

NAMM Report

Recording

by Christopher Holder

Alesis spiced up the hard disk multitracker race with the introduction of the ADAT HD24. As the name suggests, Alesis are marketing this as a 24-track HD recording ADAT. It looks very similar to an ADAT, you can use the ADAT's BRC to control it, you can sync to your existing ADATs no problem... it's really a no-brainer for ADAT owners looking for an upgrade. What it's not is a DAW, or editor... as I say, think of it like a 24-track hard disk-based ADAT. The HD24 uses a proprietary method of writing to hard disk to provide 24 tracks of 24-bit audio on low-cost IDE hard drives. This proprietary

tion line to correct for very small variations in drivers. The settings live internally and are specific to each unit.

Electric Factory: (03) 9480 5988

Not one, but two new mics from **Rode**. The NT1000 is a fixed pattern cardioid, true condenser mic, featuring a large capsule and the usual Rode eye for build quality. Meanwhile, the NTK looks pricier but highly desirable. It features a one-inch capsule gold-plate membrane with twin triode valves hand-graded and selected. There's a dedicated power supply, high level of RF rejection, internal capsule shock mounting and some very low noise figures. Initial impressions would suggest this is a valve mic to get your hands on.

*Rode Microphones:
(02) 8765 9333*



Roland's VS series of digital multitrackers seem to be undergoing almost constant improvement and revision. But I have to say, the latest update, the VS2480, involves more than a few more channels. There are 24 tracks, there's motorised faders, and it looks a whole lot chunkier. What's clever is that you can plug in a mouse and perform drag and drop editing using the on-board display (which admittedly is a bit fiddly given the size). You can now plug in a monitor via



system is said to result in decreased fragmentation of the drive, which should mean much quicker seek and play time ('under 100ms'), and a reduced chance of crashing. The other knock-on benefit is you need not buy super swift hard drives – any ol' low cost IDE drive will do. The HD24 ships with two drive caddies, and a 10GB hard drive which will yield approximately 45 minutes of recording time at 24-bit/48k. I think Alesis are onto something here, people latch onto a product like this rather easily, and the price will place them under their (admittedly higher spec'ed) competition.

Alesis also announced the first in their new DSP-enhanced studio monitor series, the ProLinear 820. The 820 features 'ultra-flat' frequency response, and the ability for users to precisely customise speaker response using on-board digital processing. In the conventional sense, the ProLinear 820 is a bi-amplified, eight-inch two-way high-performance studio monitor. But the heart of the ProLinear 820 is a new Alesis DSP module, which is applied to each speaker right on the produc-



the VGA video output, but this doesn't replicate the on-board display it provides a more generic playlist, mixer setting etc. Roland has chosen not to build a CD burner into the unit but offer an optional burner that you can connect up via the SCSI socket. There's an optional meterbridge available as well now, and Roland's COSM modelling effects are on-board as standard. The 2480 is quite a serious retake on the whole V Studio concept, and looks the goods.

Roland: (02) 9982 8266

NAMM was a good chance for people to take a closer look at **Tascam's** new 788 Digital Portastudio, a 24-bit, eight-track hard disk recorder. Offering 24-bit non-compressed recording to an internal 7.5GB hard drive, the 788 features six-track simultaneous recording and eight-track playback, with an eight-channel main mixer and six-channel sub mixer and eight-channel cue mix. Also included are four mono balanced inputs on TRS jacks and one stereo input with on TRS jacks, as well as stereo output, monitor output, stereo aux output and a coaxial digital output. The 788 has three-band EQ on each channel in the main mixer, high and low sweepable shelving bands, parametric mid, as well as aux and effect sends on each channel in the main mixer. Two internal effect processors can be independently assigned as a stereo effect processor, channel dynamics across eight channels or stereo dynamics. It can also be assigned as a multi-effects processor for direct guitar



input. The available effects include compression, distortion, noise gate, flanging, reverb, delay, chorus, exciter pitch shifting, phasing, an EQ and a de-esser. Among the 788's editing and recording features are: auto punch in/out recording with 99 multi-take function; point search for last recording start; dedicated locate and editing buttons with 999 locate points per song; waveform display for editing; and a low-speed playback function.. Up to 250 virtual tracks can be recorded on the unit per song and, using MTC, the 778 can be locked to other MTC-enabled devices. A new dedicated CD burner, the CDR-788, is being offered by Tascam to allow for CD recording via the 788's SCSI bus. Initially, the price looks like the 788 will be a genuine alternative to Yamaha's AW4416, and Roland's 2480.

Tascam: (03) 9644 2442



Mackie announced the v3.0 operating system for their D8B. v3.0 features third-party plug-in support via Mackie's UFX card, enhanced dynamics, 999 levels of undo, surround sound mixing features (depth of centre control, surround LFE control for each channel, surround-corrected bus/track assignment, surround front-to-rear pan control via control surface or Midi) and a bunch of other new stuff.

Australian Audio Supplies: (02) 4388 4666

Phonic has aimed to plug the hole in the gaping mid-priced analogue surround mixing console market with



their MRS1-20 and 1-30. Surround panning is addressed using the three-pot method (L/C/R, F to B, and Ls/Rs), while the LFE is dealt with in a number of ways, offering some more flexibility in the mix. There's also three-band semi-parametric EQ, and six auxs on every channel as well as 12-segment metering.

CMC: (02) 9905 2511

KRK added to their range of V series monitors. The V4 is a bi-amped (30w/15w) mini monitor, with video shielding, four-inch bass driver, one-inch titanium tweeter. The idea here is that you team it up with the new S8 subwoofer for a well-matched full range system. The S8 is compact, features an eight-inch driver, a 100w amp and will extend your frequency range down to 43Hz.

*Syncrotech Systems Designs:
(02) 9879 0800*



Manley has some interesting new gear. The 16-by-two tube mixer is designed to a no-frills analogue mixer optimised for sound quality over superfluous functionality. What you get is 16 channels of mic gain, mix gain, pan knobs, lit solo

and mute buttons and two large VU meters. This mixer won't be for everyone but anyone wanting the Manley sound in a compact mixer will be taking a good look.

Manley's ELOP II stereo limiter will also stir up some interest. The ELOP II aims to combine the sounds of all the classic limiters of yore which still remain indispensable in numerous recording studios. It spans the range of clean predictable limiting to the ultra grungy.

Stop press: Manley has just entered into an agreement with George Massenburg Labs (GML) to manufacture the highly desirable GML designs. No doubt this will prove to be a very interesting development. We'll keep you informed – as always.

Syntec International: (02) 9417 4700



You can read about HHB's Fatman stereo tube compressor later in this issue, but NAMM saw HHB give the Fatman bit of a nip and tuck (paradoxically) making it even fatter. The Fatman 2 will act as a tube mic pre (with 48v phantom power and HPF) and offers a switch to toggle between the rear mounted mic input and the front mounted instrument input. Well chubby.

AWA Audio Products: 1800 642922

You can read all about iZ Technology's RADAR24 later in the issue, but NAMM saw the introduction of the RADAR48, a complete out-of-the-box 48-track hard disk digital recorder. iZ also introduced the RADAR M8 surround sound master recorder, the 'world's first' 192k, eight-track HD recorder. It was also good to see the Eclipse remote in action. The Eclipse controls all the RADAR24 functions, includes a meter bridge and can be located some 100ft from the RADAR24.

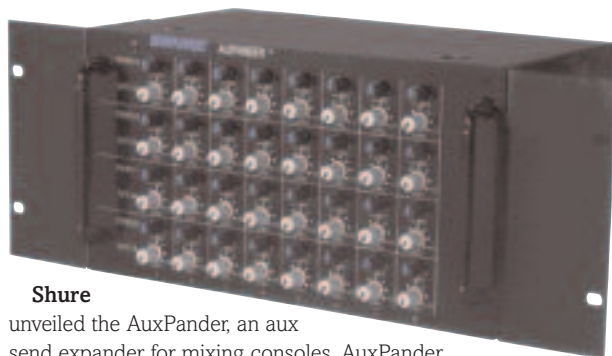
Factory Sound: (03) 9690 8344

Lexicon released the MPX500, a true stereo 24-bit dual-channel processor with balanced analogue and S/PDIF digital I/O. There's 240 presets crammed in, with classic Lexicon programs like ambience, plate, chamber and inverse, as well as a variety of modulation effects. There's also four dedicated knobs, tap tempo, Midi control etc.

Studio Connections: (03) 9874 7222

Spirit's 328 has been boosted by a v2 software update. The automation is now compatible with a wider range of sequencers, while changes to the user interface allows for easier operation.

Jands Electronics: (02) 9582 0909



Shure

unveiled the AuxPander, an aux send expander for mixing consoles. AuxPander increases a mixing console's output capabilities and lets users turn any mixer into an eight bus console.

Jands Electronics: (02) 9582 0909

Marantz released its next generation of CD recorders, the CDR631 and the CDR500. The CDR631 and 500 provide all the features of their predecessor model, the CDR630, but with enhanced functionality such as CD-Text generation and digital record level control.

TAG: (02) 9810 5300

Summit introduced the TD-100 tube DI and instrument preamp. There's a 'loading' knob to match the input impedance with the output of your bass, guitar or keyboard, while the output control gives you as much or as little tube saturation as you desire. Knowing Summit, their aim here is to make the best DI in the business.

The Summit TLA-50 is similar to the venerable TLA-100A tube leveling amp, it uses the same simple interface, with a VU meter framed by a continuously variable gain and gain reduction knobs. Attack and release are switchable, two units can be linked for stereo operation and the sidechain can be accessed via the back panel. When in bypass, audio passing through the TLA-50 also passes through the 12AX7A/ECC83 vacuum tube, so you can use it to add 'warmth' without compression.

Sound Devices: (02) 9283 2077

Zoom's PS-02 Palmtop Studio is a bright idea. It's a minute multitrack digital recorder with on-board multi-effects and 200 bass and drum patterns. It even has a built-in mic for recording vocals and acoustic instruments. Zoom use SmartMedia removable memory cards for recording.

*Dynamic Music:
(02) 9939 1299*





Emagic launched the EVP88, a new software instrument for use with the Logic Audio. It'll provide the highly sought after sounds of legendary electric pianos such as the Fender Rhodes Mark I and II Suitcase and Stage series, the Wurlitzer Electric Piano 200A and the Hohner Electric Piano. These sounds (whether you know you've been hearing them or not) are very much the flavour of the month, and from what I heard, the EVP88 offers the authenticity and the control to make Logic owners dip into their pockets.

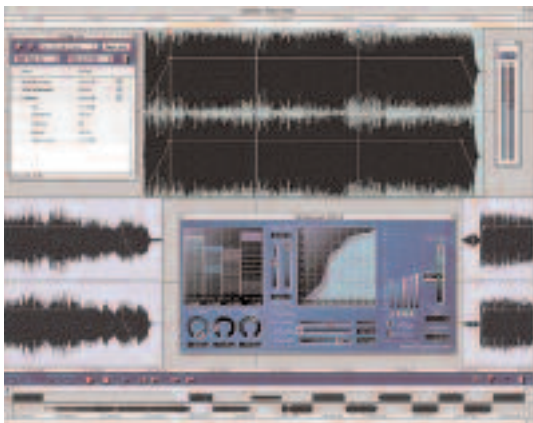
Emagic's EXS24 software sampler has been ported to TDM, and is now also VST 2.0 compatible.

Logic Audio 4.7 has some handy new additions. Significantly, 4.7 adds eight-channel surround mixing for all Platinum users running TDM-based systems. Emagic has added an elegant surround panner to take care of placement. TDM hardware users can now insert external effect processors on audio tracks, inputs, aux tracks, buses and outputs via Platinum's new I/O track inserts. There's also some interesting house-keeping improvements, which should make existing Logic users get onto this free download pronto.

Emagic's SoundDiver has been upgraded. Mostly there's been a bunch of new modules added, including for the Access Virus, which has a completely new interface design.

Emagic's WaveBurner has been given 'Pro' status. The integration of mastering plug-ins and support for VST format plug-ins, along with the ability to now directly load and work with even more audio formats, makes WaveBurner an even more attractive proposition.

Electric Factory: (03) 9480 5988



I suppose, given the focus of this NAMM news section, we should all raise a glass to **Steinberg**, who back in 1996 were responsible for the idea of the virtual studio in the first place. Ker-chink... thanks chaps.

Steinberg's HALion is a new virtual sampler for VST-compatible systems. HALion (I'm sure the first three letters are upper case for a reason!) combines the usual complement of sampler controls you'd expect, with an embedded loop editor (with some useful crossfade functions). Getting HALion going is as easy as dragging and dropping a sample to the keyzone window, whereupon samples are then streamed directly from the hard disk – so a gig of RAM shouldn't be necessary to do anything useful.



Nuendo, Steinberg's media production system has been upgraded to v1.5. VST2.0 support means you can run compliant virtual synths within Nuendo. Steinberg Spectral Design will also offer a Dolby Digital 5.1 encoding package in the near future. **TC Works** announced the release of Surroundverb, a surround reverb for Nuendo. As you'd expect this plug sounds rather good, and there's more than enough control over a smorgasbord of parameters. The 'Nuendo 8 I/O 96k' is an eight-channel A/D and D/A converter. It features Intelligent Clock Control (ICC), SyncCheck, SyncAlign, TDIF/ADAT converter, and a bit splitter. I haven't got the space to go into what ICC and SyncCheck/Align means, but if this unit delivers on its promises you're looking at virtually all sync and interconnectivity problems sorted.

Music Link: (03) 9765 6565

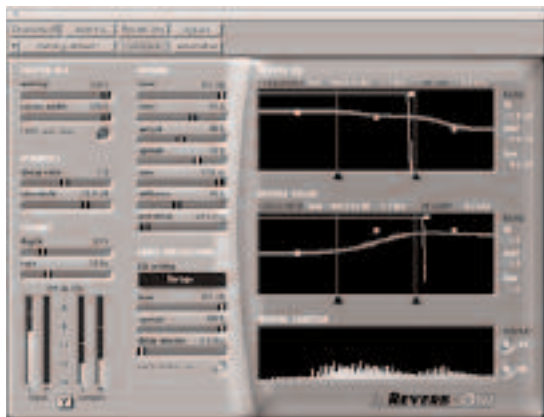
Waves' Tel-Aviv head office has been buzzing with activity as well. The new Renaissance Voice processor was on show. Voice is optimised for vocal tracks, featuring a simple interface with only two controls. The display controls a newly designed compressor, gate, and precision limiter with automatic gain staging for clip-free maximisation of vocals. At NAMM they were able to announce the TDM version as well as the Native product.

Waves also announced that the L2-Ultramaximizer software has been ported to TDM. Interesting, given the L2 was fundamentally a hardware version of the L1

software. Regardless, the L2 plug-in will be identical to the Ultramaximizer in every respect (without the knobs on, obviously).

Back to the Waves hardware stuff though, the Y56K is a card that will slot into the back of your Yamaha AW4416 (via the YDGA1 slot) and offer six of Waves proprietary audio processors.

Sound Devices: (02) 9283 2077 / Music Technology: (02) 9369 4990



Digidesign launched the new SurroundScope plug-in. SurroundScope is a multi-channel monitoring tool for the new surround capabilities introduced in Pro Tools 5.1. SurroundScope offers an intuitive interface that 'accurately depicts what listeners will hear'. SurroundScope offers a graphical display of surround positioning, phase metering and level metering for the signal level for each audio channel within the multichannel sound field.

Digidesign's Reverb One was on show. Reverb One aims to be a genuine plug-in answer to the high-end hardware equivalents. Dedicated to a single Mix chip, Reverb One makes full use of the DSP processing cycles of ProTools. Looked rather good.

Digidesign: (03) 5428 7780

Melodyne were one of the surprise packets of the show. Here's a program that extracts notes from any monophonic audio material, and then allows you to edit its pitch, formant, intonation, and amplitude of each note separately. This isn't just a pitch corrector, or harmoniser, it's something else altogether. Once, say, a vocal line appears within Melodyne, then via various tools you can get in there and alter just about every aspect of that vocal,

while still maintaining the original performance's inherent characteristics (if you desire). For example you can pitch

shift as much as two octaves with virtually no audible artefacts. I mean it. Mind boggling stuff. Furthermore it's all in real time so you can set a loop running and just tinker until it's right. Change timings, key, and note duration by just pointing and clicking. Worth investigating.

Melodyne: 'www.celemony.com'

Native Instruments has been in the virtual instrument game from the onset and have cottoned onto the fact that they need to, yes, sound very good, but also look great and be easy to use. NI had a bunch of interesting stuff including:

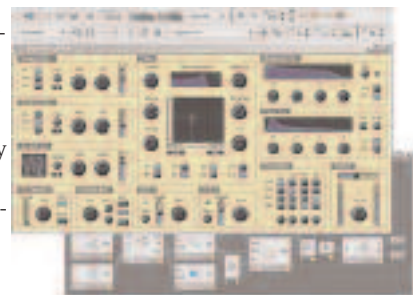
Reaktor v3.0.

The new version 3.0 has improved performance and has been optimised for Pentium III and G4 processors. A redesigned user interface comes with

new panel elements and supports drag&drop. You also get modular real-time synthesis, sampling and effects processing; extensive module and instrument library with hundreds of audio tools; MP3 compatibility and import of Akai samples directly from CD.

The NI Spektral Delay offers some interesting possibilities for creative sound design – from subtle corrections and effects to the totally 'mongrel-ising' of the input signal. It uses real-time FFT (Fast Fourier Transformation) to split up each channel of audio input into as many as 1024 individual frequency bands. The amplitude, delay time, and feedback ratio can be adjusted independently for each frequency band. Additionally, various modulation effects can be applied to the signal in the frequency domain, allowing for even further sound manipulation.

Battery offers a different take on drum sample playback. It boasts separate sound parameters for 54 instruments, modulation capabilities and ease of use. Battery will read samples in Akai, SF2, LM4, AIFF, WAV and MAP formats from 8 to 32 bits. Your drum setup can have as many as 54 instruments on the go, each with 128 velocity layers,



tuning, volume envelope, pitch envelope, bit reduction, shaper and FX Loop for innovative effects. There's also six modulation inputs per instrument with many drum-oriented presets.

Music Link: (03) 9765 6565/Major Music: (02) 9545 3540

Antares' Auto-Tune has been revised. Auto-Tune 3 adds 'source specific' pitch detection and correction algorithms. This all means even quicker correction of common pitch problems. Also v3 offers phase-coherent pitch correction of stereo tracks as well as supporting double sampling.

Sound Devices: (02) 9283 2077

It was the first time I've had a good chance to give **Arturia's** Storm software a good listen. It's a virtual studio for composition, where you can configure a huge array of software synths and effects. At first glance Storm looks pretty cheesy, with its garish colours and boxy GUI design, but it does sound very good indeed. The synth emulations are excellent, the effects are interesting (but won't obviously put Waves or TC Works out of a job) and there's a few clever arranging tools which help to put



together a song in no time. It'll run on Mac or PC and you can call it up as a VST instrument. But where Storm shines (if that's not too oxymoronic) is as a standalone composition machine.

Innovative Music: (03) 9540 0658

Propellorheads' Reason has finally arrived (after great expectation) and you can take a good look at our review later in the issue.

Meanwhile, ReCycle! has been ReVised (that's a joke son) to v2.0. The new version can now work with (yes, drum roll please) stereo files and most settings within ReCycle! can now be previewed in real time – so tempo and pitch changes are heard instantly. A number of real-time processing tools have also been added. These include gate sensitivity (easier to get rid of unwanted noise etc.); an Envelope Add attack and decay control (more control over the nature of your slicing); Transient Shaper (more control over the loop's dynamics), and a two-band parametric EQ with high and low cut.

Music Link: (03) 9765 6565

Rocket Network revealed v2.3. The new system allows audio pros to organise and manage their audio files in a standard data-tree structure. In v2.3 users will have an account that provides access to all their work. When the user enters the system, they see a list of their sessions and any session they have been invited to participate in, displayed in a typical file list format. It sounds easier to navigate and it is. Rocket is onto something here and the big software developers are cottoning on – Logic is 'Rocket Powered' and MOTU has recently 'signed on' as well.

Rocket Network: 'www.rocketnetwork.com'

Nemesys, the first company to make sampling off your hard disk a commercial reality, were demonstrating



their Gigastudio 160 sampling workstation. The 160 relates to the maximum number of voices you can stream off your hard drive, but there's some other tasty features which makes the whole 'Giga' concept very appealing. There are Nemesys' own NFX effects (from what I heard, they seem to be on the right track), the latency is very low, and the GUI is pretty intuitive. If the literature is to be believed, then Hans Zimmer certainly thinks they're onto something, and the steady stream of new sample CDs in Giga format just makes the platform even stronger.

East West Sounds: (02) 9922 3591

MOTU in Australia are probably better known for their rather good hardware units, but the NAMM show demonstrated that their Digital Performer package is stronger than ever. Version 3, or DP3 as it's dubbed, looks very interesting. Surround sound integration, new editing features (like the ability to edit audio and Midi together in DP3's new Sequence Editor) and a swag of new effects will all breathe some fresh life into this sequencer.

MOTU: 'www.motu.com'

Applied Acoustics Systems announced the release of version 2.0 of the Tassman. You may well be unfamiliar with Tassman 1.0 so here's a quick synopsis. Tassman boasts of being the first modular software synth to use physical models of analogue hardware, acoustic objects and musical instruments that are easily controlled by an well designed GUI. Tassman offers users 'building blocks'

based on analogue hardware and acoustic objects that can be patched using their inputs and outputs for the creation of 'limitless' number of instruments. This one's for those who enjoy the process as much as the end result. Tassman 2.0 now features support for the Dxi and VST plug-in formats, 'unnoticeable latency', and some brand new sound modules.

Tassman: 'www.applied-acoustics.com'



Creamware has added the Vectron to their Pulsar/Scope DSP platform. Vectron owes a bit to Sequential's classic Prophet VS, even incorporating wavetables that are equivalent to the VS factory wavetable set. By the look of Vectron, Creamware has made vector synthesis more available (and more fathomable) to a

larger market, while the sonic variety is very good indeed.

Major Music: (02) 9545 3540

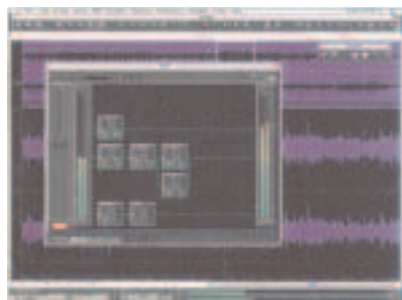
Arboretum Systems' Realizer addresses the problem of MP3 audio's loss of sonic integrity. Basically it's an audio enhancer tailored to the losses that MP3 compression inflicts, by improving stereo imaging, maximising bass and bringing back high-end sparkle. Meanwhile Ionizer is Arboretum's take on noise reduction. There's the usual array of click, pop and other artefact removal as well as some interesting 'frequency morph' technology which applies EQ curves from any recording onto any other piece of audio.

Arboretum: 'www.arboretum.com'

BIAS debuted VBox, a multieffects control environment for VST plug-in effects.

Within VBox you can combine, repatch and mix in real time any VST plug. If you've used TC Spark then you'll be familiar with their effects matrix setup and VBox runs along similar lines. Neat idea.

BIAS: 'www.bias-inc.com'



BitHeadz released Phrazer, a digital audio loop sequencer for the Mac. Phrazer is designed for multi-track loop arranging, and features the ability to simultaneously adjust the tempo and pitch of multiple loops in real time.

What we're talking about here is an attempt at offering Mac users something like the PC-only Acid. Speaking of which, Phrazer will happily import Sonic Foundry's Acid file format, as well as virtually every other popular format, in 16- or 24-bit resolution. To give things a kick along, East West (the sample CD

people) are launching a new range of CDs optimised for BitHeadz Unity DS-1 software sampler format. Here's the drill: get your loop 'just so' in DS-1, dump it into Phrazer and start arranging.

BitHeadz: 'www.bitheadz.com'

Cakewalk debuted SONAR, which will take over as their flagship

Midi+Audio sequencer package. If you're a Cakewalk owner then best have a good look at SONAR, there's a bunch of new soft synth integration, as well as some very well thought out house-keeping updates among other improvements.

Cakewalk: 'www.intelliware.com.au'



With a name like **Cycling '74** you know this company has a sense of humour, but the release of their Pluggo collection has been given some serious praise. They've added to the collection with Essential Instruments, which includes 14 software synths, drums machines and sampler modules for VST2 and MAS. The whole vibe here is low cost, good quality fun. Cycling '74 also announced Radial, a loop-based composition and performance tool for Mac. Max 3.6 is another interesting one. It's a graphic programming environment for developing real-time music and media applications. You can use it make Midi control a laserdisc player; with a mouse, joystick or nearly any computer input device you can control the playback of a QuickTime movie; you can build interactive music generators etc... Next up, the MSP2.0 which provides over 100 objects for synthesis and signal processing that work inside the Max environment. Combine Max and MSP for some serious fun and always interesting results. All up, hard stuff to explain, but if you like the process of noodling around for hours to get your own unique sounds and setups then Cycling '74 are well worth a look.

Cycling '74: 'www.cycling74.com'

The Czech Republic is hardly known as a hot bed of software design but **DSound** might have something to say about that. Their new Stomp'n FX provides the guitarist with a large suite of VST/DirectX-compatible virtual pedals. Distortions, modulation effects etc... very handy.

Dsound: 'www.dsound1.com'



Control Surfaces

It strikes me as a little odd that as more and more control surfaces for your favourite digital audio software are released that an established player in the digital mixer market hasn't weighed in. Instead NAMM demonstrated that the main players are coming from the audio interface manufacturers. Already we've seen releases from otherwise unknown companies like CM Automation, Event, and Radikal Technologies, and now we can see imminent releases from Mixed Logic, Emagic (admittedly, in collaboration with that little known mixer manufacturer, Mackiel), M Audio, Steinberg, and (the big one) Digidesign.

Okay, **Digidesign** does have some mixer 'runs' on the board with their ProControl, which has served the post market admirably, but there has been a real opportunity to service the recording guys who rely on ProTools. Digi's answer is the Control 24. It's a joint venture between Digidesign and Focusrite, with Focusrite offering their analogue preamplification design. What's on the board includes touch-sensitive moving faders, dedicated EQ switches on every channel, and illuminated buttons for mute, solo, record



Also included are stereo capabilities and an integrated submixer section with eight stereo inputs for command over submixes, synths etc.

NAMM was also the first time many had seen Digidesign's Edit Pack, effectively an add-on option for Digidesign's ProControl mixing control surface. Edit Pack features two touch-sensitive motorised joysticks for surround sound panning, a QWERTY keyboard and trackball, eight-channel high resolution metering, and other new, dedicated editing switches allowing 'single button' access to common software features within ProTools. I think the way Digi sees things is, if you want to get the most out of PT 5.1's surround sound features, and you already have ProControl then Edit Pack is a natural progression.

Digidesign: (03) 5428 7780

Emagic and Mackie used NAMM to announce a collaboration to develop a family of state-of-the-art



hardware controllers. First up will be Logic Control, a control surface for Emagic's Logic Audio software. It'll be developed as a modular system, with the basic version comprising eight motorised touch sensitive faders, one-touch sensitive master fader, eight mutes, eight solos, eight rotary encoders, tape-style transport, two XDR mic preamps, a data wheel and Alps control pad. We may see Logic Control before winter.

Electric Factory: (03) 9480 5988

Of the new control surface prototypes on display, **Midiman's** was by far and away the least recognisable as a control surface! [By gum, I wish I had a pic to show you.] Rather than use conventional faders, the SurfaceOne uses a fibreoptic-based touch-sensitive material. Originally designed by the Canadian Space Agency and now licensed by Tactex, the material transmits the information it receives through touch, which is then converted into the (far less space age) Midi protocol. Because the fabric can read up/down, left/right, and pressure information at the same time, SurfaceOne is capable of sending multiple messages simultaneously; each of which can be assigned to different Midi parameters. [Mmm., my space helmet is fogging up just thinking about it.]

Electric Factory: (03) 9480 5988

Steinberg's Houston looks close to being shipped. It's designed as a Midi/USB controller for Nuendo and Cubase VST. It features nine 100mm touch-sensitive motorised faders, eight rotary encoders with LED position indicators and a matrix of buttons, to bring all aspects of the VST mixer within easy reach. Additionally it features a large LCD display, transport controls and a jog/scrub wheel, a numeric keypad for entering values and for selecting setups and marker positions. Houston has been designed so that all basic VST parameters are only one button push away.

Music Link: (03) 9765 6565

Mixed Logic's M24 certainly eschews the glamorous for the fiercely functional. Of the lot, the M24 looks the most like a traditional mixing console, with 24 touch-sensitive motorised faders, and what look like 24 conventional channel strips, and a 'master' section. It's fully con-



figurable, expandable, bank swappable (for more controllable channels) and talks to your favourite digital audio sequencer via USB. It looks solid as a small brick building and my guess is that we're looking at an Australian price of around \$10,000. Check out

'www.mixed-logic.com' for more.

Innovative Music: (03) 9540 0658

This is a great little idea from **C-Mexx**. It's called the MIR (Midi Interactive Remote), it fits in the palm of your hand and can conveniently control or manage digital mixing consoles, external effects units, drum machines synths, soundcards etc. It comprises a



number of user-definable buttons and an LCD that will display relevant parameters your editing. If you're a guitarist flicking through effects, or if you're editing a synth and want to remotely control your sequencer, this little baby could save you some time.

Innovative Music: (03) 9540 0658

Radikal's SAC-2K was being demonstrated and Radikal had a considerably longer list of supported software to announce. Check out our review later in the issue.

Sound & Music Productions:
(03) 9528 5744



Synthesisers

Judging by the gear on show, the humble synth hasn't gone the way of the dodo, but if anyone is going to sit up and take notice there has to be an interesting angle. Which leads me to the rather interesting:

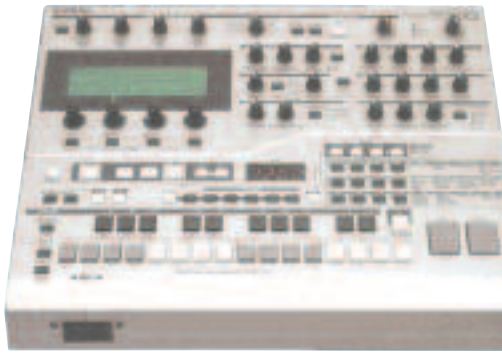
Korg Karma, which combines the sounds, effects and sequencing capabilities of Korg's Triton (without the sampling engine) with a new technology called Karma, which Korg describes as a 'variable performance modeller'. This, in practice, means that based on the notes and chords that are played, Karma will automatically generate and manipulate phrases and patterns that are impossible to produce with conventional arpeggiators or static pattern playback functions. The first time I caught wind of this, I thought, "uh-oh, cheesy, auto-accompaniment style instrument", but no, there's something genuinely very interesting here. For example, using

Karma you can call up a guitar patch, hit a chord and hear the synth play an intricately overlaid cascade of notes, the basis of which you can edit using the eight Karma pots. Karma does stuff you could never really hope to achieve on a keyboard or even with clever programming, and, what I like, is that there's enough user definability such that you can get a Karma effect going and make it your own (i.e. it's not something like the 'Universe' patch on the M1 where everyone knows you've used *that* sound).

Music Link: (03) 9765 6565

I have to say that I didn't see **Yamaha's** RS7000 coming. It's a 'music production studio' with sampling, synthesis, and sequencing, or, to bring things into perspective, it's Yamaha's idea of an Akai MPC killer. The beauty of Akai's MPC family is the ability for producers in loop-based genres like hip hop, R&B, big beat etc, to bring their samples and loops together and arrange them on the fly all from the one box. The RS7000 aims to take on that immediacy but add synthesis as well. So with the RS7000 you can import your samples, chop your breaks up, synchronise loops of differing tempos, filter them, effect them, resample them and so on. Then you can use the on-board





tone generator (more than 1,000 on-board sounds, and 63 drum kits) to create your basses, strings, and additional drums, and then bang it all together using the on-board 200,000 note sequencer. Also, the master effects section looks interesting,

R E P O R T

which combines the usual array of compression/limiting with some DJ-oriented stuff which will have you sounding more like Mr. Fatboy, if that's your bag.

After finishing up on their MPC 'killer', Yamaha evidently turned their gaze to Korg's rather successful Electribe series... the result is the Loop Factory. I have to say, what really caught my fancy was the DX200, which resurrects FM synthesis and puts it into a box any old chump can get their pea-sized brains around (unlike the DX7 which required 200 hours of your spare time and a brain the size of a Commodore 64). It combines a six-operator, 16-note polyphonic FM synth with a bunch of rhythm sounds and a 16-step analogue-style sequencer. Worth a look for the FM side of things alone.

Its brother, the AN200, does a similar thing but on a physical modelling tip. As mentioned, both combine drums with synthesis, which makes them more powerful than some of its competitors, but ups the complexity of the interface.



Yamaha Music Australia: 1800 805413

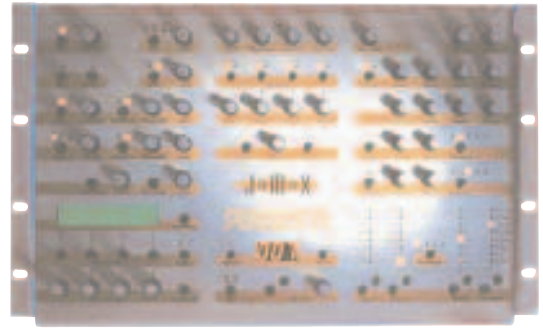
E-mu introduced the XL-7 and MP-7 Command Stations. The XL-7 takes the synth engine of E-mu's Proteus 2000 and the XL-1 sound modules and combines them with a new 'grooving' multitrack sequencer. The vibe here is dance/techno, and there's enough knobs, buttons, presets and polyphony to do some damage.

Meanwhile the MP-7 is the same sort of beast except the Mo-Phatt soundset has been injected into the formula to appeal to the hip hop, R&B home boys.

Electric Factory: (03) 9480 5988



Jomox have one of the more street-credible names in modern analogue. Their analogue drum machine pleased the purists, and their new Sunsyn will no doubt do the same. It's a polyphonic analogue synth. It's a little bit of an odd-ball because of a feature called RCO (Ramp Controlled Oscillator), which means you can play the sort of complex digital waveforms with the timbre of the Sunsyn analogue VCOs. Equally, you can just play the VCOs by themselves. The filter section features a fully configurable



four-pole analogue filter, which offers all sorts of possibilities for emulating classic analogue filter sections. Furthermore, there's two filter setup setting, and you can morph between them in the analogue domain. Nifty.

Innovative Music: (03) 9540 0658

NAMM had its fair share of analogue modular synths, which certainly gets the juices flowing of all the Tangerine Dreamers out there. Truth is, I doubt whether any of them will get past the garages of their makers. Except for **Doepfer**, I think, who have been on the scene since the analogue renaissance began. The A-100 analogue modular system is a full-blown analogue synth in the tradition of Roland's System 100 etc. In fact the vocoder modules were designed in cooperation with Kraftwerk. We are the robots, indeed.

Innovative Music: (03) 9540 0658

Kurzweil have packed the sounds of their PC series keyboards into a 1U rack. The PC2R includes the triple-strike stereo grand piano, new stereo strings, multistrike classic keyboards and organs, as well as Kurzweil's KB-3 organ models.

Music Technology: (02) 9369 4990

MAM make a line of cost-effective analogue 1U rack gear. There's a couple of monophonic bass synths, including the MB33 II, which is all-analogue – not hugely complex, but offers a nicely chunky sound. Their other gear is all worthy of further investigation and all-analogue – there's a filter, 11-band vocoder, resonator, phaser, and EQ. As I say, cheap enough to get a couple of each.

Innovative Music: (03) 9540 0658

It's not much more than a cosmetic touch-up, but **Novation** released a limited edition platinum version of their Supernova. It's a ProX model of the Supernova and if you want a piece of history you'll no doubt pay a little more. More practically, Novation has developed a new ADAT and S/PDIF digital interface card for the Supernova II rack and keyboards. Anyone with a mixer sporting ADAT optical will see an obvious application for this little card. Meanwhile the ADAT input means you can route multiple channels of audio through the Supernova's effects/filter/vocoder etc.

Innovative Music: (03) 9540 0658



Audio Interfaces



RME's Hammerfall DSP is the German company's solution to mobile, laptop recording. The system consists of a PCMCIA type II card as the computer interface and various I/O boxes optimised for different applications, offering several analogue digital and Midi I/Os. To show off the potential power of this interface card RME have teamed it up with a beast of a breakout box comprising three ADAT optical I/Os, ADAT-Sync In, S/PDIF I/O, wordclock I/O, two Midi sockets and a separate analogue line out. Apparently, all this can be used on a standard notebook with the same 'zero CPU load' and low latency (down to 1.5ms with ASIO) as seen on Hammerfall's desktop PC setups.

RME's ADI-8DD is an eight-channel 24-bit/96k universal format converter. The idea here is to have a unit that can convert your ADAT/TDIF into AES/EBU and vice versa. Switchable sample rate converters in 24-bit quality allow for high quality sample rate conversion and clock decoupling of AES/EBU inputs. There's some other interesting features which include SyncCheck, Intelligent Clock Control (ICC), SyncAlign, Bitclock PLL, digital patchbay functions, active jitter reduction per SC-PLL and 24/96 sample rate conversion. And if you don't know what all that means then don't feel bad, much of it is proprietary smarts to sort all syncing, clocking and conversion issues.

Innovative Music: (03) 9540 0658

M Audio continue to make natty new interfaces, offering serious quality in the process. The Delta TDIF is a 24-bit/96k PCI card that support all MDMs conforming to the TDIF-1 standard. The Delta TDIF offers a stereo pair of analogue in and out for connectivity with your DAT etc. Useful and cost effective.

The MidiLink offers another option for those wanting to use their laptop as a sequencer. It offers Midi I/O and compatibility with all the Windows flavours. AudioSport Quad PC is a four I/O audio interface with Midi for PCs with USB access. Another handy little solution.

Electric Factory: (03) 9480 5988

Ego-Sys's GigaStation looks quite interesting. It's built to complement Nemesis's hard disk-based sampler, the Gigasampler. It happily supports Nemesis's GSIF Gigasampler driver as well as ASIO drivers, so you can easily combine Gigasampler with your favourite digital audio sequencer. There's eight analogue outs, and will actually be packed with Gigasampler and the Gigapiano sample CD.

The Midi People: (02) 9542 4105

Aardvark are probably better known for their synchronisation products, but this digital audio interface is very interesting. The Direct Pro Q10 is the latest addition to Aardvark's Direct Pro Series, and features powerful DSP-based virtual mixing software which eliminates the need for an external outboard mixer by providing control of recording, monitoring and mixing within your digital audio workstation. The Q10's Control Panel mixer software provides many of the features of an automated digital mixer, including a digital patch bay, digital peak metering, VU meters and presets for snapshot recall of any mixer setting.

Innovative Music: (03) 9696 6999



Emagic launched what they've dubbed the 'first 24-bit portable multichannel audio interface for USB'. It delivers six playback and two recording channels at 24-bit. Emagic have designed it to be truly plug-and-play – the computer will recognise it and power will be supplied via the USB port. You can also expect latency-free monitoring. As far as I was



concerned the jury was still out about the issue of USB having the necessary wherewithal to pass audio reliably in real-time, but Emagic have a 'unique technology' which will transfer all the channels of audio without data reduction. We will see, no doubt.

Electric Factory: (03) 9480 5988

The **Soundscape** Mixpander PCI card provides a hefty amount of DSP processing power for Soundscape's R.Ed and SSHDR1-Plus DAWs. It'll plug straight in and integrate with your Soundscape mixer transparently. To give you an idea of what this guy can do, a Mixpander/9 is capable of running 10 heavyweight TC Reverbs, plus a 32-channel, 32-bus, 5.1 surround mixer, with four master channels for simultaneous 5.1, LCRS, Dolby surround and stereo outputs. Should tide you over!

Soundscape: (08) 9473 1222

Lucid introduced four digital audio distribution amplifiers. Each DA features a selection of outputs that will distribute audio or sync signals to multiple destinations. Of the four DAs, the Lucid AESx4 and CLKx6 perform the



simpler set of tasks: taking the audio at their inputs and distributing it to a number of same-format destinations. The AESx4 receives either word clock or AES audio and delivers it to four AES-connected units. The CLKx6 passes sync information, in word clock or superclock format, to six parallel outputs. Two additional Lucid DA's offer an expanded set of features. The SPDIFx7 can take S/PDIF stereo audio and feed to it four S/PDIF and two TOSLINK optical outputs, plus one AES output. Distribution in multiple formats is simultaneous. The GENx6 can distribute or generate sync information. It routes word clock or superclock to six BNC outputs. With the flip of a switch it operates as a stand-alone clock source, generating word clock or superclock at frequencies of 44.1k or 48k.

Major Music: (02) 9545 3540



I'm not sure whether this product belongs in this section but it needs talking about. **Lake**, the Australian company who made its name in simulating surround sound via two channels, has released a mass-market processor that will make life a lot easier for many people. It's snappily called the TheaterPhone HSM6240 and it converts 5.1 inputs into a simulated 5.1

listening experience via a pair of standard headphones. Yes, it really works. Dolby certainly think so, they've licenced Lake's DSP technology for their Dolby Headphone products (as heard on Singapore Airlines, apparently). This unit also offers three different simulated listening environments (bigger, brighter etc.) I tell you, there's plenty of places in post, recording, broadcast, and DVD authoring where the TheaterPhone will be darn handy.

Lake DSP: (02) 9211 3911

This is something a little different from **Waves**. MaxxStream is a suite of products which addresses the problems associated with audio streaming. MaxxStream integrates audio capture, processing and encoding into a single workstation. It performs real-time streaming with full-spectrum sound at any bandwidth and any format currently available. I haven't got the space to go into all the features, but here's one of the problems it aims to address: you spend weeks mixing and mastering a track for delivery over the internet, which you then encode, say, as a MP3 file. The fact is, you don't really know what the compression will do to your work until you do it.

MaxxStream removes the guesswork by allowing you to work with the encoded file and restore much of the associated degradation, via Waves' well-regarded on-board plug-ins.

Sound Devices: (02) 9283 2077



Sound Reinforcement

Traditionally, NAMM isn't somewhere to go to look at new sound reinforcement gear. Make no mistake, NAMM is still primarily about MI and hi-tech, but some of the major live sound players are choosing this LA show as great platform to launch new product.

When **Midas** launch a line of more cost effective

mixers, it's time to sit up and take notice. These consoles have been dubbed the Venice Series – and it's nothing to do with their all-weather durability. Venice aims to package the renowned XL-series and Heritage sound into a smaller format. If you love those mixers but you're on a smaller gig, or conference work, you can still specify a Midas. This will make many people very happy. Currently there's three models in the range, the Venice 160/240/320, all offering four stereo line/mono mic

inputs with a differing complement of dedicated mono mic/line inputs. As you'd

expect, the facilities are comparatively stripped down compared to a top of the range Heritage, but Midas are canny enough to



know what's required. Unlike the smelly, water-logged city of the same name, I can't see these mixers sinking without a trace.

EVI Audio: (02) 9648 3455

Soundcraft and their lower cost brand, Spirit, were one of the pioneers in packaging good functionality and respectable sound quality into small format mixing consoles. NAMM proved they continue to have a commitment to this end of the market. Perplexingly, the new M Series is neither a Spirit console or a Soundcraft console,

it's both. The Soundcraft Spirit M Series look great, appear to be very sturdy, are rack mountable and are designed to be just as useful in the studio as they are on the road. Currently, there's three different frame sizes in the range, the M4, the M8, and the M12. I like the fact that Soundcraft have gone for 100mm faders, individual mute and PFL switches, as well as inserts on the mono channels and direct outs. There's also three-band semi-parametric EQ, and some very creditable specs on the mic pres, noise and crosstalk. The M Series isn't meant to service the rock bottom price market (although the M12 should come in under \$3000 Australian I imagine), but thankfully sells itself on quality of design. There's much about these mixers which instill s me with confidence.

Soundcraft also released its Show Series Two, a compact live sound console aimed at small touring sound companies, theatres, churches, and other fixed installs. Series Two is available in a variety of frame sizes, and each channel features four-band EQ and a variable high pass filter, as well as the usual complement of functions you'd expect from Soundcraft.

Jands Electronics: (02) 9582 0909

JBL continue to hone and expand their EON G2 (Generation 2) range of powered speakers. The EON10 G2 is brand new, featuring a 10-inch woofer, increased power (125w for the lows, 50w for the highs) and a three-input mini mixer. The EONSUB G2 is the new 250w sub woofer designed to complement the range with its 15-inch woofer and 40Hz to 200Hz frequency range. As with all of the EON range these moulded cabs will stack happily, and, even more appealing, JBL has dropped the prices considerably. JBL has also given the EON mixer another look, releasing the MusicMix 14, sporting six mono inputs, two stereo inputs, two aux inputs and three-band channel EQ. All up, EON remains a rather attractive package that requires little experience to setup and get sounding good.

Jands Electronics: (02) 9582 0909

Yamaha introduced their portable MS400 powered loudspeaker system. Delivering 400w of built-in power, the MS400 is a compact, lightweight, bi-amplified speaker system that can be flown, stacked, pole-mounted or even used as a floor monitor. The high frequency section of the MS400 contains a single two-inch titanium compression driver coupled with a 90- by 60-degree constant directivity horn, and is driven by a 100w power amplifier. The 15-inch transducer, equipped with a light neodymium magnet driven by a 300w power amplifier, produces efficient mid and low frequency reproduction. Utilising Yamaha's EEEngine Technology, the internal bi-amplified system maintains efficiency, low current draw, low heat and reduced weight.

Yamaha also introduced their MC series of multipurpose mixing consoles. These boards are lightweight and strong, feature 32 or 24-input capability, four group buses and six aux buses in its standard FOH configuration. Like previous Yamaha designs you can reassign aux busses to become group buses, allowing you to swing the MC into monitor duties.

Yamaha Music Australia: 1800 805413



NAMM was the first time I'd caught up with **EAW's** new Avalon DC-Series club system. Loudspeakers in decent sized clubs take up space and are pretty conspicuous, so EAW reasoned, 'why not combine a little glamour with a top quality array of cabinets?'. These are distinctively styled and have already become popular among some of the 'superclubs' in the US and Europe. This range is designed to revel in the rigours associated with today's dance music (i.e. kick drums banging away for eight hours straight and hi-hats slicing punters' heads off... that sort of thing), and they're designed to be wall/ceiling-mounted in awkward spots (where appropriate). Probably worth opening up a club for.

Production Audio Services: (03) 9415 1585





Electro-Voice were showing their new Cobalt range of mics. EV's mics have always been well regarded and at least a couple of their RE series are in most engineer's cabinets, but EV were after a line of workhorse mics which could introduce their name to the lower end of the market. The range encompasses a number of vocal mics and an instrument mic. The Cobalt range look good, EV's engineering and sound is always very good, and these mics will no doubt be a viable alternative to the ubiquitous 57 and 58.

EVI Audio: (02) 9648 3455



Behringer debuted their new Eurolive Series, comprising five models – two two-way full-range speaker enclosures, two two-way floor monitors, and an 18-inch sub. Eurolive are tailored to serious touring and large installs, but are priced incredibly reasonably. I can testify to the fact that they can chuck it out, certainly it had the official NAMM decibel clerks scurrying in Behringer's direction with their SPL meters.

Behringer also introduced their Ultrawave B300 lightweight moulded cab design speaker. It's an active two-way, 300w system with internal EQ processing and a built-in mic preamp.

The Eurorack MXB1002 mixer has some obvious live applications. It's a compact 10-channel mixer (two mono channels, three stereo, and a stereo tape return), and can be operated using standard alkaline batteries. Potentially a handy little box in a crisis.

Music Link: (03) 9765 6565

Crest was showing their new range of LT and ST series amps. Both ranges ship with the same power specs, but the LT features a linear power supply and switching output stages, while the ST features both a switching power supply and switching output stages. These amps are an attractive and highly spec'ed alternative for musicians, installs, mobile DJs and the like.

Production Audio Services: (03) 9415 1585

Symetrix has completed the redesign of their line of



ambient sensing gain controllers with the release of the 371 SPL Computer. The 371 is an updated version of the 571, featuring refined processing algorithms, and a lower cost per zone. Designed for installations featuring foreground or background music and/or paging, the 371 continuously monitors ambient noise conditions using an external mic and adjusts the system gain proportionally.

Audio Telex: (02) 9647 1411



Phonic has weighed into the power amp market with their ULP series. They feature a switch mode power supply, clip limiters, high pass filter, dual continuous variable speed fans, and a sub woofer output selectable at 60Hz, 90Hz, or 120Hz.

Upping the ante a little is the PIII series, which is capable of producing up to 1400w per channel. Being Phonic, these amps will, no doubt, be a cost effective alternative as well.

CMC: (02) 9905 2511

Sabine introduced the SWM-5000 wireless mic system. The SWM-5000 is available in one or two-channel models and include Sabine's built-in 'targeted input processing', the FBX feedback exterminator, a compressor/limiter and an intelligent de-esser. Sabine has also thrown in mic 'SuperModeling', which allows you to dial up a choice of several well-known dynamic and condenser mic element simulations (physically, this system uses an Audix OM-5 capsule).

Audio Telex: (02) 9647 1411

AKG added three new models to their Emotion series. The D660S is a 'low cost, high quality' vocal mic, the D550 is an instrument mic with LF boost, while the D440 is another instrument mic with mid/high boost. The D880 and D880S remain the top of the line Emotion vocal mics, but these additions should offer some more alternatives at a lower cost.

AWA Audio Products: 1800 642922

Celestion announced the launch of two new multipurpose bass systems that make up a range of products called Substation. The new Substation 10, 15 and 18 all feature Celestion's connector panel that allow them to be configured in any one of three modes: passive stereo, passive mono, and direct mono. The dual voice coil

design enables mono 'summed' bass reproduction of a stereo signal, while an internal passive crossover allows the user to select mono or stereo high pass passive filtering for separate mid/high loudspeakers. All of these Substations, from the 10-inch to the 18-inch are quite low profile, feature carry handles, top pole mount socket and kick-proof grille. Ideal for installs, pubs and clubs.

GUET: (02) 9418 6029

The DSP blue MEQ-2000 multimode equaliser is the first member of **Inter-M's** DSP-2000 family. There's a 31-band graphic, an eight-band parametric EQ, both supported by a six-band notch, low cut and high cut filters. On the back end there's a combined limiter/compressor for loudspeaker protection and a peak limiter. A delay on every

analogue and digital channel allows you to adjust the sound for different loudspeaker positioning. The convert-



ers are 24/96, but dithering and noise shaping options are included. Looks like a good sound reinforcement workhorse.

Magna Systems: (02) 9417 1111

Earthworks introduced their new hypercardioid stage mic, the SR68. This new mic offers 'uncoloured clarity' combined with 'huge' off-axis rejection. Earthworks tells us that just behind 90 degrees the sound is simply and cleanly eliminated – the benefits of improving volume before feedback would appear considerable.

Australian Audio Supplies: (02) 4388 4666

Superscope Technologies demonstrated a four-model range of units specifically designed to assist in the learning of music by enabling the speed of a recording to be varied by up to $\pm 50\%$ while maintaining the same key. Thus the transcription of lyrics or notes, or the mastering of a difficult riff becomes a much easier process. By



using the A-B practice loop the same section of a CD can be repeated again and again to enable the artist to perfect a performance. The PSD220 and PSD230 are both portable CD players, both can read CDR and CD-RW discs and include analogue, digital and headphone outputs with three-band EQ for audio output. Prices start from \$1,295.

Technical Audio Group: (02) 9810 5300

Samson launched a new line of S Class series processors designed to be equally at home in the studio as on stage. The SoCom is a two-channel compressor with an expander/gate, limiter and enhancer on each channel. The AEG (Automatic Envelope Generator) allows the threshold and release time to be set automatically depending on the program material. The SoCom Plus adds a variable de-esser into the equation. The SoCom 4 is a four-channel expander/gate/compressor/limiter; the SoPhones is a four-channel headphone amp; the So3-Way is a three-way stereo/four-way mono active crossover; the SoVox is a stereo voice channel; while the SoGate 4 is a four-channel expander/gate/ducker unit.

Electric Factory: (03) 9480 5988

Yamaha Tours **AW4416**

Yamaha will be running a series of demonstrations to present the new AW4416, (as reviewed in Issue 12). Currently there's two dates: Wednesday the 21st of February in Sydney at the Film and TV School, and the 28th of February at Yamaha's rather salubrious Melbourne-based head office on the Southbank. Apparently all attendees will receive an AW4416 instructional manual and an excuse to get out of the house.
Yamaha: 1800 805413 (ex 105), or (03) 9693 5105

Record Production **Seminars**



'Hotshot Yank shipped in to tell Australians where they've gone wrong'. I think that's what many people may be tempted to think when they read about these series of seminars being conducted around Australia. But after having a chat to those concerned I can guarantee the reality is very different. Certainly, Mike Wanchic is American and he is the 'real deal' when it comes down to his production and engineering credits (Mellencamp, Bryan Adams, Bob Dylan, Beach Boys etc etc), but the purpose of these seminars is to provide a frank discussion of the aspects of putting together a hit record – stuff you won't necessarily learn from experience or from a college. Mike will cover subjects

like: pre-production, analogue versus digital recording, ProTools, demo to hit single, arrangement techniques, production techniques, outboard techniques, and cap things off with a Q&A session. If you're in a band embarking on a studio recording, if you're an aspiring record producer, in A&R, or have any interest in becoming more clued-up on the process of making successful releases, then Mike will be most edifying. Tickets for these seminars will go for \$70 and you'll need to ring the number below or Ticketek to secure a place. I'll see you there.

On top of these seminars Mike and engineer Ross Hogarth (Black Crowes, Celine Dion, Jewel, Motley Crue etc) will conduct a series of more personalised workshops for professionals. Again, the focus is on taking your production and engineering to the next level of worldwide commercial success. Most likely the format will be based around Mike putting up one of his well-known recordings on multitrack and working through the processes and rationale which elevated the project from creditable recording to hit single. These particular pro sessions will be conducted in a selected studio in each city, and ticket sales (at \$190 a piece) will be capped at 15 for each.

The seminar dates start in Melbourne on the 5th of March, and then head to Sydney, Brisbane, Adelaide, Perth, and Darwin. Ring the number below to find out more.

Phone: (03) 5784 3263; or email: iam@ancc.com.au

Affordable **ATCs?**



ATC has introduced a new nearfield portable monitor system which brings ATC performance down to a new price level. The new two-way active powered monitor, the T16, is available individually, as a stereo monitor pair or in a 5.1 surround system incorporating four T16s, a dedicated centre channel speaker plus a powered sub-woofer.

The on-board amplification provides a total of 250w (200w + 50w) of continuous power and is matched to the one-inch neodymium magnet fabric dome tweeter and 6.5-inch ATC soft-dome mid-bass drive unit.

Although the standard T16 is supplied in a high gloss silver, virtually any colour is available for special order, including yellow [you're kidding!]. Retail price of the T16 is \$6,495 (per pair) or \$27,995 for the 5.1 surround system.

TAG: (02) 9810 5300

Mistake

We got a few things wrong on our Brook Audio profile last issue. Mark Hornibrook's phone number was incorrectly printed, his actual number is (02) 9519 9220. Furthermore, the accompanying picture incorrectly stated that Mark was in Velvet Studios, when, in fact, he was pictured at Megaphon. If that wasn't enough, we omitted to mention that Richard Clews was the author of that rather fine piece. Sorry chaps.

Weiss in Australia

Weiss' range of rather good digital outboard will be more readily available in Australia. Worth investigating is their MK2 series of converters, equalisers and compressors which make full use of the 96k sampling rate at 24-bit resolution (for external connections) and internal processing at 96k/40-bit floating point to ensure top quality sound. Weiss Engineering is regarded by many mastering engineers as the 'numero uno' for digital EQ and compression. Bob Ludwig has been quoted as saying of Weiss: "The smoothest digital equalisation so far". High praise indeed.

Mirror Sounds: 0414 535 795