us to exaggerate. We don't force ourselves, everything comes together very spontaneously. Everything that we use comes back again, even if it's in a remix or something. Nothing is thrown away.

"It has happened that each of us would arrive with ten samples for the same track! We're the first ones in rap who've used 48 tracks, and I think that's great because we started with such simple equipment. It's more our spirit which filled those 48 tracks than our music, you know what I mean? That's another advantage of starting with basic equipment; when you arrive at the studio you lay down the basis which you've built up at home. You don't have to patch anything any more, plus you have your engineer who will help you when you start polishing things. And you can still mess about with some records on top."

With stories of artists like S' Express' Mark Moore taking nothing but records into the studio, I wondered how many records he usually takes in with him.

"That depends on the recording stage", he replies, "where we are that day. If there's only basic tracks, then I need a lot of records, but I do limit myself to things I've been listening to for a while - music which I've walked through.

"I have a large record collection which is growing very fast. Thirty-nine crates - I think that's quite a lot. They are our milk crates, and they're big, you know? And there's still so much that I want to have. . . I buy a lot of new things, also when I'm on tour I'm always searching in record shops. I like to keep up with the times, but I usually buy a whole lot in one go. Even if it's shit I still want to have it, just to find out what's currently happening. OK, all right, I refuse to buy MC Hammer or Vanilla Ice, I categorically refuse that. They have to give me that. Free. I won't buy that, but I do want to hear it. I think it's unlawful that you have to pay money for that."

"I refuse to buy MC Hammer or Vanilla Ice but I do want to hear it - I think it's unlawful that you have to pay money for that."

In contrast to the spoof game show that appeared between tracks on *Me Myself and I*, the conversation that's interspersed between the music on *De La Soul is Dead* reflects the matter of fact way the band have of looking at their situation and their new-found fame - and the impossibility of pleasing every listener.

"If you asked me whether the new CD has been received as well as the first one, I could answer yes and no", says Maseo. "My mates, the younger listeners, like it. The older ones, the people who really loved the sound of *Me, Myself and I* and 'Say No Go' are a little dissapointed, I think, but

I don't care because they please me. Most people don't have the vibe they had for De La Soul in the early days, but there are also people who initially were holding back a bit and who are getting into us now. I think that especially the song 'A Roller Skating Jam Named "Saturdays"' has helped with that. You know, it's simply a challenge and I need that, I like working hard for recognition."

Maseo admits that Tommy Boy weren't particularily pleased when the first, obviously different tracks of *De La Soul is Dead* started to come out of the studio.

"There were a lot of discussions with Tommy Boy", he recalls, "but that's the same as with every record company. When something in a certain form is successful, they'll wring it out of the public until it's completely saturated. And that's not OK, of course. My idea is to be successful with something different every time. Leave one style to its own devices and carry on with another one. That's why our next record will be very different again.

"In an ideal world a record company has faith in its artists. It supports them, stands behind their ideas and allows them to do what they feel they have to do. I won't say that Tommy Boy is against us, but. . . The reality is that Tommy Boy invested in De La Soul and what worked the first time, they want to see working again. But then, you won't get another *3 Feet High and Rising*, that will never happen again. Even now I don't feel any pressure for a follow-up. I have to say that it's frustrating that there are bands who break through on the basis of one hit single, whilst the rest of their album is full of shit. They're not following up on a strong album. With all respect, Heavy D arrived because of 'Now That We've Found Love', which is simply a rework of an old hit with some hip samples and so on. The rest of their album isn't exactly worthless, it's nice, but it's completely the same as its predecessor. Apart from that hit, there's no difference - it's exactly the same Heavy D. And that happens with a lot of bands. I find that confusing and a bit frustrating."

IT'S CONVENIENT THAT ALL THREE MEMBERS of De la Soul have known each other since their high school days because, whether they're in the early stages of recording demos or involved in recording or remixes in the studio, it means they work very smoothly together.

"We always use the system of a majority vote", says Maseo of their relationship. "Take for example the first single from *De La Soul is Dead* - we all wanted 'Ring Ring Ring' apart from Paul. He thought 'Swingalokate' was the best choice. I was still undecided between 'Ring' and 'Saturdays' but the way we work everybody had two choices, which always included 'Ring Ring Ring'. And if someone can argue their choice, what should you say against it? 'In the States Buddy' was our last single. It didn't do very much in Europe, but was pretty successful with us, the record had real street cred. And 'Ring' was different, it had a very different sound. I consider that the best reason for choosing it. So 'Ring Ring' was the first stroke, and 'Saturdays' was the knock-out punch. That was what we thought, but it didn't exactly work out like that. It didn't go badly, but it could have gone better. To really score these days, it appears as if you have to make an awful record. But that's not what we want - we don't want to adapt to the decade of wack music."

During the European leg of their current world tour, De La Soul expanded their line-up to include three female dancers. The limitations which arise from being a trio with two rappers, one DJ and a small technical crew, were solved with DAT, which supplied the basic tracks whilst Maseo's turntable took care of the overdubs.

"We encountered DAT for the first time when we did a festival where NWA also performed. They used DAT and were head and shoulders above the rest of the artists - including ourselves - so we started experimenting with DAT with our engineer Bob Powers. And it immediately worked well for us. Thanks to DAT we could finally arrange the different musical styles in our shows properly. The way we now perform 'Say No Go' and 'My Brother's a Basehead' is miles away from the album version. We stuck those two together extensively using Digidesign's Sound Tools. We edited everything with that. I don't know at all how it works, but Bob told us everything about it, in order that we could come up with clearer ideas."

During the tour Maseo dragged his own studio along with him everywhere they went.

"I like to have my own stuff with me", he explains. "I like working on new tracks every moment of the day. As I said before - I record it and then find out in the studio what I want to use.

"I get frustrated when I've been too far away from my equipment for too long. Imagine that I meet up with loads of dope beats when we're in Europe. What should I do, remember them all? I prefer to record them."

It's courtesy of Prince Paul that Maseo, Posdnous and Trugoy are asked for work by other artists.

"Paul is our producer, of course, but he teaches us a lot. He isn't distant in the collaboration. With the most recent recordings he more or less became a fourth member of the band. His knowledge of the studio, acquired mainly though his work with Stetsasonic, has given us immense insight into the workings of a studio. There is still so much to learn. . . I never got telephone calls until this album was finished. I would have liked to, but I wasn't big enough - my name wouldn't have brought any more sales, that really was the bottom line. But now it's 'Maseo do you want to remix this?', 'Maseo do you want that?'. . . Before it was Paul who was asked for all the remixes and other productions because people thought that De La Soul owed everything to Prince Paul. But Paul kept saying 'This is a band, I've taught them everything I do, so they're perfectly capable of delivering good work themselves'."

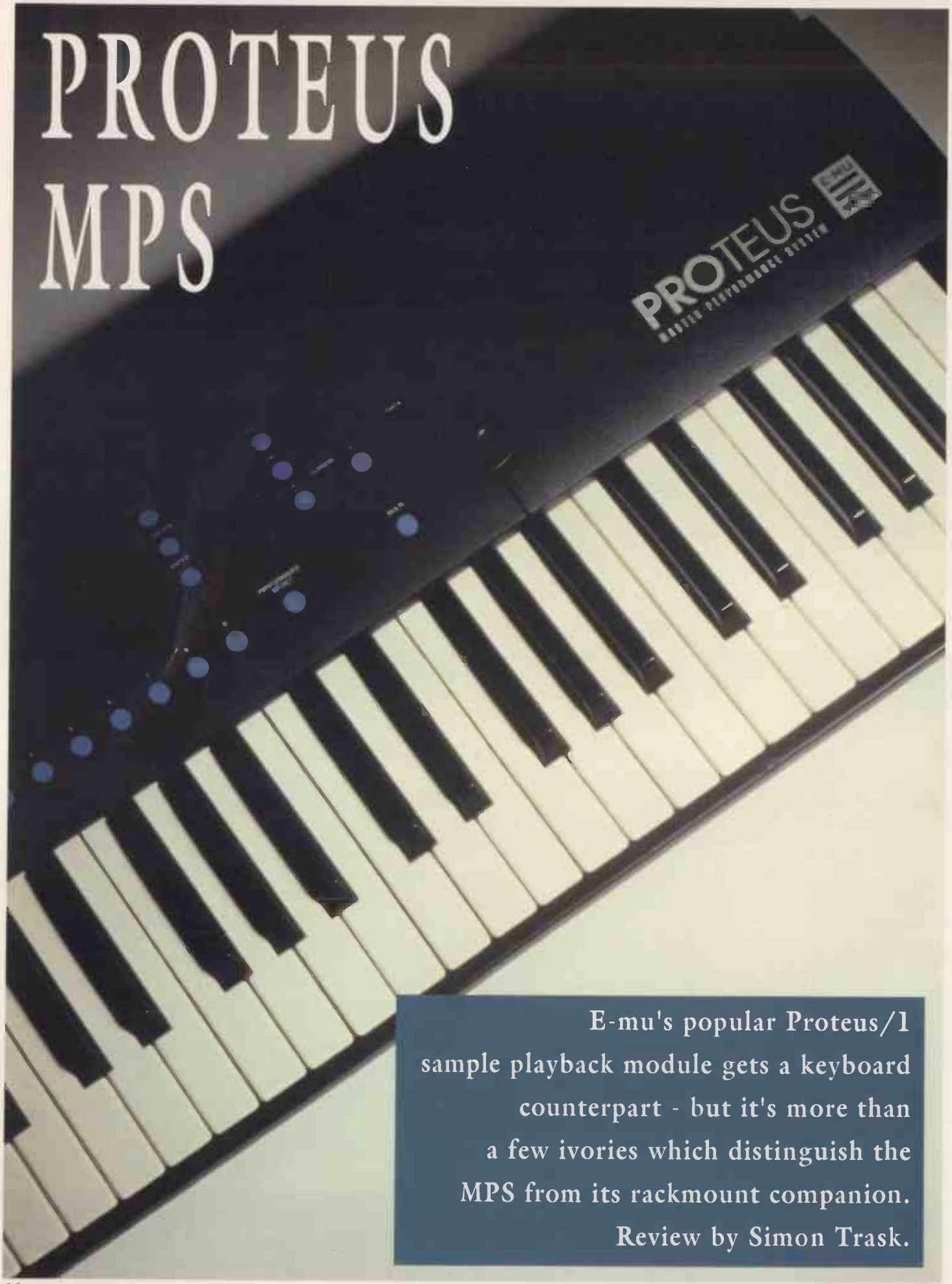
De La Soul are currently on the Australian leg of their world tour but should be back in the studio to begin work on their third LP when they get home later this year. When they do you can be sure they'll have brought a whole new range of influences back to experiment with. But even as we speak, certain developments are beginning to show through - Maseo's interest in acoustic drums, for example.

"I really want to record live drums", he reveals. "I can't yet play a drum kit, but give me one-and-a-half years and I will, watch me."

Given that Stetsasonic have already used acoustic drums in hip hop, you could be forgiven for suspecting that the influence is rather close to home. In fact, it's closer than you might think.

"At school I played in a marching band, so I used only one drum. The drum kit which was there was always occupied of course, because everybody wanted to play on it. . ." ■

PROTEUS MPS



E-mu's popular Proteus/1 sample playback module gets a keyboard counterpart - but it's more than a few ivories which distinguish the MPS from its rackmount companion. Review by Simon Trask.

OVER THE YEARS, it's become common practice for manufacturers to release "the expander version" of a MIDI instrument after the keyboard version. Yet it's a practice which can be frustrating for the many musicians who want to buy the latest synthesis system or the latest collection of sounds but who don't need another keyboard in their MIDI setup - not to mention having to pay for it.

So when E-mu Systems launched their Proteus series of sample players in 1989 with a module rather than a keyboard, they were going against the grain - but pleasing a lot of musicians, who were only too happy to slot a 1U-high, 19" rackmounting unit with a large and varied collection of samples and waveforms, 32-note polyphony and 16-part MIDI multitimbral operation into their setups.

The company subsequently followed up the Proteus/1 with a series of related modules under the Pro banner, but no keyboard. Not that it seemed to do them any harm. The descent of E-mu from the rarefied heights of their EIII and Emax samplers to the more populist territory of the Pro-series modules has been one of the success stories of recent years.

But now, more than two years after the launch of Proteus/1, E-mu have finally brought out a keyboard version of their best-selling module - although it was actually first unveiled in public at last year's International Music Show (for a review of Proteus/1, see MT November '89). The Proteus Master Performance System - as the keyboard is somewhat grandly known - isn't just a Proteus/1 with a keyboard slapped on the front. At the same time, it's apparent that the company opted to "build around" the Proteus/1 samples and programming architecture rather than make any fundamental changes to the structure - Proteus users will therefore find much on the new instrument that's familiar to them.

THE BIG PICTURE

BUT WHY BRING out a keyboard instrument now? More specifically: why bring out a keyboard version of Proteus/1 - even if it is souped-up - more than two years after the release of the original module? The answer lies in the name: Proteus Master Performance System. The various Proteus modules - Proteus/1 (pop/rock), Proteus/2 (orchestral) and the forthcoming Proteus/3 (world instruments) - together with Pro/cussion (drums and percussion) have been designed to provide a combination of versatility and familiarity: on one hand they complement each other sonically, on the other they offer, wherever possible, operational and functional consistency across the range. In short, we're talking System Concept - with the Proteus MPS as the centrepiece of the system, if not necessarily the final component. E-mu's American ads have been pushing this concept, and there's no doubt that if you were to piece together some or all of the components you'd have a pretty powerful and versatile setup.

Although it's not a workstation, the MPS has been designed to stand up well on its own, which is why E-mu have given it a broad-based collection of samples - and what better collection than the tried and tested Proteus/1 sounds? The company have also made provision for sonic expansion on the MPS, as they did on Proteus/1, by expanding its 4Mb of sample ROM to 8Mb, and are planning to offer a choice of two 4Mb upgrades, one containing Proteus/3's world instrument samples and the other a selection of Proteus/2's orchestral sounds.

MAIN DEVELOPMENTS

E-MU HAVE MADE one change to the Proteus/1 samples which the MPS comes fitted with, replacing the original grand piano with a mono version of the superior sampled grand from their Pro/formance stereo piano module. But it's the new instrument's inclusion of onboard digital effects processing (a first for the Pro-series) which makes the most significant impact on the Proteus sound world - as is apparent from the mixture of old and new factory Presets (Proteus patches) programmed into the MPS.

Another significant development is the instrument's front-panel user interface. Rather than transplant the Proteus module's necessarily constricted user interface to the MPS, E-mu have taken advantage of the keyboard instrument's greater front-panel area to redesign the user interface with the emphasis on straightforwardness and accessibility. And they've made a good job of it, too, minimising the hierarchical levels (there are just three edit levels: Master, Performance and Preset) and providing dedicated buttons for important features like Transpose, Quick Keys, Performance Select and MIDI Multi mode so that you can access them instantly. Red pinpoint LEDs associated with a number of buttons are also a great help, as they allow you to see at a glance whether certain features are enabled or not. The central 2 x 16-character, backlit LCD is bright and clear, the generous (but not overwhelming) number of buttons are coloured a distinctive light blue so you can make them out clearly against the depressingly familiar sober grey casing (a severe case of the Majors), and all the buttons are labelled with their specific function (there's virtually no dual functionality on the MPS). There is one feature I would have liked to see implemented: a second infinite rotary wheel, so that one could be dedicated to scrolling through the many software pages and the other to editing the parameters within each page - as it is, moving the cursor between page select and parameter fields all the time quickly becomes tedious.

A new feature known as Quick Keys allows you to call onto the keyboard with a single button-press a split/layer/overlap texture consisting of up to four Zones, each of which can trigger a Preset and/or an external MIDI sound.

When the Quick Keys function is enabled via its dedicated front-panel button, the ten (0-9) numeric buttons located below the LCD window can each select a different Key setup - a completely different configuration of internal and MIDI sounds is just one button-press away. These keyboard-based setups, which are intended for use in live playing, can be ➢

"When the Quick Keys function is enabled, a different configuration of internal and MIDI sounds is just a button-press away."

➢ used in conjunction with sequenced parts playing on the MPS when it's set to MIDI Multi receive mode - always bearing in mind that polyphony can get squeezed even with 32 voices if you're using much internal layering.

Quick Keys programming can certainly be used as a means of building up wonderfully big, expansive sounds. Equally, you can use the Quick Keys to group individual frequently-used Presets together on the buttons for easy selection. All in all, then, a versatile and valuable feature.

It seems ironic, with all this thoughtful development of the software and the user interface, that E-mu seem to have put no thought into what keyboard they should fit to their first Pro-series keyboard instrument - especially when so much of the design effort has been directed towards making the Proteus MPS performer-friendly. It's not just that they've used a 61-note unweighted keyboard, sensitive to attack velocity and channel aftertouch - but that the MPS's keyboard has quite the most insubstantial feel I've come across. You hardly need to play it; just stroking the keys is enough to coax forth the notes.

"Clearly, E-mu have put a lot of thought into what they wanted a keyboard version of Proteus/1 to be - and it's paid off."

ORGANISATION

THE 125 INSTRUMENTS in the Proteus MPS's 4MB of sample ROM are divided into sampled sounds (16-bit linear, 39kHz sample rate, derived from E-mu's EIII sample library), harmonic waveforms (odd and/or even harmonics within various octaves), single-cycle waveforms (either synthesised or taken from samples) and multi-cycle waveforms (short sections of sampled sounds, such as voices, strings and mallets).

While the waveforms offer plenty of abstract material (including a lot of great metallic stuff), sampled sounds cover the usual range of real-world instruments - piano, strings, choir, flute, sax, trumpet, trombone, acoustic and electric guitars, electric and synth basses, synthpad, organ, marimba, vibraphone, and standard, Latin and FX drum and percussion sounds arranged in a number of kit configurations.

Two Instruments, known as Primary and Secondary, can be combined within a Preset (patch), where each can be routed through a DCA with a dedicated Attack-Hold-Decay-Sustain-Release envelope generator and on to a Pan module before being routed to the effects processors. You can, of course, set coarse and fine tunings for each Instrument, and a function called Double + Detune, which can be turned on/off for each Instrument, makes layering and detuning of an Instrument easy by assigning a second voice to the Instrument for you. Individual Instrument sounds can also be played backwards by enabling the Reverse Sound parameter.

On the subject of tuning, the MPS has four preset tuning tables (Just C, Vallotti, 19-tone and Javanese Gamelan) and four user-programmable tuning tables in addition to standard equal temperament. The user tables allow you to define the tuning of every key from C-2 to G8 - which should cater for all eventualities, I suppose! For each key you can select a MIDI note number (0-127) and a fine-tuning value from 0-63 (in steps of 1/64th of a semitone, or approximately 1.56 cents), so you can encompass anything from subtle pitch inflections on notes to the most bizarre scales you can think up. With the cursor in the LCD's Key field you can select the key you want by playing it on the keyboard, which speeds things up a bit; note and fine-tune parameters are set by stepping the cursor to the relevant fields and then using the infinite rotary wheel or the numeric buttons to select the required values. Unfortunately there's no extrapolate function to allow you to quickly duplicate an interval or series of intervals across the keyboard, so it's manual labour all the way. Nor is there any function for altering the root note of a scale so that the intervals are preserved if you play in different keys. One thing you can do, because the MPS allows you to assign tuning tables to individual Presets, is freely combine different scales - which can lead to some interesting results, to say the least.

Dynamic modulation of Preset parameters is well catered for. There are two LFOs, an Auxiliary D(elay)AHDSR envelope generator, pitchbend wheel and four user-selectable MIDI controllers. Mono pressure and poly pressure can act as mod sources for 24 possible mod destinations, while key number and attack velocity can act as mod sources for 33 destinations. Up to eight destinations are simultaneously modulatable in the former instance, up to six in the latter. One of the destination parameters for the key number and velocity sources is Tone, a very basic filtering facility, hardly worthy of the name (which is perhaps why E-mu have called it Tone); in fact, Tone can only be activated by one of these two modulation sources (which alter a cutoff point), and there are no parameters as such.

The number of Presets has been upped overall in relation to Proteus/1, with 100 ROM and 100 RAM Presets onboard and a further 100 Presets accessible on a ROM or RAM card which you plug into an inconspicuous card slot located near the left-hand edge of the MPS's front panel. Card Presets can be played without the need to load them into onboard memory, so in all, up to 300 Presets can be accessible at any one time. Preset selection in response to incoming MIDI can take one of two forms: either the MPS references one of four user-programmable patch-to-Preset maps or it responds to the MIDI Bank Select command. While we're on the subject of MIDI, the MPS implements the usual SysEx transfer of Preset and other data, with individual and bulk options, and also implements remote editing of Presets using SysEx commands.

New to the Proteus MPS are Performance Maps. These basically govern the multitimbral side of the

instrument. Five maps can be stored onboard, while another five can be stored on a RAM card - and, like the card Presets, read from card without having to load them in. To call up a Performance Map, you hold down the front-panel Performance Select button and press the relevant numbered button below the LCD window.

The Performance Map definition includes ten Quick Key setups, Multimode effects settings and routings, volume and pan settings and Preset selection for each MIDI channel (you can assign one Preset per channel), and selected MIDI commands to be transmitted automatically by the MPS each time the Map is selected. Like Presets, Performance Maps can be edited remotely using MIDI SysEx commands - presumably the relevant software companies will be updating their Proteus editor/librarians to take account of the new instrument's added capabilities.

Staying with MIDI, you can select up to four MIDI transmit commands with associated values per Performance Map; these commands can be selected from patch change, song select, song start, song stop, volume and pan. So, for instance, you could remotely select and Start a Song on your sequencer by selecting one Map, and Stop the Song at any time by selecting another Map, or select an effect on an external processor using a patch-change command so that the effect change is aligned with a new Preset being output from the Submix outs.

Another Map function, Record User Data, allows whatever MIDI data you want to be transmitted automatically when you select a Performance Map. You can record up to 320 bytes of MIDI data per Map, either by Starting the MPS' record function and then transmitting the relevant data into the instrument via MIDI or by manually entering the required data yourself via the instrument's LCD window (you can also edit recorded data in this latter way). Manual entry is only going to appeal to those people who know their MIDI codes and feel at home with hexadecimal numbering - which is probably *not* the majority of musicians. In fact, I wonder how many people will make any use of this function at all.

EFFECTS

THE PROTEUS MPS has two stereo effects processors, labelled A and B. These effects can be programmed per Preset and per Performance, while output routing can be programmed for each Instrument within a Preset (Effect A, Effect B, Dry or Submix) and for each MIDI channel within a Performance (as for Preset, but with the additional option of Preset - that is, whatever the Instrument routings of the selected Preset are).

Whenever you select Multi MIDI reception on the MPS, the effects settings and routings of the currently-selected Performance automatically replace those of whatever Preset you were playing. All 16 parts/channels in Multi mode are routed through the same two effects processors - no surprises here.

Effect A and Effect B can be treated as separate effects processors running in parallel. Alternatively, you can take a feed from the output of effect B and route all or some of it into effect A, should you want to route an Instrument or a Preset through two effects. If you select Dry, the Instrument or Preset is routed via the main stereo output pair but bypasses the effects processing.

Submix refers to a second, dry stereo output pair (the MPS drops Proteus/1's third stereo pair) which is useful for routing selected sounds out of the instrument to a mixer for separate processing. However, if you're routing the MPS straight into an amp or a pair of powered speakers, you can turn the Submix outputs into auxiliary effect send/return loops, insert an external effects unit into the loop and you've got a second source of effects processing. To work this, you need to plug stereo jacks into the Submix sockets, as the MPS sends the output signal at each socket via the tip and receives the effected signal back via the ring of the plug. This signal is then summed into the MPS's main stereo output at a point in the signal path after the internal effects processing.

Each of the built-in effects processors can generate one effect at a time, chosen from 23 effects in the case of processor A and nine in the case of processor B. Reverb processing is restricted to processor A, which means that, as A can't follow B, you can't do things like flange or chorus the reverbed signal, which is a pity.

Processor A provides you with a choice of 16 reverbs: Room, Warm Room, two Plates, two Chambers, three Halls, two Small Rooms, four Early Reflections and Rain (a sort of "pitter patter" reverb created using a dense group of short echoes followed by longer echoes). Reverb programmability is limited to decay time (and you can get some very long decays out of reverbs like Room - which becomes more like universal space when you turn the decay time up full). E-mu's reverbs have character and presence, and together they provide a nicely varied collection, suited to a variety of requirements.

Other effects selectable for processor A - and thankfully offering a few more programmable parameters than the reverbs - are Stereo Delay (up to 209ms), Cross Delay (up to 209ms), Stereo Phaser, Stereo Flange, Stereo Chorus, Stereo Echo (up to 400ms) and Stereo EQ (two-band parametric). Effects processor B's nine effects are: Stereo Flange, Stereo Chorus, Phaser, Fuzz1, Ring Modulator, Stereo Delay (up to 104ms), Stereo Cross Delay (up to 104ms), Stereo EQ and Fuzz Lite. Effects like the flange, delay and EQ provide variations on the equivalent effects in A - so B's stereo EQ is one-band rather than two-band parametric, but unlike A's stereo EQ its left and right channels are independently adjustable.

Ring modulation is an under-used and underrated effect, and certainly hasn't been implemented often in the digital domain (only Alesis' Quadraverb Plus springs to mind), so it's nice to see E-mu including it on the MPS. Choose the right sort of sounds to put into it and you can get some really wild spiky metallic stuff or eerily soothing metallic drones.

Fuzz1 and FuzzLite can both be pretty grungy and over-the-top, but they can also add a nice rich sustain to less complex sounds. In fact, the waveforms included in the Proteus MPS's sample ROM really ➢

"The Proteus MPS is a serious instrument with sonic depths just waiting to be explored by the more demanding musician."

➢ come into their own with the addition of effects processing, especially with the wilder effects.

How to handle the transition from one programmed effect to another, when a new patch is selected while notes are held down, is something which different manufacturers have handled in different ways. Some simply mute everything for a moment while the new effect parameters are copied into the processor, others do their best to ensure as smooth a transition as possible. In my books, Korg's Wavestation has the smoothest transition of all. The Proteus MPS fares very well, too, but there can be a crackle - or Ping as E-mu call it - and a momentary dropout when you switch from one effect (pair) to another, so they've included a Master parameter called FX Transition which you can set to either Mute (everything is muted for a moment, to cover the changeover) or Ping (nothing is muted but there may be a crackle).

All effect parameters for the currently-selected effect in each processor can be edited remotely via MIDI using controller data; you can also use controllers to select the effect for each processor and to set the A amount, B amount and B-into-A amount. The controller numbers are preset by E-mu, as are the controller values for selecting effect type, but all are clearly indicated in the manual. It seems that this remote manipulation of effect parameters is intended more for editing purposes than for dynamic control during a piece of music, because the effects do tend to glitch in response to real-time parameter changes (as E-mu point out in the manual, to their credit).

VERDICT

CLEARLY E-MU PUT a lot of thought into what they wanted a keyboard version of Proteus/1 to be, and it's paid off for them in the resulting Proteus MIDI Performance System, which has emerged as a stylish instrument with real flair. I can see it appealing to a variety of musicians, because sonically it's hard to pin down to any one category. This is particularly so with the addition of the digital effects, which widen the scope for sound creation even more. The effects are very appealing; somehow they just seem to sit perfectly with the samples and waveforms - I suppose you could say they were made for one another. The MPS isn't a difficult instrument to get to grips with, and with its user-friendly front panel, well-varied collection of sounds, Quick Keys easy multi-Preset creation, 16-part multitimbrality and 32-voice polyphony, it could well be an ideal instrument for the hi-tech novice. This isn't meant to put more seasoned hi-tech musicians off giving it a try-out, however. Despite its apparent straightforwardness, the Proteus MPS is a serious instrument with sonic depths just waiting to be explored by the more demanding musician. ■

Price *£1289 including VAT.*
More from *E-mu UK, PO Box 1, Prestonpans, East Lothian, Scotland EH32 0TT. Tel: (0875) 813330.*

Music Maker Exhibitions Presents

NORTHERN MUSIC SHOW 92

16th - 17th May 1992
G-Mex. Manchester

See it! Hear it! Touch it!
All the latest musical equipment on show at the North's biggest music show.

For further information
contact Clive Morton on 0353 665577

MUSIC MAKER EXHIBITIONS

G-MEX

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 L ❑ XL ❑ *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.

readers ads

MUSIC TECHNOLOGY's readers' 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 (0891) 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 readers' classifieds published in MUSIC TECHNOLOGY.

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

KEYBOARDS

CASIO AZ1, remote controller, great spec plus pose value, boxed, £250. Colin, Tel: (0353) 661425, days/(08012) 4017, after 6.30pm.

CASIO CZ1000, Yamaha RX8, Korg SQD8, all exc cond, boxed, manuals, £400 the lot, buyer collects. Tony, Tel: Luton 416985.

CASIO CZ1000, box, manuals, £140. Kevin, Tel: (0270) 872558.

CASIO CZ3000, 2 RAMs, extra sounds, needs slight attention, hence £125; Boss DR550, psu, £120; Yamaha FB01 module, £80; Yamaha CX5, 2 RAMs, £75. Dave, Tel: (0484) 539524.

CASIO CZ5000, exc cond, keys split + layer, sequencer, chorus, Atari ed/lib, patch book, manual, £225 ono. Tel: Cheshire (0928) 711006.

CASIO HZ600, good synth/master keybd, psu, ROM card, Casio CZ230S synth/drum m/c + simple sequencer, psu, both boxed, £120 each. Stuart, Tel: (0684) 293435.

CASIO MT540 portable keybd, multitimbral, decent piano sample, £60. Sean, Tel: (0438) 313865.

CASIO VZ1, £300; Korg P3, exc sounds etc, £150. Swap pair for U20 keybd. Richard, Tel: (0536) 746113.

CASIO VZ10 rack, £180 ono. Tel: Merseyside (0744) 35567.

CHEETAH MS6, £150. Tel: (0484) 518315, after 6pm.

CHEETAH MS6 analogue synth module, home use only, boxed, manual, £170 ono; Roland MT32 multitimbral sound module, boxed, manual, £150. Simon, Tel: (0705) 733969, after 6pm.

COMPLETE MIDI SETUP: Roland Studio MV30, 8-channel sequencer, automated mixing + fx, ethnic card, Roland PC200 MIDI controller keybd, Goodmans Maxamp powered spks, all 2 mnths old, cannot split, £1100. Tel: 071-267 8119.

E-MU PROTEUS/1, £550 or exchange for Kawai K4. Gary, Tel: 051-327 2296, after 6pm.

ENSONIQ ESQ1, Valhala RAM, Steinberg ROM, expanded sequencer, £525; Kawai K4, £300; MTR 12:8:2 mixer, case, £300; McKenzie 90W keybd amp head, £120. Ian, Tel: (0883) 714940.

ENSONIQ ESQ1, expanded sequencer, RAM cartridge, 800 patches, f/cased, £460; Roland U20, f/case, £595. Both exc cond. Nigel, Tel: 081-898 7573.

ENSONIQ ESQ1 synth, 120 sound programs, easy-to-use + compose, built-in sequencer, good sounds, good cond, operation manual, will give practical demo lesson to buyer, £400. Sean, Tel: (0227) 722369.

ENSONIQ SD1, 1000s extra sounds, guaranteed, £1100; EPS16+ rackmount, SCSI interface, 100Meg hard drive, over 1000 exc samples, £1499. Jim, Tel: (0843) 45102.

ENSONIQ VFX-SDII synth, £950; Ensoniq EPS16+ rack sampler, £1150. Both boxed, as new. Tel: (0875) 52979, after 6pm.

FENDER RHODES electric piano, great sound + touch, perfect cond, bargain, only £199. Tel: (0444) 247810.

GODWIN CD200 portable organ, lightweight, 2 internal spks 50W each, stereo, new 1989 £1350, mainly home use, accept £550 or wd exchange for keybd + stand w/cash adjustment. Tel: (0493) 604514.

KAWAI K1, RAM card, £330; Roland MT32, Atari editor, £260. Will split. Tel: (0264) 738750.

KAWAI K1 keybd, boxed, manual, £300; Casio CPS700 digital piano, 76 keys, MIDI, £250. Tel: Southampton (0703) 583126.

KAWAI K1R rackmount synth, 2 cards, leads, manuals, boxed, £225. Paul, Tel: (0256) 475406.

KAWAI K5, £450; Roland MKS70, £540. Guy, Tel: (0246) 452184.

KORG 700S analogue synth, £50; Sequential Pro1 analogue synth, £125; Yamaha KX5 remote keybd, £150. Joe, Tel: Rotherham (0709) 379656.

KORG DS8 digital synth, £300 ono; SL1200 turntables, pair, £400 ono. Tel: (0293) 885003.

KORG DW6000 MIDI keybd, f/case, mostly home use, £300. Tel: (0264) 738750.

KORG M1, 2 Valhala Gold cards, 6 mnths old, £750. Debbie, Tel: York (0904) 635452.

KORG MONOPOLY synth, £150. Chris, Tel: (0734) 794493.

KORG POLY61, powerful analogue polysynth, offers around £200; 12:2 mixer, £110 ono. Both for bargain price £300 - wow! Nick, Tel: 071-589 2372.

KORG POLY800, mint, home use only, f/case, will p/x for Juno 106 w/cash, offers accepted. Peter, Tel: (0235) 529012.

KORG T3 workstation, exc cond, 1000s new sounds inc International Gold Series, £1350 ono. Steve, Tel: (0429) 222517.

KORG T3 workstation, 1000 new sounds, Valhala Gold cards, disks, manuals, exc cond, home use only, £1500. Lloyd, Tel: 081-290 1782, after 7pm.

KORG WAVESTATION, 2 cards, as new, boxed, manual, £740 ono. Chris, Tel: (0284) 705679.

OSCAR, MIDI, £325; Roland SPV355 pitch-to-voltage rackmount analogue monosynth, operates from guitar, mic or CV gate inputs, offers; Pro1, £150; Prodigy, boxed, £150; SH09, £100. Steven, Tel: (0726) 66715.

PPG WAVE 2.2, exc cond, 1 owner, f/case, pedal modification, manual, £699; Yamaha DX5, 2 DX7s in one, case, manuals, 2 ROMs, £625. Tel: 071-267 8119.

ROLAND ALPHA JUNO 2, £350; Tandburg 2-track reel-to-reel, £200. Mark, Tel: 031-332 2674.

ROLAND D5, as new, £325. Tel: (0763) 262134.

ROLAND D5, £300; Roland S10 sampler, £200; Yamaha DX100, £125; Casio CZ101, £125; Kawai K1R rackmount, £200; Akai XE8 drum sample player, £150. Darren, Tel: (0734) 585421, days/580831, eves.

ROLAND D10 synth, built-in drums + fx unit, exc cond, home use only, free Atari s/w + extras, £380 ono. Tel: (0742) 580074.

ROLAND D10, as new, stand, PC MIDI board, s/w, £425 complete. John, Tel: Bury St Edmunds 704002.

ROLAND D110, multitimbral synth module, boxed, manuals, mint, £275. Don, Tel: 031-441 3948, after 6pm.

ROLAND D110, multitimbral sound module, extra sounds, £275. Pat, Tel: Bristol (0272) 306671, work/422462, home.

ROLAND D110, £275. James, Tel: (0786) 78655.

ROLAND D110, Atari editor, 1000 sounds, £320 ono. Steve, Tel: (0742) 306854.

ROLAND D20 synth, £660; Roland Juno 106, £350; Alesis HR16 drum m/c, £150. Robert, Tel: 091-388 6000.

ROLAND D70, as new, home use only, £895. Tel: (0491) 39320.

ROLAND D70, Super LA megasynth, boxed, manuals, leads etc, full f/case, absolutely mint, £1200. Don, Tel: 031-441 3948, after 6pm.

ROLAND E5 intelligent synth, good sounds, good cond, £300. Tel: (0896) 55844, days.

ROLAND FP8 electric piano, brand

new model, fabulous sound, hammer action, costs £1699, 4 wks old, £1350; f/case, £90; Yamaha MIDI Merge box, £50; Yamaha foot controller, £45; Alesis Quadraverb, offers pls. Bob, Tel: (0707) 55594.

ROLAND JUNO 6, f/case, £175; Korg EX800, 400 sounds on disk, £125; swap my mint Korg M1 for Korg M1R. Chris, Tel: 071-739 8993.

ROLAND JUNO 60 synth, exc cond, £180, can deliver. Richard, Tel: Leeds (0532) 638965.

ROLAND JUPITER 8 synth, f/case, mint, £600. Billy, Tel: 081-891 4426.

ROLAND JX3P, as new, £250 ono. Raphael, Tel: (0483) 33763.

ROLAND JX3P, PG200 programmer, £300 ono. Peter, Tel: 021-422 4133, eves.

ROLAND JX3P, exc cond, £240. Jamie, Tel: (0607) 72754.

ROLAND JX8P, f/case, £420; Roland MT32, £190. Both good cond. Mark, Tel: 071-232 0629.

ROLAND JX8P, £300; DX11, £250; Kawai K1 MkII, £400; Yamaha YF100, £200. All mint, home use only. Tel: Lancs (0257) 270569.

ROLAND MKS70, JX10 rack, pristine cond, complete ROMs, £750 ono. Robin, Tel: Lincoln (0522) 752458.

ROLAND MT32, vgc, boxed, psu, manual, £180. Graham, Tel: (0206) 867863.

ROLAND PC200 controller keybd, Roland MT32 sound module, Atari sound editor, 100s sounds, good working order, £290 together. Tel: Wellingborough (0933) 273915, days.

ROLAND RD1000 digital piano, probably the best digital piano around, exc cond, stand, manual, £1600. Graham, Tel: (0582) 451260.

ROLAND RS505, panasonic strings/synth/bass, £150; Juno 60, £275; D110, £350; Yamaha DX7, £380; Roland TR606 Drumatix, £80. Alan, Tel: (0242) 579185, eves + weekends.

ROLAND SH101 analogue synth, exc cond, £95; Maplin EC444 Echorder echo chamber, as new, £20. Tel: Hitchin (0462) 733170, eves.

ROLAND SYSTEM 101 keybd synth, £100; Roland CR8000 drum m/c, £50; Roland PG1000 programmer for D50, £80; EPS sampler, 2x memory expansion, 40 disks, £700; Yamaha CS60, £200; Yamaha CP70 piano, £600. Paul, Tel: 041-423 5485.

ROLAND U20, RS-PCM multitimbral keybd, as new, boxed, £600; Roland MC50 sequencer, immac, disks, boxed, £400; Fostex X26 multitracker, boxed, Beyer 300 mic, stand, £150. Tel: (0273) 410909.

ROLAND U20, boxed, manual, as new, £550; Alesis MMT8 sequencer, boxed, manual, as new, £150; Hohner The Jack custom bass, classic headless bass, mint, £220. Dean, Tel: Walsall (0922) 32275.

ROLAND U20 multitimbral sample player, as new, boxed, manuals, home use only, exc for sequencing/home studio, £625. Paul, 081-989 9203.

SEQUENTIAL PROPHET VS keybd, boxed, manual, vgc, ultimate analogue synth, £1300. A Prentice, Tel: 031-440 1797, 9am-4.30pm.

SEQUENTIAL PROPHET VS analogue synth, f/case, £1100. Adrian, Tel: (0225) 743268.

SEQUENTIAL SIXTRAK, classic fat analogue sounds, 100 memories, multitimbral, just serviced, v2 s/w, bargain at £190. Jason, Tel: (0525) 717557 or Sean, Tel: (0525) 717976.

SWAP MY U220 for your K5M; Prosonus Sample CD, £20; 2 Microwave ROMs, £25 each. Write: Barry Dillon, Thomond Rd, Lisdoonvarna, Co Clare, Rep of Ireland.

SWAP MY YAMAHA SY22 for your Roland U20, or my Roland S50 + cash adjustment for your Akai S950. Adam, Tel: (0273) 420163.

TECHNICS AX7 MIDI workstation, £500. Roger, Tel: 021-559 4784.

WURLITZER ELECTRIC PIANO, case, good cond, £180 ono. Tim, Tel: (0707) 872886.

YAMAHA CLAVINOVA CVP3 digital piano, 76 keys, 16 rhythms, £600 ono. Tel: 081-575 8185.

YAMAHA CS30L analogue monosynth, great for rave or dance bnds, £80. Neil, Tel: 021-443 1922.

YAMAHA DX5 megasynth, 76-note keybd, 32-note polyphonic, £850 ono. Write: G Burt, 55 The Avenue, Camberley, Surrey GU15 3NF.

YAMAHA DX7, w/E-board, £520; Roland Juno 60, w/Groove MIDI, case, £300; Yamaha QX21 sequencer, manual, £100; Roland Drumatix TR606, £60. Matthew, Tel: Bournemouth (0202) 392505.

YAMAHA DX11, exc cond, extra sounds, boxed, DD10 drum m/c, boxed, PSS180 keybd, good cond, £300 the lot. Tel: 081-472 1980, eves.

YAMAHA DX11 synth, home use only, £295. Len, Tel: Faringdon (0367) 240732.

YAMAHA DX11, £280 ono; Evolution EVS1 synth module, £180 ono; 1Meg STE, £180 ono. Eddie, Tel: Lincoln (0522) 696355, between 6pm-9pm only.

YAMAHA PF85, 88-note AWM piano, £550 or swap for 76-note piano. Tel: Hastings 716528, eves.

YAMAHA PS70 electric piano, 75-note weighted keybd, full MIDI spec, internal spks, f/case, Yamaha EMT10 piano module, £500 ono. Simon, Tel: 081-541 5545.

YAMAHA PSR80 MIDI keybd, f/case, good cond, £245 ono. Andrew, Tel: (0659) 58106.

YAMAHA PSR4500, feature-packed, beautifully-arranged keybd, boxed, as new, £460 ono. Kieran, Tel: (0889) 881884, days/881325, eves.

YAMAHA PSS680, mint, ideal for beginners programming, Steinberg Pro24, £100. Tel: (0323) 416739.

YAMAHA PSS790 MIDI keybd, boxed, manuals, as new, adaptor, £130. Philip, Tel: 081-941 6359.

YAMAHA PSS790, perfect cond, £130 ono. Tel: (0525) 403707, after 4pm weekdays.

YAMAHA SY22, International Gold card, still under guarantee, £595. Adrian, Tel: 021-458 6934, after 6pm.

YAMAHA SY77, 2000 extra sounds, immac, boxed, £1250. Jason, Tel: (0252) 725272.

YAMAHA SY77 workstation, extra voice s/w, £1225. Tel: Hampshire (0243) 376905.

YAMAHA TG77, exc cond, £900 ono. John, Tel: (0926) 422066.

YAMAHA TG77, as new, unracked, 13 banks of Yamaha sounds, little use, £875. Bill, Tel: (0402) 223345.

YAMAHA TG77, full f/case, cards, £799 ono; Roland U20, cards, case, £495. Steve or Kathy, Tel: (0252) 521902.

YAMAHA TX81Z, £150; Yamaha QX7, £90; Roland TR626, £175; Simmons MTX9 electronic kit, £300. Tel: (0702) 711269.

YAMAHA V50, exc workstation, home use only, 1000s sounds, £750. Tel: (0525) 377587.

YAMAHA YPR6 electronic piano, 5-octave, full-size keys, music stand, chrome stand, perfect cond, £145 ono. Tel: 061-980 6140.

SAMPLING

AKAI S612, disk drive, 7 disks, £320; Korg Monopoly, £150; Roland TR707, £120. All immac. Paul, Tel: Brighton (0273) 565790.

AKAI S900, exc cond, home use only, latest s/w, £750 ono. Raphael, Tel: (0483) 33763.

AKAI S900 sampler, exc cond, studio use only, £600. Mark, Tel: (0752) 894457.

AKAI S950, expanded memory, boxed, as new, real bargain, only £775 ono. Tel: (0271) 79176.

AKAI S950 MIDI sampler, as new, exc cond, £900 ono. Dean, Tel: (0753) 580475.

AKAI S1000, R-DAT library, 380Meg, all digital samples, no gimmicks, £150. Simon, Tel: (0482) 872073.

AKAI X7000 sampler, expanded, £300; Korg SQD1 sequencer, £160. Steve, Tel: (0387) 720133.

CASIO FZ10, mint, £625. Steven, Tel: (0603) 56161 X2550, days.

CASIO FZ10M, 2Meg sampler, boxed, as new, large sound library of 100+ disks, £775 ono. Colin, Tel: (0353) 661425, days/(08012) 4017, after 6.30pm.

EMAX SE sampler, Steinberg editor, full sound library, Digital Muse Virtuoso sequencer program. Narinder Singh, Tel: 021-356 1344.

EMULATOR II, hard disk, ex-Simple Minds, 20Meg internal hard drive, large sound library, exc cond, manuals, £2000, no offers, no time wasters. Don, Tel: 031-441 3948, after 6pm.

EMULATOR II, HD, double internal memory, 20Meg on hard disk, 60 disks, f/case. Tel: 041-339 0344.

ENSONIQ EPS 4x memory expansion board, £200; w/SCSI module, £250. Terry, Tel: 071-703 7133.

ENSONIQ EPS sampler, sample disks, library, sampling CD, Carlsbro 65W combi amp, 4 inputs, reverb, cost over £1750, accept £1000. Tel: Falkirk (0324) 31513.

ENSONIQ EPS, 2.5Meg memory, 8 output expander, massive library, all boxed, mint, manuals, £1100 ono. Paul, Tel: (0742) 879758.

ENSONIQ EPS16+, rackmount sampler workstation, 2Meg memory, 16-track sequencer, multi digital fx, boxed, manual, library, brand new cond, £1350 ono. Steve, Tel: (0429) 222517.

ENSONIQ MIRAGE, disk library, £400; Fostex X26 4-track, £200; Yamaha PSS140, stand, £50; Korg SQ10, boxed, £10. All good cond, manuals. Simon, Tel: (0602) 763770.

ENSONIQ MIRAGE, large disk library, input sampling filter, f/case, £390; Technics SX-PV10 digital piano, built-in spks, pedal, wooden case, £95. Tel: 071-733 1917.

GREENGATE DS3 sampler, Apple IIe, monitor, twin disk drives, all Greengate s/w in latest form, huge library, performance keybd, MIDI retrofit, manuals, £300 ono. Keith, Tel: (0444) 831504.
KORG DSS1 monster synth sampler combination, free Atari editing s/w: Digidesign + Sound Designer, massive library, will sell £650 or swap for module DSM1 + then throw in quite a few goodies. Sean, Tel: (0525) 717976.
ROLAND S10 sampling keybd, full library, carrying case, stand, disks, £350 ono. James, Tel: 021-308 6343.
ROLAND S50 sampler, home use only, as new, sound library, accessories, Director S sequencer package, £595. Tel: 021-471 4157.
ROLAND S50, monitor, sequencer, library, never gigged, £950; Hornet 45 combo, amp/spk for keybd, never gigged, £180. Yuri, Tel: 071-497 3126.
ROLAND S50, disks, manual, £700 or swap w/cash adjustment for EPS/EPSm/Akai S950. Adam, Tel: (0273) 420163.
ROLAND S50 sampler, Tatung 15" FST teletext colour monitor, sequencer, complete Roland library, immac, all boxed, £750. Neil, Tel: (0773) 540234, after 5.30pm.
ROLAND S330, 1U rackmount sampler, mouse, monitor, manuals, disks, as new, £650 ono. Tel: (0706) 50897.
ROLAND S550 sampling module, full Roland library, £1150 ono. Tim, Tel: (0773) 823224.
ROLAND U110 module, as new, boxed, manuals, 100s sounds, £300; Korg EX800 module, as new, boxed, manuals, 100s sounds, £125. Adam, Tel: (0203) 416255, days/021-355 2685, eves.
ROLAND W30, large sample library over 50Meg, £1000 ono, swap for Ensoniq VFX-SDII or p/x for Ensoniq SD1. Martin, Tel: (0734) 744261.
ROLAND W30, as new, £950 ovno. Simon, Tel: (0602) 279384.
ROLAND W30 workstation, great for studio + live work, £900 ono. Tel: (0223) 313075/071-724 0340.

SEQUENCERS

ALESIS DATADISK SQ MIDI data recorder, ideal for live sequencer playback, unused, guaranteed, £225. Michael, Tel: 061-798 0581.
ALESIS MMT8 8-track sequencer, mint, power supply, manual, £140. Tel: (0703) 220152.
ALESIS MMT8 sequencer, psu, manual, £120. Rob, Tel: 071-723 1397.
ELKA CR99 MIDI disk recorder, 99 songs, 80,000-note capacity, £150 ono. Derek, Tel: 081-549 6983.
KAWAI Q80, exc cond, very little use, power supply, manual, very user friendly, £300. Jason, Tel: (0239) 710523.
KORG SQD1 disk drive sequencer, vgc, £150 ono. Jason, Tel: (0525) 717557.
KORG SQD8 sequencer, as new, £150. Tel: (0763) 262134.
ROLAND MC4B + OP8M, classic 4-channel CV gate sequencer, w/MIDI option, tape sync, manuals, leads, £300. Tel: (0264) 738750.
ROLAND MC50 sequencer, boxed, manuals, leads etc, as new, £400. Brian, Tel: Manchester 061-624 1957.
ROLAND MC500, exc cond, reluctant sale, rock solid timing, more reliable than any computer, £350 ono. John, Tel: 021-440 5274/(0296) 681226.
ROLAND PR100 digital sequencer, disks, s/w, as new, boxed, £200. Tel: (0909) 566695, between 6-8pm.
ROLAND TB303 bassline, boxed, manual, £160. Steven, Tel: (0726) 66715.
SEIKO MR1000, £25; Roland MC202, £95. Tel: (0264) 738750.
YAMAHA QX5, 8-track MIDI sequencer, good cond, manual, £130. John, Tel: 061-220 9617.
YAMAHA QX5FD 8-track, 32 Macrotrack digital MIDI sequencer, built-in 3.5" floppy disk drive, vast editing facilities, sync-to-tape etc, as new, f/case, boxed, £350 ono. Tel: (0384) 410853.
YAMAHA QY10, as new, £195. Mike, Tel: West Midlands (0562) 700726.

DRUMS

AKAI XR10, boxed, as new, £220. Chris, Tel: 071-739 8993.
ALESIS SR16, 1 mnth old, 233 sound samples, £220. Tel: Wellingborough (0933) 273915, days.
ALESIS SR16 drum m/c, 5 mnths old, still under guarantee, £175, no offers. Tel: (0275) 854802.
BOSS DR550 drum m/c, boxed, manuals, as new, adaptor, £120. Philip, Tel: 081-941 6359.
BOSS DR550 drum m/c, 48 sounds, mint, boxed, manuals, power supply, £140. Tel: (0703) 220152.
BOSS DR550 drum m/c, 48 sounds, inc the best of the TR808, boxed, as new, £125, no offers. Paul, Tel: Leeds (0532) 320537, eves.
CASIO RZ1 sampling drum m/c, tape of samples containing TR808 + 909 sounds, good cond, £130. Sean, Tel: (0438) 313865.
CASIO RZ1, £100 ono; QX21, £70 ono; Korg SQD1 sequencer, disk drive, £150 ono; Roland Juno 6, £140 ono; Roland MT32, £150 ono. Paul, Tel: (0344) 429163.
CHEETAH MD16 drum m/c, perfect cond, £240. Tel: (0525) 403707.
KORG DDD5 digital drums, bass ROM card, manuals, exc cond, home use only, £90. Lloyd, Tel: 081-290 1782, afer 7pm.
KORG DDD5 drum m/c, as new, £150. Tel: (0763) 262134.
ROLAND R5 drum m/c, boxed, manual, psu, good cond, £260. John, Tel: 061-220 9617.
ROLAND R5, £220; Roland PR100 sequencer, £220. £400 the pair, will split. John, Tel: Exeter (0392) 438214.
ROLAND R8, exc cond, boxed, manuals, £400. David, Tel: (0293) 521648.
ROLAND TR505, £100; TR808, £280; TR909, £450. All exc cond. Nigel, Tel: (0724) 711353.
ROLAND TR707 drum m/c, £80. Richard, Tel: 071-608 2282.
ROLAND TR727, MIDI in/out sync, trigger in, individual realtime volume controllers + outputs, £120; Akai MIDI delay unit, £35. Chris, Tel: (0243) 586395.
ROLAND TR909, good cond, £350; Roland SPD8 drum pads, only used 10 times, £250. Graham, Tel: (0223) 860348.
SIMMONS MTM trigger-to-MIDI interface, boxed, as new, £225 ono; Simmons MTX9 expander, £79 ono. Steve, Tel: (0271) 79176.
YAMAHA RX11, Yamaha RX21L latin, £150 the two. Write: Richard Silverthorn, 11 Fries Hill, Kingswood, Bristol.
YAMAHA RX15 drum m/c, good cond, £120 ono. Tim, Tel: (0773) 823224.
YAMAHA RX17, 26 voices, £120; HH Electronic 100W combo amp, £100. Both for £200. Paul, Tel: (0273) 591847.
YAMAHA RX17, 26 drum samples, 100 patterns, 10 songs, £110. Pete, Tel: (0622) 859948, work/(0795) 535931, home.
YAMAHA RX17, as new, fast sale needed, £100. Simon, Tel: (0382) 644510.
YAMAHA RX21, £60; Roland TR606, £30. Tel: (0223) 212226.

COMPUTING

AMIGA A500, 1Meg, Philips stereo colour monitor CM8833 MkII, Music-X sequencing s/w, only 3 mnths old, mint, £450; will throw in FB01 expander for an extra £50. Oliver, Tel: 071-289 0227, eves.
APPLE MAC SE 1/20, HP Desk Writer, printer, exc cond, £850 ono. Tel: (0706) 50897.
APPLE MAC SE/30, under guarantee, s/w, 2Meg RAM, 40Meg hard drive, £1250. John, Tel: (0502) 731237.
ATARI ST, Cubase, Notator + Virtuoso s/w, all latest version originals, £800 or swap for Wavestation or SQ80. Simon, Tel: (0279) 443877, eves.
ATARI 520STFM, 1Meg drive, Musilog Studio 24-track sequencer, scorewriting, Citizen 120D dot matrix printer, over £500-worth games, word processor, as new, cost over £800, £375 ono. Rick, Tel: (0427) 873116.
C-LAB CREATOR, v3, original, manual, £130; Steinberg FZ Sampler Soundworks, £120 ono. Tel: Merseyside (0744) 35567.
C-LAB CREATOR, v3.0, registered, manual, £200; C-Lab Explorer, library + editor for D110, £50; Rockman Soloist, power pack, clean + dirty sounds, £50. Pat, Tel: Bristol (0272) 306671, work/422462, home.
COMMODORE 64, 6 games, £50. Lee, Tel: Kings Linford 294161.
ROLAND MPU401, IBM card, computer music interface, MIDI timecode generator, brand new, never used, manual, £200; Yamaha MJC8 MIDI patchbay, 8 in/8 out, as new, £150. Tel: (0899) 4312.
STEINBERG PRO24, v3, £60; Steinberg Twelve, £30. Paul, Tel: (0609) 770090.
STEINBERG PRO24, v3, genuine, £40; C-Lab Explorer 32 for Roland D-series editors, 1200 sounds, £40. Nigel, Tel: (0724) 711353.
STEINBERG PRO24, manual, key, swap for MIDI-to-CV converter. Tel: Cambridge (0223) 276311.
SYQUEST 45MEG removable hard drive, SCSI interface, will work w/any SCSI sampler/computer, £250. Tel: (0706) 50897.

YAMAHA CX5M keybd, cassette, voicing/sequencer/composer s/w for Commodore C64 computer, costs £500, sell for £80 ono. Tel: (0742) 552290.

RECORDING

AIWA HDS1 DAT, 6 mnths old, very little use, upgrading to pro DAT, £350 ono. Chris, Tel: 081-963 1100, days/081-748 2767, eves.

AKAI MG614, £650. Tel: (0264) 738750.

ALESIS 1622, £420; Yamaha MT3X, £350; Neumann U87ai, £750; Atari 1040, monitor, £375; Axxeman, £100; Akai S1100, 10Meg, £2825; Alesis MMT8, £145; XRI XR300, £165; Urei 1176, £600. Offers? Tel: 081-462 6261.

ALESIS MICRO LIMITER, stereo comp/lim, boxed, psu, vgc, £50. Dave, Tel: (0704) 875097.

AMSTRAD STUDIO 100, 4-track, 6-channel mixer, echo unit, built-in mixdown cassette, record deck, radio, spks, mics, £180. Sean, Tel: (0438) 313865.

AMSTRAD STUDIO 100, 4-track cassette recorder, 8-input mixer w/echo, built-in 2-track cassette, radio, record deck, spks, exc cond, 6 mnths old, £130. Tel: 081-689 4166.

BOSS DE5 guitar multi-fx, chorus, delay, distortion, compression, £130. Nick, Tel: (0296) 394538.

BOSS RCL10, half-rack compressor, £69 ono. Rob, Tel: 071-723 1397.

BOSS RRV10 digital reverb, £80. Richard, Tel: 071-608 2282.

CUTEC 16:2 mixer, built-in graphics, £325; Korg DS8, £450. Andy, Tel: (0554) 890349.

DESKTECH 12:2 mixing desk, full aluminium f/case, £200. Chris, Tel: Hull (0482) 782869.

DI BOX/BALANCING BOX, 600 ohm balanced to high impedance in either direction, passive transformer type, total insulation, £25. Alan, Tel: (0379) 676670.

FOSTEX 3050 digital delay, £80; RV2 spring reverb, £70; pyschoacoustic enhancer, £80; XR300 SMPTE unit, £130. Tel: (0264) 738750.

FOSTEX A8, £500; Roland D50, £500 or swap either for Roland D550; Marshall 12W keybd combo, £75. Tel: 081-876 0599.

FOSTEX B16/REVOX A77HS, buy my B16 w/remote, get the A77 free, both exc cond, £1500. Tel: 031-441 5660.

FOSTEX E16, only used 600 hrs, motors, capstan, recording heads have no wear whatsoever, rare bargain, equivalent to buying new m/c. Raphael, Tel: (0483) 33763.

FOSTEX E16, footswitch, rackmount stand, vgc, £1950 ono. Barry, Tel: (0438) 740088, days/(0767) 318257, eves + weekends.

FOSTEX R8, 8-track reel-to-reel recorder, vgc, boxed, remote, footswitch, manual, £800. Earl, Tel: 081-571 5320.

FOSTEX X26 multitracker, exc cond, bargain, £180. Tel: (0388) 819913.

FOSTEX X26 multitrack, needs servicing, ie very loose jack socket on front, needs play + record buttons, but perfectly usable, only used approx 4/5 times, £95 ono. Jason, Tel: (0525) 717557.

JBL CONTROL 1 monitors, as new, £120. Tel: (0763) 262134.

JBL TLX9 monitors, as new, £195. Tel: (0763) 262134.

PEAVEY UNIVERB, 128 reverbs, fx settings, good cond, boxed, £200. A Prentice, Tel: 031-440 1797, 9am-4.30pm.

PRO MIXER MODULES: Electrosonic 16 channels + 4 groups, edge connectors, circuit diagrams, £10 each. Alan, Tel: (0379) 676670.

REVOX B77II, absolutely mint, 3.75/7.5ips, quarter-track, varispeed, 2 unused + sealed Ampex 10.5" 456 tapes, £550 ono. Mike, Tel: 081-558 3504.

SECK 18:8:2, 16-track connections, exc cond, £800 ono. Raphael, Tel: (0483) 33763.

SONY DTC55ES DAT m/c, blank tapes, boxed, manual, as new, £375 ono. Neil, Tel: 061-865 9822.

SONY DTC1000ES, w/modification, £795 ono; Tascam DA30 DAT m/c, £840 ono; Yamaha MT3X portastudio, £350 ono. Tel: 081-462 6261.

SOUNDCRAFT 200B mixer, 24-channel, 4 groups, 8 monitors, 4 auxs, 4-bnd EQ, f/cased, £2100 ono; JBL Control 10 monitors, £750 ono. Richard, Tel: 081-985 9894, after 6pm.

STUDER A810 stereo tape m/c, full manual, exc cond, regularly maintained, £2000; 2" multitrack test tape, £150. Mark, Tel: (0752) 894457.

STUDIO RESEARCH 12:2 mixer, 3-bnd EQ, 2 auxs, very quiet, rugged steel construction, exc cond, £215 ono; Yamaha MT44 4-track, w/4 input mixer, 7-bnd graphic EQ, patchbay, cassette storage, case, exc cond, £300 ono. Mark, Tel: 021-449 7938, eves + weekends only.

30 POST OFFICE patch cords, £4 each; 1 AKG 451, £75; 1 Twister automation unit, £400. Tel: 081-808 9283.

24:2 MIXER, ideal for MIDI, £450; 2" weather test tapes, NAB + IEC, hardly used, offers. Alan, Tel: (0379) 676670.

TASCAM 22-2, 2-track recorder, exc cond, £325 ono; Simmons SPM8:2 MIDI mixer, vgc, £200 ono. Pete, Tel: Cheshire (0928) 88978.

TASCAM 34, 4-track reel-to-reel, good cond, £200 or swap for SR16 drum m/c. Neil, Tel: (0753) 537116, days/(0628) 603329, eves.

TASCAM TSR8, 8-track, boxed, as new, 2 reels Ampex tape, £1390; Dramwer LX20, £170; EMT10, £140. Alan, Tel: 051-339 1167.

TEAC A3340 tape recorder, remote, £400. Chris, Tel: (0734) 794493.

VESTA FIRE RV3 twin-channel analogue reverb, EQ, £75 ono. Tony, Tel: Cambs (0480) 66346.

WHITE 12:2 mixer, £110 ono. Wanted: Alesis 1622 mixing desk. Nick, Tel: (0946) 830262.

YAMAHA MT3X, £335; Sony DTC1000ES DAT, £765; Tascam DA30 DAT, £825; Drawmer 1960 valve compressor, £695; Alesis MMT8, £140; Atari 1040, monitor, £350; Axxeman, £95; Yamaha SPX90II, £250. Offers? Tel: 081-462 6261.

YAMAHA MT3X, exc cond, boxed, manuals, £335. Terry, Tel: 021-471 4157.

YAMAHA MT3X, 4-track, 6 inputs, 2 auxs returns, home use only, £425. Tel: (0525) 377587.

YAMAHA MT44, 4-track tape m/c, Yamaha RM602 mixer + patchbay, £400. Neil, Tel: Hemel Hempstead (0442) 871465.

YAMAHA R1000 reverb, as new, £100. Tel: (0763) 262134.

AMPS

C AUDIO 1200W stereo power amp, f/cased, £650 ono. Tel: (0706) 378141.

CARLSBRO COBRA 90 keybd combo, 3-channel, £150. Nigel, Tel: 081-898 7573.

CARLSBRO COBRA 90W keybd amp, 5 inputs, reverb, fx loop, £160 ono. Tim, Tel: (0707) 872886.

CARLSBRO COLT 45 keybd combo, never gigged, £100 ono; MIDI thru box, 2 ins/8 outs, £30. Lewis, Tel: 071-609 5750.

CARLSBRO SCORPION keybd amp, reverb, 2 inputs, exc for home use, £40 ono. Simon, Tel: (0705) 733969, after 6pm.

CUSTOM SOUND 200W 6-channel mixer amp, footswitch, fx loop: mutable on each channel, mutiple outputs, headphone socket, vgc, £190 ono. Barry, Tel: (0438) 740088, days/(0767) 318257, eves + weekends.

LESLIE 760, 100W, separate bass + treble power amps, absolutely mint, matching preamp - use w/any keybd, £325. Neil, Tel: Hemel Hempstead (0442) 871465.

1000W RMS MOSFET stereo power amp, 500+500, anti-surge, anti-thump, DC protection, fan cooled, bargraph meters, twin power supplies, balanced in, £400. Alan, Tel: (0379) 676670.

PA SYSTEM, 6-channel Seck desk, 300W Kudos spks, dual power amp, Beyer mic, echo unit, leads, all £480. Tel: Wolverhampton (0902) 757527.

SOUND CITY COMBO AMP, 120W, built-in reverb, exc for guitar or keybds, will swap for powered monitors or £120 cash. Alan, Tel: (0706) 57692.

TANNOY STRATFORD monitors, £95. Ian, Tel: (0308) 25819.

PERSONNEL

ADAM IN NOTTINGHAM, the guy who was going to get the Fairlight, call me back mate, I've lost your number. Steve, Tel: (0782) 660969.

BRISTOL-BASED techno wiz looking for similar to make some hard-core hard-hitting toons. Martin, Tel: (0275) 854802.

EXPERIENCED SALES PERSON, wd like to work in studio. Average experience due to home MIDI studio setup. Don't mind what job at all, preferably in London. Neil, Tel: (0753) 537116, days/(0628) 603329, eves + weekends.

FEMALE VOCALIST urgently required to become part of latest digital studio. Must be talented and reliable. Dance/soul orientated. Immediate start. Claire, Tel: 071-608 2282.

GREAT SONGS seek lyricist. Andrew, Fax: Warsaw, Poland +4826 284580.

JAZZ/BLUES BAND, working in Portsmouth area, require keybd player preferably doubling Hammond organ. Tel: (0705) 472935.

KEYBD + DRUM M/C PLAYER wanted for songwriter for band/duo. A Hornsby, Tel: 081-880 2650.

KEYBD PLAYER needed who can read most forms of music to work

with producer/arranger with own equipment. Into: dance, rare groove, house, hip hop and all that. This isn't a hobby, this is serious. Sherwin, Tel: 081-952 9251/(0459) 138141.

RAVE TECHNO OUTFIT seeks group or partners in Midlands area. Tel: (0527) 546826, after 6pm.

SYNTH PLAYER WANTED, 16-21 yrs old, for band starting out in Falkirk area. Must have analogue and sampler sense. Influences: heavy metal, hard core, techno, acid house. Paul, Tel: (0324) 474253.

WANTED: confident S1000 and Cubase user for programming and teaching in home studio. £4 per hour. Tel: (0268) 681345.

WANTED: male or female vocalist for dance, soul or rap songs. Full commitment essential. Tel: 081-659 7605.

MISC

GIBSON SG STANDARD, walnut, 1970s, vgc, £250; Gibson SG 1963, good original cond, £500; Washburn Eagle, solid mahogany, 5-piece straight through neck, humbucking pickups w/coil taps, superior quality instrument, £250. Alan, Tel: (0379) 676670.

LEFT-HANDED Pulse electric guitar, 1U black, twin pickups, whammy etc, gig bag, £50. Tony, Tel: Cambs (0480) 66346.

MPC SYNCTRACK, syncs Roland TR808, other non-MIDI drum m/cs + sequencers to tape, £15. Tel: (0706) 50897.

PHILIP REES 2M 2-way MIDI merge unit, brand new, unused, £70. Tim, Tel: (0773) 823224.

SCHOLZ ROCKMAN guitar, headphones, power supply, £140 ono. Rob, Tel: 071-723 1397.

SOFT CELL *Mutant Moments* EP, £50; 'A Man Can Get Lost', £25; various rare flexis, £15. Jason, Tel: (0525) 717557.

STYLOPHONE, immac collectors item, £20; 80 copies of MT, 1984 onwards, 80 original colour spec sheets, 13 manufacturers catalogues, original 808, 909, TB303 etc, £10 the lot. Tel: 081-993 0786.

2 PRO FLIGHTCASES by Quentor of Norwich, 28"x10"x40" internal dimensions, £70 each. Alan, Tel: (0379) 676670.

YAMAHA EMQ1 MIDI disk recorder, boxed, manuals, as new, adaptor, 11 disks, £110. Philip, Tel: 081-941 6359.

YAMAHA WX11 MIDI wind controller, WT11 sound module, £425 ono. Tel: (0277) 373008.

WANTED

AKAI S1000/S1100, Atari 1040STE, hard cash paid. Jay, Tel: 081-508 5853/(0836) 367479.

ALESIS HR16 drum m/c, must be exc cond, cash waiting. Tel: (0384) 410853.

ATARI 1040STF external TV modulator, good price paid. Paul, Tel: (0634) 861744, after 6pm.

AN ASSORTMENT OF KEYBDS required + studio gear to enhance my studio line-up, cash waiting. Royston, Tel: 061-273 5480.

CARLSBRO COLT 45K, cash available. Laurie, Tel: (0504) 860675, anytime.

CASIO FZ1 or Roland S50 sampling keybd, will pay between £600-700 depending on model + cond. Philip, Tel: (0424) 32076.

DESPERATELY WANTED: MPG80 programmer for Roland MKS80 synth. A Prentice, Tel: 031-440 1797, 9am-4.30pm.

FOSTEX M80 + Kawai K4 keybd, cash waiting. Tel: 061-483 8551, anytime.

FULL-SIZE POLYSYNTH, w/manuals + box, must be MIDI + digital for use w/Yamaha QX21 sequencer, £100 cash waiting. Tel: (0462) 675329.

KORG CX3 organ. Joe, Tel: Rotherham (0709) 379656.

MIDI-TO-CV CONVERTER, swap for Pro24 v3. Tel: Cambridge (0223) 276311.

MOOG TAURUS MKI bass pedals, genuine musician looking to pay fair price for set in reasonable cond. Martin, Tel: 081-558 2658.

MUSIC TECHNOLOGY, March 1990 issue, send me your copy + I'll send £2.50 by return. Tel: 081-689 8372.

ROLAND D50 programmer, Steinberg D50 s/w, MPC Electronics music percussion computer. Stephen, Tel: (0603) 56161 X2550, days.

ROLAND E15 at reasonable price, cash waiting. Alan, Tel: (0379) 676670.

ROLAND MULTITIMBRAL KEYBD, D10 or similar. Tel: Nottingham 283289.

ROLAND MV30 Studio M, p/x Akai MG614 etc or cash. Tel: (0264) 738750.

ROLAND RD250S piano, cash waiting. Dave, Tel: (0925) 814385.

ROLAND SH101. Tony, Tel: (0202) 697054.

ROLAND TB303 bassline, will pay £200. Paul, Tel: (0642) 535736, after 5pm.

ROLAND TB303 bass synth. Steve, Tel: (0224) 742688.

ROLAND U220, Roland U20 in exchange, any offers. Mike, Tel: (0273) 675000.

ROLAND W30 music workstation, will pay around £900. Paul, Tel: (0302) 538304.

SIMMONS PORTAKIT. Tel: Warwick 400512.

SOMEONE/CIRCUIT DIAGRAM to fix my poorly Korg Monopoly. Tony, Tel: (0636) 707069.

TEAC RX9 dbx unit, any cond, not necessarily working order. Chris, Tel: (0742) 343527.

WANTED: floppy disk drive for Commodore 64, 1541 or similar. Alan, Tel: (0379) 676670.

YAMAHA PSR2000 keybd, cash waiting. Tel: Portsmouth (0705) 376700.

ad index

ABC Music.....15
Akai 20, 21
AMG 61
Andertons 45
Axe Music 33
Dangerous CD Company.....45
Digital Music 10
Eddie Moors Music 51
Four Minute Warning ...72
Gigsounds.....24
Korg U.K.....O.B.C.
MCM.....9, 45
Midi Music Show.....65
Music Connections36, 37
Music Corporation.....48
Patchworks.....19
Peavey U.K.....13
Percy Prior.....19
Pro Music.....50
Roland U.K 5
Soho Soundhouse.....63
Sound Control 23
Sound Technology 17
Time & Space.....51
T.S.C.....1, 27
Yamaha .....I.F.C.

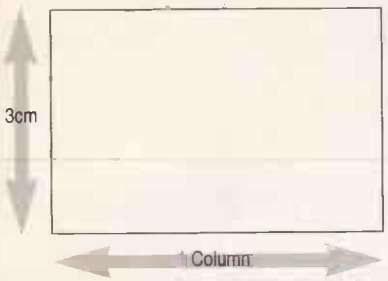
CALL IN YOUR READERS' AD ON

(0891) 100767

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:



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

SOFTWARE, HARDWARE AND SAMPLES

SAMPLE LIBRARIES

EPS/FZ1/S950/S1000/S550/S330/W30 1/S770/S750/PEAVEY DPM SP/DPM-3 SE/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.
HOUSE ATTACK II - NOW OUT

SAMPLES ON R-DAT

1500 SOUNDS ONLY £80.00 JD 800 SOUNDS - NOW IN STOCK

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

DESERT ISLAND
TEL: 0463 - 221488
DESERT ISLAND (DEPT. M)
20 EDINGTON RD. INVERNESS, SCOTLAND, IV2 3DB

HEAVENLY MUSIC
ST/PC MIDI SOFTWARE

DR. BEAT *Producers Series Drum & Percussion Disk*

A vast collection of Drum and Percussion Patterns. Fills, Intros and Endings Professionally Programmed with the FEEL of a REAL drummer!... Not a machine. Dr. BEAT has already received exellent reviews and is being described by our users as THE DEFINETIVE Drum and Percussion Pattern Collection in MidiFile Format. Vols 1 AND 2 available NOW!
£10.00 each inc. p&p

RAMJAM *Musicians Series of Midi Jam Files*

A collection of 'KILLER' jams in MidiFile Format. Imagine a jam session with some of the worlds TOP musicians in styles from Funk to Fusion in ANY key at ANY speed... till you DROP! You've just imagined RAMJAM! Vol 1 available now with Vol 2 coming soon.
£12.95 inc. p&p

MEGGA-TRACKS *Professional Series of Midi Song Files*

Through demand from our Dr. BEAT customers... THEY WANTED PRECISSION MIDI SONG FILE SEQUENCES WITH FEEL! Programmed by NY /UK Producers to give everybody something the others can't... WHAT YOU WANT! We've produced for : WEA, CBS, RAK, EMI, Atlantic Rec. (UK & US) and Anglia ITV and now for YOU! Phone about those songs you can't find elsewhere!
£26.00 for 5 Songs inc. p&p

S-S-S900/950 *Producers Series of Sample Disks*

Specifically configured for use with all our Midifile products £6.00 inc.p&p

We dispatch your order the very same day we receive your cheque with full helpline support. Don't blow your money on inferior imitations offering more quantity than quality!

To order: Send cheque or Postal order to - HEAVENLY MUSIC, 39 GARDEN ROAD, JAYWICK VILLAGE, CLACTON-ON-SEA, ESSEX CO15 2RT
For further details, phone Clacton - on - Sea (0255) 434217
We won't cut corners on Quality....So why should you?

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

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 Lync and Info files as standard.
Individual Drum Tracks. Bulk Discounts available.

Phone or Write for Cataloque.

4 Chart Hits for *only* £20.95 (+£1 P&P)

"HANDS ON" MIDI SOFTWARE LTD.,
14 LODGE ROAD, BEDHAMPTON HAVANT, HANTS PO9 3LL
TEL/FAX (0705) 452628

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

BIG TIME PRODUCTIONS B.T.P.
FZ-1 SAMPLE LIBRARY DSDD DISK £3.50 / DSHD DISK £4.00 DEMO DISK £1.00 DSDD / £1.50 DSHD
Write for free cataloque
BIG TIME PRODUCTIONS PO BOX 520, BURSLEM, STOKE ON TRENT ST6 5UR TEL: (0782) 810611
Discounts for bulk orders

NEWTRONIC
- MIDI SOFTWARE
- SOUND DISKS / CARDS
- MIDI SEQUENCES

081 691 1087
62b Manor Avenue, London SE4 1TE

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

PLANET ZOID
50 Market Sreet, Dalton in Furness, Cumbria LA15 8AA

ZAP IN lush strings, spacial pads, mega bass, organs, techno, atmospherics, FX's, harsh brass, bells, lead, and much more.
On data cassette for:
JUPITER 8 > 256 Prog £20 ESQ-1 200 Prog £15 JX-3P 128 Prog £12
JUNO 106 128 Prog £9.50 ALPHA JUNO 1> 192 Prog £9.50
TECHNO BASS TAPES>> JP-8 <40pg > ESQ-1 <40pg> JX-3P<48pg> £4 each
STRANGE / WEIRD TAPES >> JP-8 < 40pg > ESQ-1 < 40pg > £4 each
write for info or contact Tim (0229) 53746
Cheques / Postal Orders to PLANET ZOID

CASSETTE DUPLICATION

COMPACT DISCS
LPs 95p - Singles 80p
Plus mastering min 1,000
AUDIO, VIDEO & DAT COPYING
EXACT LENGTH CASSETTES
SELECTA SOUND
5 MARGARET ROAD, ROMFORD
ESSEX RM2 5SH Tel: 040-245-3424

FOR SALE

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 + £2.00 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)

FOR HIRE

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

SERVICE / REPAIRS

PMS
PANIC MUSIC SERVICES
HI-TECH SERVICE CENTRE
ALL MUSIC EQUIPMENT REPAIRED AND SERVICED MOOG-ARP, ETC. A SPECIALITY
SERVICE CENTRE FOR ROLAND, SANSUI TEAC/TASCAM
Tel: **0954 31348** or **0860 782541**

TUITION

MIDI CLINIC
PRIVATE TUITION IN ALL ASPECTS OF MODERN MUSIC TECHNOLOGY.
SEQUENCING, SAMPLING, SYNTH PROGRAMMING, ETC.
CUBASE, NOTATOR SPECIALISTS.
TELEPHONE HELPLINE AVAILABLE
PHONE FOR DETAILS
081 898 1276

FOR SALE

THE FRIEND-CHIP K..AT
New **Keyboard Remote for the Atari**
Seven keys and the shift function allow you to remote up to 14 functions of any software package. The K.AT automatically loads up to 32 variable configurations at start up, and a footswitch can be used to operate the "Record" key for punch in/out. Comes pre-configured for C-Lab and Steinberg.

MIDI METRO

The world's first fully programmable, highly visual, MIDI metronome. It can be used to display tempos, time signatures, meter changes, ritards and accelerandos.
The MIDI Metro eases the burden of annoying click tracks, relieves ears from excessive monitoring levels and increases confidence and muscle control giving efficient, accurate performance tracks.

FRIEND-CHIP TCR1 TIME CODE REFRESHER

No matter how distorted the time code signal on your tape machine is, the TCR1 transmits a code with the quality of the first generation, eliminating any jitter, even if the code is played at variable speed. This results in a constant level, symetric wave-form with slanted edges to minimalise distortion and crosstalk. The TCR1 recognises all code formats automatically, and features sensivity down to -30dB (adjustable).

Q-LOGIC™
TEL: 0796 2001 **FAX: 0796 3806**
P.O. BOX 109 ♦ DUNDEE ♦ DD1 9DF ♦ SCOTLAND
Available Mail Order or Selected Dealers
Telephoned Credit Card orders welcome

Reach today's Hi-Tec musicians with a classified ad in Music Technology Magazine Call 0353 665577 Ext. 135

SAMPLE THE RHYTHM WITH 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:
ROLAND: CR78, TR505, TR606, TR626, TR707, TR727, TR808 (MULTI SAMPLES), TR909(MULTI SAMPLES), R8.
YAMAHA: RX5, RX11, RX21L.
KORG: DDD1, KPR77, DDM110, DDM220.
BOSS: DR550, DR.55 (DR.BEAT).
PLUS: **SIMMONS** KIT, **LINN** 9000, 2, **SEQUENTIAL** TOM, **ALESIS** HR16,HR16B,**CASIO** RZ1, **EMU** DRUMULATOR, **AKAI** XR10,XE8, **OBERHEIM** DBX, **DR.BOHM** DIGITAL DRUMS.
OVER 700 ORIGINAL DRUM MACHINE SOUNDS
AND AVAILABLE FOR THE EXCLUSIVE PRICE OF JUST

£29.95 (INCLUSIVE).

To order your compact disc simply telephone **0424 436674** for details and credit card purchase, or fill in the coupon below and send it to;
Patchworks, Frederick house, 211Frederick 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.. .....
.....
..... Postcode .....
Tel: .....

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!

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 3/92

K O R G P O R T R A I T S

Tony Banks & Phil Collins
01/W Music Workstation

Two prime forces in Genesis, Tony Banks and Phil Collins, are down on "The Farm," the band's ultra-modern studio in the heart of the English countryside, recording their new Atlantic disc, *We Can't Dance.*

Sound is what Genesis is all about, so they chose the 01/W Music Workstation.

As they put it: "Korg has come up with a synth that has some of the most evocative sounds we've ever heard!"

The 01/W Music Workstation from Korg. Because great sounds are what it's all about.

Hear them on the new Genesis record and upcoming Tour.

KORG® 01/W MUSIC WORKSTATION

For more information, write to: Korg (UK), 8/9 The Crystal Center, Elmgrove Road, Harrow, Middlesex HA1 2YR

© 1992 Korg U.S.A.