Welcome to AT's commemorative Indispensable section of Issue 50. I know Andy has done a masterful job steering his introductory Ed Space around the craggy rocks of misty-eyed nostalgia... I'm afraid I can't be so circumspect. It's Issue 50, I've been doing AT since Issue 3 and I demand some misty-eyed nostalgia! Here goes:

In 1998, when I arrived back in Australia after five years in the UK, my first stop-off was to see Greg Simmons and Philip Spencer in Sydney. I heard they'd just started a new magazine and also heard they were looking for another pair of hands in editorial. I guess they couldn't believe that someone with pro audio publishing experience was just happening to head home, and I could hardly believe there was a mag in Australia that would allow me continue the work I was doing at Audio Media and Sound on Sound magazines. A match made in heaven...

But it was tough times. I'm sure anyone who's started a small business would be familiar with the uncertainty that comes with that – the lack of money and hardware, stupidly long hours, phones getting cut off... but also the profound satisfaction of doing something cool, doing it well and doing it your own way.

I'm proud of AT. The 49 issues of the magazine that line up in front of me on my desk, account for the prime years of my working life, as well as a good chunk of what should have been my recreational/family time. And going back through them one by one has, dare I say it, been a real misty-eyed nostalgia trip.

I hope you get a kick out of the next 49 pages. I know there are plenty of readers who have been with us since Issue I, and for all those true believers, this issue is dedicated to you.

Christopher Holder, Editorial Director.





In his inaugural editorial Simmo put high-end audio design into a dollar and cents perspective, identifying the value of paying five grand more for 'that wonderful tonal character we call 'the sound'. It was a fitting preamble to Simmo's extraordinary interview with the legendary audio designer, Rupert Neve - an interview that spanned the first three issues of AT and arguably put the new magazine on 'the map'. In the first installment, Rupert and Simmo cover a lot of ground - the emerging 24/96 digital standard, the limitations of 'CD-quality' digital audio, and even how the inherent distortions of CD may be responsible for social problems! - and left readers gagging for more. Elsewhere in Issue 1. Mackie's soon-to-beeverywhere HR824 monitors are hoisted onto the test bench. as was the ultimately-doomed PARIS workstation from (the ultimately-doomed company) Ensoniq. ProTools 24 was released, as was Cubase VST for Windows

95 and Logic Audio 3.0.

Issue I also saw Mike Stavrou's first effort as a magazine columnist. Immediately Stav demonstrated his left-offield approach to 'sound balance engineering' with his article on finding the best possible distance between your nearfield monitors – espousing his 'ribbon effect' philosophy in the process.

Meanwhile, Rick O'Neil didn't miss a beat from his Sound Australasia writing, again taking up residency on the back pages of the magazine and again weaving his beloved Ford Futura into a thought-provoking article on the subjectivity of good sound.

Issue I caused quite a stir. It was arguably the first Australian audio mag to write about serious audio topics in a way that agreed with pros, semi-pros and enthusiasts alike. It wasn't ravey and low-brow; it was entertaining, cleanly designed but packed with solid info to chew on.

Now all the AT team had to do was 'get up' for the 'difficult' second issue. –*CH*.

50

INDISPENSABLE INSIGHTS

Thanks to everyone who took the time to make their views known on our Indispensable Poll. In the coming pages we'll take a look at what gear and software people are relying on, and we'll hear from you, the readers, about what you find indispensable and why.

This is the input that really interested me. I was fascinated by what fired you all up. And it's a real sign of the times that software is what gets the juices flowing. It's evident that we all know the importance of great monitoring, microphones, preamps etc, but it's the software that we all sit and look at for hours on end and it's the software that really generates the whole Ford/Holden loyalty.

There's a real divide between what people own and use and what really gets them animated. The only exception to this rule was Digidesign. Not only do ProTools and Digi's interfaces take the lion's share of their market segments, but there are many grateful readers out there – you can read their responses for yourself. – *CH*.



WHO IS ...?

The geezer we liked to call the JMC Dude' graced the pages of AT for a number of issues, helping to advertise audio engineering school, JMC Academy. If you know the identity of JMC Dude, or if in fact you *are* the JMC Dude and reading this right now... then please get in touch, there's so much we want to know... that mix... that hat...

WHATEVER HAPPENED TO ...? ENSONIQ PARIS

Upon its release PARIS was touted as 'The Complete Digital Recording & Mixing Solution', which might sound pretty ho-hum in 2006, but back in '98 it has to be remembered that no one was mixing records from within their DAW environment. Digidesign's ProControl was still on the drawing board, while Logic and Cubase were still Midi + Audio 'sequencers' - remember 'sequencers'?! Instead, PARIS arrived, out of the box, with its own hardware interface complete with (gasp) real faders. Pivotal in the design of PARIS was audio luminary, Stephen St. Croix, who ensured PARIS featured the type 'real studio' functionality that was being lost

in the market's haste to embrace digital audio workstations. Here's some of what Stephen said in his interview with Greg Simmons: "PARIS is the only DAW I know of that has a real studio monitor with stereo solo-in-place. It's got a mix bus, and a monitor bus with mute, mono, dim and its own level control for studio monitoring. You use it like a real studio." Remarkably, years later, stand-alone devices like Mackie's Big Knob and Presonus's Central Station are doing a brisk trade, offering the sort of dedicated monitoring that PARIS was supplying as standard. Arguably PARIS may have been before its time and fell between the two stools of ProTools TDM (with all its juicy

plugins and market dominance) and the 'sequencers' of the day like Logic and Cubase (whose users couldn't understand why they needed extra DSP when their blazingly fast 200MHz Pentium was doing them nicely, thanks very much). In Issue 17 we reviewed PARIS v3, but by then there was a definite tinge of desperation in the words of our reviewer, Sakis Anastopolous - the writing was on the wall and despite our review's introduction, there wouldn't 'always be PARIS'. As of 2006, even the PARIS true believers have moved on - you can head to www.parisfaqs.com to plug into the remnant colony of Parisians.



GREG SIMMONS, FOUNDING EDITOR An Infinitely Recurring Echo From a Warm and

Distant Past...

"How about an interview with Rupert Neve?" It was late '97, and the enthusiastic voice on the end of the phone was Frank Hinton of ATT Audio Controls. Frank was the Australian representative for Amek, the highly regarded British console manufacturer. We were discussing a review of Amek's PurePath products for the premiere issue of AudioTechnology, and Frank thought it would be a good idea to include an interview

with PurePath's designer, Mr Rupert Neve.

It seems crazy now, but I was lukewarm to the idea. I was carrying in my head the entire editorial vision for this new magazine, AudioTechnology, and had already mapped out the content of the first issue. Accompanying the PurePath review with an interview, no matter how small, meant more space would be required, and that was likely to send a ripple of layout changes through the following pages of the magazine.

Furthermore (and I feel terrible admitting

this), I didn't think the name 'Rupert Neve' was particularly newsworthy at the time. It didn't stack up against the exciting things I had planned for the first issue, such as our scoop indepth preview of Paris (RIP), the eagerly-anticipated digital audio workstation from Ensoniq (RIP), and the accompanying interview with its designer, Stephen St Croix (RIP). This was hot 'front cover' news, whereas the name 'Rupert Neve' was perennial... an infinitely recurring echo from a warm and distant past.

Nonetheless, what old-school audio guy in his right mind would turn down a chance to talk with Rupert Neve? I resolved to somehow shoehorn a half-page or thereabouts into the review. So while Frank arranged a date and time, I studied the PurePath promotional literature and jotted down half a dozen questions.

When the time arrived, I dialled the number. Somewhere in Wimberley, Texas, an English gentleman was waiting patiently by the phone. "Hello? Can I speak to Rupert Neve please?" The voice on the other end sounded like an older, wiser and far more secure Hugh Grant, and was immediately at-ease and welcoming. "This is Rupert.."

After exchanging formalities, we got down to business... and my brief little six-question 20-minute interview went on for two fascinating hours, covering every imaginable aspect of audio equipment history, design and application. Rupert was happy to talk for as long as I was happy to listen, and I didn't give a hoot about the international phone call charge because his words were priceless. In fact, the conversation never reached a logical conclusion; I decided to wind it up when it occurred to me that, being a true English gentleman,

Rupert was unlikely to tell me to get off his phone and leave him alone.

I didn't sleep that night. I sat up for hours, playing the interview over and over again, transcribing it into Microsoft Word and excitedly pacing back and forth across my small home office. On tape were some of the most interesting and reassuring insights into professional audio I'd ever heard. I knew I had to include a full-length interview with Rupert Neve in our first issue. So much for my precious editorial 'vision'!

The transcribed text



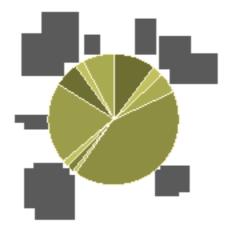
WE LIKED:

Gazooks! Rick discovered Photoshop... and check out the results. Young whippersnappers will be surprised to hear that Turtlerock wasn't always the 'biggest', the 'best' or 'the most outstanding' mastering studio in Australia... but in 1998 it was 'cooler than a '64 Futura'. Perhaps, but if the ad is anything to go by it was creepier than a sack full of centipedes and lower res than an '80s sampler.



It's immediately obvious that ProTools in its various guises has a dominant position in the market, with an impressive 40.9% of readers electing ProTools as their primary DAW. Ableton Live has a smaller but vocal group of aficionados and beats Acid in the 'quick arrangement' stakes. While Cubase beats arch-rival Logic in the numbers game.

DAW'S/EDITING



It was AT's 'difficult second issue'. Simmo and Philip Spencer were lavished with praise for the ground breaking Issue 1, but in this game you're only as good as you're latest mag. AT was touted as a bi-monthly, but that promise quickly proved to be a pipedream. Two months turned to three and four... then it arrived, Issue 2, absolutely crammed with stuff - no less than 18 reviews and six features. Actually, make that five features and a dodgy 'adverpromotorial' called 'Don't Stop the Music'. Unfortunately the AT team had been sold the idea that the new parallel CD import legislation was going to spell certain doom to the music industry. For those who remember, the government got it into their heads that CDs were way too expensive and one way of bringing down the cost was to allow retailers to stock cheaper, overseas sourced CDs. In these days of iTunes it almost seems laughable that imported CDs were going to send the industry to hell in a hand basket, and sure enough the legislation had about

as much impact as Y2K. Issue 2's four-page polemic is packed full of dire warnings and pictures of pensive/angry individuals pointing fingers and waving important-looking documents around. Apart from AT's brief and only foray into politicking, it was steady as she goes: more Rupert, Chesky (Greg's pet audiophile label), Rick and Stav. Notable appearances of gear included: the Mackie HUI, Sennheiser's first Evolution mics, Martin Audio's Wavefront 8 and Roland's VS1680; a few of 'does anybody remember?' products like the Tascam TM-D8000 and Creamware TDAT16; along with a bunch of portastudio products from Korg, (the aforementioned) Roland, Akai, and Yamaha, whose ancestors continue to make their presence felt today. - CH



MACKIE HUI... NEVER AGAIN



It was 1998 and Mackie had teamed up with Digidesign to produce the first serious ProTools controller. What's remarkable about HUI is that since the controller's been consigned to the secondhand market, everyone knows of the HUI protocol. Why is that? The answer's simple. After HUI (the controller), the honchos at Digidesign must have figured: "hang on, why give someone else the ability to control ProTools when we're doing our own controller?" Within a year, Digi released ProControl and hasn't played ball with any third-party controllers since. Even now, eight years on, the only way SSL, Smart AV, Tascam, Radikal, etc etc can interface their controller/mixers with ProTools is via the positively ancient Midi-based HUI protocol. Meanwhile, Nuendo, Pyramix and the like are falling over themselves to hand over code to allow third party products to interface with them. Who's the savvy ones here and who are the chumps? Well, you've got to hand it to Digidesign, they're the market leaders and business is business after all.

Pop Quiz

 A: Human User Interface (as opposed to all those alien user interfaces out there).
G: Myar, and the HOI acronym stand tou.

contained over 12,000 words, but we could only fit 3000 words into a feature interview. It was all equally good and important information, and I found it difficult to delete anything. So I sent copies to 10 of the smartest audio guys I knew, along with a cover note saying, "Please highlight the most important parts and return ASAP". The response was unanimous: "It's all important!" So I decided to publish the interview as a series through the first three issues of AudioTechnology.

Our first issue was a resounding success with all levels of the audio industry

in Australia, and the Rupert Neve interview was a major contributor to that success - especially with the cynical and hardened professional engineers who were expecting yet another ill-informed, over-hyped and ad-driven piece of garbage aimed squarely at the home studio market. Rupert Neve was also happy; the prestigious AudioMedia magazine bought the interview from us and published it over multiple issues of their US and UK editions, re-kindling worldwide interest in Rupert's uncompromising philosophies and audio designs

Rupert began writing a regular column for AudioTechnology (which I predictably labelled 'Rupert's Word') providing in-depth discussions of noise and distortion and the tonality of audio equipment, supported by graphs, tables of measurements, and anecdotes from his own considerable experience. This further established AudioTechnology's professional credibility. But despite the intrinsic value of this information, Rupert refused to accept any payment. (Rupert's Word was short-lived because he got too busy to keep doing it - a problem I am sure he was

glad to have!)

With each new issue of AT I am reminded of Rupert Neve and his selfless contribution to our early success. We've only done 50 issues so far, but I hope that the name 'Audio Technology' will eventually become as perennial as 'Rupert Neve' – an infinitely recurring echo from a warm and distant past.

The full text of the Rupert Neve interview can be obtained by emailing Greg Simmons at: simmosonic@gmail.com "Your job, your career, and the entire Australian music industry is under threat from the Federal Government's plans to introduce the parallel importing of CDs."

...or not, as the case proved to be. AT leads the charge in a beatup of Y2K proportions.



Issue 3 was big. Big because it had about 400 pages of catalogues bound into it, and big because Simmo had had enough and handed over the job of editor to me, Chris Holder. One of the first jobs I took upon myself to make happen was the establishing of a readers' letters page. The trouble with letters pages is they don't write themselves and the first one is the toughest. There was nothing for it, I decided to write the first two 'letters' myself - the first a searching missive questioning the use of extra 'translation' monitors and the second a knockabout rant from a knockabout 'retailer' telling people interested in shonky software to get stuffed.. Trouble was, the letters page was, of course, called Your Word (still is, for that matter), which sat near the front of the mag near my newly minted editorial page entitled, Second Word, which all began to get a bit 'Wordy' in the same magazine as First Word, Last Word and Stav's Word. Regular readers will note that more recently

only Your Word and Stav's Word continue as 'Word' monikers.

Some eight months after Issue I was first released, the Rupert interview continued. Many in pro audio circles were concerned that Mr Neve may not live to see the final instalment – he wasn't getting any younger and each issue of AT was taking an eternity to publish (thankfully, Rupert is thriving. See the Issue 48 wrap for his perspective).

Elsewhere, technological breakthroughs abounded. Monitor engineer stalwart, Rod Matheson, gave AT a glimpse of 'Rod's Rock Bottom'. No, Rod hadn't been working particularly hard on his 'glutes', it was one the first uses of a drum stool 'shaker'. Gear-wise, Digi's ProControl and Yamaha's O1V were reviewed, while the Gigasampler made its first appearance. Meanwhile, at the other end of the life cyle, Alesis released its latest Adats. The new 20-bit Adats started at \$4300... which puts things into perspective a little. -CH



READERS SPEAK PROTOOLS

"It's like the mothership, innit?" Daniel Arena

"It has become so advanced it has actually changed some of the fundamentals of the way we do albums, especially when it comes to editing. For me, the mix of 'Tools and the SSL is really the best of both worlds: the ease of digital editing and plug-ins, and the warmth and fatness of the console." **Henry Seeley**

"I originally come from a world of tape. The flexibility ProTools gives me is incredible. Something as simple as copying a backing vocal from one chorus to another, used to be a case of fly in off ¼-inch tape, for example. Now with ProTools it's copy, paste, job's done. Gotta love it." Laurence Maddy

"From the producers, engineers and musicians' point of view – it's *the best thing* that happened to me in the 25-year musical career." Nonda Antononoulos



FOOTBALLER CRASH TACKLES EXPENSIVE OUTBOARD

When footballers get involved with advertising it's inevitably something to do with a car yard. There are so few exceptions to this rule that they're hardly even worth noting... except one. Cliff Lyons, rugby league legend, was seen spruiking a Manley Voxbox in İssue 3. When later asked by his team mates what he was seen tackling for the photoshoot, Cliff was heard to mumble "I'm not entirely sure, but I like the fact it integrates all the essential audio tools for vocal recording and processing in one convenient 3U package".



WHAT THE ...? BEHRINGER'S BIZZARRO CATALOGUE

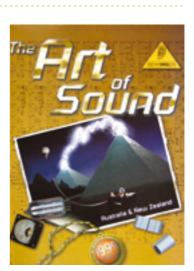
Issue 3 included a bound-in Behringer catalogue, and here's how the cover looked. Can anyone tell me what the hell is going on here? Anyone? Let's examine the facts. It's all got something to do with the 'Art of Sound'... that much we can be sure of. Somehow the art ties in with two giant Behringer pyramids (hard to see, but the Behringer ear logos are definitely on those pyramids, with their references to ancient wisdom... something to do with the Masons perhaps?), and a nasty looking electrical charge that's connecting the two. If all that wasn't baffling enough, there's a chap sitting at a grand piano fiddling with an ancient device bedecked in bakelite knobs (take a look for yourself... why would I make this stuff up?). The contraption looks a little like a cross between a VCS3 and a Marconi radio, but appears to have two

"No one is *not* going to buy a record because it was done on ProTools."

In 1998, producer Marius DeVries puts the whole analogue versus digital debate into much needed perspective.

valves on the top connected with another arc of plasma. There's so much electricity in the air that you'd have to have rocks in your head to go up in a hot air balloon, but sure enough there's some idiot flying over the two stone erections in a balloon, and appears to be tethered to one pyramid, with a second line going to the bald dude sitting at the baby grand. For a company that in 1998 had all the airs and graces of a bratwurst - 'you want mixer? Here is mixer' - this construct seems remarkably obscure. And to top it all off, the words '1999 catalogue' are printed in what can only be described as some Behringer bling - a necklace for goodness sakes. The following page... things get weirder and weirder. Behringer does the Mackie thing (or is that the other way around?) by printing a whole bunch of staff photos with a space on

top of a pyramid pointing out 'Your picture fits here'. Freaky. I mean, Mackie does Chihuahuas and Behringer does whacky-doo occult rituals... A personal letter from company founder and audio visionary, Uli Behringer, caps things off with his discourse on interactivity: "Even language differences cannot stop two people falling in love - most definitely the ultimate interaction." Quite perhaps, but... but... What is going on here!? Here was I thinking I was looking at a Behringer catalogue when in fact I've just fallen through some vortex and woken up in a New Age world of crystals, pyramids, crazy machines, hot air balloons and inspirational words of wisdom from guru Uli. Fortunately, the next 45 catalogue pages are full of cheap, no-nonsense, getthe-job-done gear - back to reality then.





Last time we spoke to engineer, Glenn Santry, it was in regard to his work on the Karl Broadie recording, *Black Crow Calling* (Issue 44). Here, Glenn talks about the indispensability of high quality converters. Glenn Santry: The most important tool in integrating the analogue and digital domains in today's production environment is, in my opinion, the A/D converter. l remember, years ago, mixing to DAT from two-inch tape. It would always sound different playing back off the DAT. Sometimes I would even adjust my mixes to compensate! Then I bought a Prism AD-124 A/D converter to put in front of the DAT recorder, and finally my mixes sounded the same on playback. I

find the Prism converter to be an incredible piece of equipment, preserving the quality and depth of analogue signals when transferring to digital. Not only that, but my monitoring D/A conversion has improved, now being clocked from the Prism. Nowadays I mix, and sometimes track, to a computer. When I'm using the Prism my A/D conversion is taken care of and I can focus on other aspects of the recording/ production. I sometimes feel like it's my last throw of the analogue dice before

entering the digital world. But mostly I don't have to think about it at all, and that's the beauty of it. With the Prism I can utilise the best of both worlds –

analogue & digital – and that's why it's my indispensable piece of equipment.



WE LIKED...

In a 1998 advertising field of black boxes, text-heavy boredom or Photoshop-mad confusion, Quantegy's ad stood out by a couple of lengths. Issue 4 coincided with the launch of Quantegy's GP9 tape – a tape that Simmo suggested rolled the best of Quantegy's and 3M's tape technologies into one reel. It was certainly a world away from shortages, hoarding and the uncertainties that dog the world of tape today.



READERS SPEAK APPLE LOGIC

"It does everything – multitracking, editing, virtual instruments, Midi, scoring..." Chris Williams

"It has always been a faithful tool." Peter Buckley

"I'm not crazy about a computer being the centre of my studio, but Logic makes me feel like I'm in control of all my gear, rather than being a slave to the machine."

Gwydion Elderwyn

"The great thing is that you can make music, good music, with nothing else!" Chris Preston

"Anything else we can substitute or remain open to change, however Logic 7 is the ultimate tool." Kaeleen Hunter

"The beauty of the software is that it's so customisable, that it's designed to serve you, the master."

George Mangos

"Has evolved into the best integrated Midi/audio/ soft-synth environment on the planet!" Graeme Trott The theme of Issue 4 may not have been particularly novel, but it was well expounded: learn your gear, avoid presets and get the right tool for the job.

As an exception that proves the rule, Issue 4's live sound feature on 'The Main Event' (featuring the dream team of Little Johnny Farnham, Olivia Neutron Bomb, and Anthony Warthog) outlined John Henderson's use of a phalanx of Yamaha 01Vs on monitors. Right tool for the job? I don't even think Yamaha's chief international sales guru would recommend its new baby digital console for the job. But there again, in-ear monitoring (IEM) was only just starting to gain wide acceptance and only now are we seeing purpose built monitor consoles that are addressing the special demands of IEM.

Mackie's D8B made its first appearance. Simon Leadley gave it a good going-over, enjoying the customary Mackie innovation (V-Pots, the Morph feature et al) but had a few issues with only 12 mic preamps and the price – \$22,995, plus any plug-ins you might need. In retrospect, it was arguably the first Mackie product release that didn't go completely ballistic and may have contributed to a period of hibernation for Mackie – which it is

certainly out of now. I'll sign off this highlight section with Rick's (edited... sorry Rick) checklist of the \$10k home studio: 1. Get some standard reference speakers. 2. Get a power amp to drive them. 3. Get a DAT player and a CD player. 4. Get a condenser mic. 5. Get an outboard preamp/DI box. 6. Get a decent compressor 7. Get a simple mixing desk (simply for monitor and mixing). 8. Get something to record to (don't stress too much about what type of recorder you start off with). 9. Get the fastest computer you can afford. 10. Get ready to destroy your social life.

Some things have changed, but point 10 sure hasn't. - CH.



that point but, of course, the iLok wasn't even a glint in the developer's eye.

The Bondi Blue G3 also did away with (shock) serial ports in favour of USB and Firewire. This had Brad spinning in his studio chair: "where do I plug my Midi interface?". Back in the AT office we were having similar conniptions: "where do we plug our printer?"

History tells us that the peripheral market (audio and office) soon cottoned on and Apple was, once again, fully vindicated in its decision to drag us kicking and screaming into the present.

WHATEVER HAPPENED TO ...? THE FLOPPY DRIVE



his Issue 4 Mac Audio column to lament the demise of the floppy drive (and SCSI) from the new 'blue' G3. In his heartfelt tirade Brad unleashes with: "Why oh why hasn't Mr Jobs left a nice beige G3, six-slot PCI machine in production?" Back in 1998 copy protection and

Hard to believe now, but Brad Watts used

authorisation was still predominantly a job for the humble floppy. In fact, around this juncture, there was a small spike in the sales of external floppy drives. In a prescient moment of reflection Brad muses: "the copy protection issues will need to evolve to suit the machines." Indeed. PACE was already on the scene at

INDISPENSABLE JEFF 'MADJEF' TAYLOR



In Issue 4 we interviewed Jeff 'Madjef' Taylor, a producer/engineer best known as the 'go to' man for killer drum sounds, supplying beats for artists like Michael Jackson, Janet Jackson, BoyzIlmen, Patti Labelle, New Edition, Barry White and more; and is well known for his collaborations with the Jimmy Jam and Terry Lewis production team. We recently caught up with Madjef to talk 'indispensability'.

Madjef: Back in 1983 I was blown away by this new digital technology called the 'drum machine'. I bought a Roland TR808 along with a Korg Poly 800. Fast forward a few years and Akai releases the MPC60, which had a built-in sequencer with 99 tracks that I could Midi up and just go bananas with, it also had the ability to sample sounds into memory... Oh my, a drum machine on steroids! I bought one and stayed in the house for the next year sampling my family's record collection. I would go everywhere with my sampler, and a case of floppy disks, offering my programming services to studios and musicians, sometimes for free. People started to hire me because of my knowledge of Midi and my ability to sample sounds and program a drum machine. The industry started shifting to this style of production working and lucky for me, I had a

niche, I was in on the ground floor.

I've been through a lot of gear over the years and currently have all of the latest software synths and samplers a person could ever use along. But the one thing that I've never been without in my professional life is the Akai MPC – we've grown together from the MPC60 to the MPC2500. And we're still doing it. I find the Akai MPC to be a completely indispensable tool.

Go to: www.madjef.com

"Digital audio is man's new best friend – it used to be the dog, but now it's digital audio!"

Madjef, in 1998, reckons bytes are better than barks.



Anyone a bit uncertain about computer recording in 1999 would find the cover of Issue 5 a little confronting. Right underneath a big pic of a Manley Massive Passive lurked two digital upstarts - Yamaha's DSP Factory and Soundscape's Mixtreme. To be honest, it was becoming pretty clear that no one had any real idea how to make home studio owners part with extra dosh to record on their computers. Yes, people were using PCs to record, but either they were happily using Midi+Audio sequencers and a little interface from Event or M Audio; or they were spending big money on ProTools TDM. The sequencer crowd mostly didn't know what to make of Yamaha's '02R on a card' and mostly ignored it. In short, DSPs were a bit obscure - fine in an effects unit, but on a PCI card? Evidently no one told Creamware of the market's ambivalence when it released the Scope card. About the same price as a late model Commodore and almost as long, Scope was no ordinary PCI card. It

sported 15 SHARC chips(!), open audio architecture and no discernible customer base. Admittedly, its smaller brother. Pulsar was popular and was quite possibly one of the few DSP-based interface cards that actually made any headway. On the other side of the DAW domination coin, in Issue 5, Brad Watts took a look at Digi's ProTools 24 Mix system, which heralded 'Tools' first move into PC compatability. Which seemed a little inconsequential at the time, and even two years later hardly anyone had bought a TDM system for PC... but sure enough that's all changed now. Curiously... Digi, with the new Mix system, remained resolutely non-96k. -CH.



READERS SPEAK PROTOOLS LE

"Walk into any professional studio or backyard shanty and you know an LE, TDM or HD will be available and compatible." James Dean

"ProTools LE has changed the nature of the industry completely. Apart from providing a seamless integration with professional studios around the world, with ProTools being in almost every pro studio on earth, it allows the freedom to record literally anywhere." **Michael Carpenter**

"ProTools has arguably done more than anything else to democratise the process of recording and mixing music. It delivers a flexible and configurable power that only half a generation ago could only be found in high-end studios controlled by majors." **Paul Blakey**

"It has thrown open the range of options for how you record (and most importantly how much it will cost you!) without needing to sacrifice too much in quality terms (eg., vocals and guitars at home, drums at one studio, edit at home, mix at another studio)." Ian Thompson

"I've made a lot of money because of this software and its versatility and stability." Martin Mulholland

LET ME EXPLAIN...'SINGLE ENDED' & 'CLASS A'

In Issue 5 Brad reviewed Manley's Massive Passive and Simmo had a chat to Manley Labs' boss EveAnna Manley. In that interview EveAnna rather eloquently explains the differences between 'singleended' and 'Class A' circuits. We thought it worth reprinting, so here goes:

EveAnna Manley: A lot of amplifier designs, whether they're low-level signal amplifiers or power amplifiers, split the signal into two opposing waveforms – the positive and negative half cycles – and then each half cycle has its own amplifier circuitry. They're usually called 'push-pull' amplifiers. Now, when the two amplified half cycles are added back together, unless the amplifier is extremely well designed, you get crossover distortion at all the points where they join. But 'singleended' means you're not splitting the signal into two halves, you're amplifying it as a complete signal. It's the purest form of amplification.

Class A really refers to how an amplifier circuit is biased. If it's Class A, it means it is biased on all the time, so it's always drawing current and is less efficient. A Class A circuit could be single-ended, or it could be push-pull. Biasing a push-pull circuit into a Class A usually helps reduce crossover distortion. So being Class A doesn't necessarily mean a circuit is single-ended!

WICKED! TASCAM GETS TRIPPY WITH THE TRIBE

It was 1999 and planet Earth was still in the grip of a dance music phenomenon and franchised superclubs were ruling the latenight entertainment roost. With this as the cultural backdrop, Tascam figured the best way to sell its top-end, professional 24-bit DA-45HR DAT mastering recorder was with the word 'Wicked!' in a funky typeface. In fact, its collection of digital recorders were described as 'An Unbeatable Techno Trio', along with the words 'Rave!' and 'Craze!'. Never has there been a more transparent attempt at 'reaching the kids' since The Chief infiltrated the Groovy Guru's cult wearing a paisley cravat, sunglasses etc. in a particularly funny episode of Get Smart.



A: 31U from head to toe.

"[the mic] turned out to be on the floor, pointing at some cymbal propped up against the wall!" Nick Launay explains the precise art of setting up a room mic during drum tracking.



Brad Watts spoke to Paul Mac in Issue 18 after his highly successful 3000 Feet High album reached stratospheric heights, since then he's gone onto explore new territory with Daniel Johns via the Dissociatives project . We checked in to find out what Paul thought of when we mentioned the word 'indispensable':

Paul Mac: "Oh, it'd have to be the Moog Vovager... It's possibly the only bit of gear I've acquired that I could never really do without. Why? It's just totally what we've been missing out on for so long really good oscillators. Compared to a synth like the Nord Lead where you can record all your controllers, and even old gear like my Jupiter 6. Comparing the Voyager to the Nord is like comparing the Nord to a Juno 106. It's just that much cooler than the Nord even. Oh and the nifty blues lights... you've gotta love the blue lights.

"But, seriously, working with the Voyager is just like painting, you can go from bass sound to a pad in seconds and so much stuff fin between - most of the sonic universe can be covered with that and a Roland Space Echo.

"And it's just got that labcoat feel about it, with the old-fashioned Moog section that raises out of the keyboard so you can access all the knobs. I really love it."

POP QUIZ

In the late '90s Manley was going ballistic, with the very switched-on EveAnna Manley at the helm. Here's your 'starter for 10': how many rack units high is Ms Manley?

a) 41U

b) 35U c) 31U



CRAZY SPREAD

Our Portuguese graphic designer's brain was on siesta for this Cirque Du Soleil spread. I love the dancers in the middle of the page. including the middle leotard whose head completely disappears into the gutter of the magazine, all that's left is a pair of lycra'ed arms and legs



WE LOVED... LITTLE CANDLE GUY

The new Yamaha MSP5 baby active monitors needed selling and who better to do it than Little Candle Guy What a fabulous concept! Obviously, the idea is that the MSP5s have the welly to blow out a candle, but not just any candle... Little Candle Guy to the rescue! You expect him to put on some ice skates and start singing 'Be Your Best' at any moment.

STUDIO IN A (PENTIUM) BOX

PCs were getting blindingly quick and everyone was talking about selling their hardware multitrackers, synths and effects, trading up to the fastest Pentium chip possible, and living the 'studio in a box' dream. Martin Walker, our long-time PC Audio columnist, had other ideas. Here's some of what he had to say:

"When it comes to software synthesis, there is an enticing array of options... The thing that links all these is processor power - you need lots of it. While you can probably run an eight voice analogue synth on a Pentium 166MHz PC, you're going to need some serious processor



READERS SPEAK ABLETON LIVE

"A great 'centre of everything' - not only easy to use but also inspiring and deep.' Rob Crowdy

"Ableton Live got me interested in music again." Ade Akisanya

"It is so easy to create, and create in many different ways.

David Moorhead

"Absolutely cornered the market when it comes to live performance.' Philip Norton

"I really can't go past its ability to re-inject creativity into computer-based music making." Mik la Vage

"I was used to multitrack recorders, synths and samplers... I still use those things but now to feed Live. I'm lost for hours. Lovely!' John Ward

"I used to take hours tweaking beats and changing bpms and transferring the edits back to my Mac. Live ReWired to Cubase is a marriage in heaven." Murray Campbell

"It is the first thing I turn on and the last thing that I switch off." Nigel Cruickshank

power if you want to add resonant filtering, LFOs and effects to each voice.

"I've run several software synths on my Pentium II 300MHz PC and they're all capable of extremely impressive results, but many of the best sounds take around 50% of my processor's power – even when they're only running eight voices. Considering that most hardware synths and samplers have at least 32 voices, to provide the same options in software could easily consume the total power of a 400MHz PC! And don't forget that we need to run our Midi+Audio sequencer as well..."

DVD was growing legs. It was 1999 and a few people were bringing back DVD players from their holidays in Hong Kong and DVD was starting to jostle for shelving space at Blockbusters. Meanwhile, Peter Garrett was still a muso back in 1999 and Midnight Oil still existed. DVD and the Oils collided with the release of 20,000 Watt RSL, a 20-year Oils retrospective and, interestingly, the first locally-produced music DVD released in Australia.

As you can imagine, news like this was giving commercial studio owners conniptions. Firstly, would they need to jump right in and set up 5.1 monitoring? Secondly, would they need to make the leap to 24/96 recording - something that not even ProTools was doing at the time? It was certainly enough to give Rick O'Neil a few sleepless nights. To console himself he applied the 'mother' test. Rick's Mum would never bother moving furniture and speakers around the living room to enjoy 5.1, but if it was on offer when she hopped in the car... then

Now that Martin had backed up the fire

that I'm trying to talk everyone out of

combine your software solutions with

hardware support. This 'halfway house'

approach gives you the best of both

PC. It's only when you want to achieve

start circling overhead, waiting for your

PC to fall over."

you. The practical way to do it is to

Rick could see that 5.1 had officially 'crossed over' to the mainstream. Personally Rick was quite happy for the market to take its time... which of course it has

The Line 6 Pod didn't make it onto the cover but proved to be the most influential bit of kit in the Issue 6 reviews. The Royer R-121 was another future classic in the making, while the DAT was having its last hurrah with the release of the 24-bit DA-45HR from Tascam. – CH.







ISPENSABLE JASON BLACKWELL

Jason Blackwell – Sydney **Opera House Engineer** and freelance engineer/ producer

Sydney Opera House's Jason Blackwell talks about the one tool he'd save from a burning building.

Jason Blackwell: It would have to be ProTools, or really any computer based DAW system, I suppose. But ProTools would have to get the nod just because it's such an industry standard. Nobody could really deny the impact these rigs have had on recording over the last ten years. Now anyone can afford to produce and release quality recordings. The transfer aspect is also pretty incredible.

I can take a multitrack recording from the studio to my ProTools LE system at home without any file transfer dramas. Compare that with carrying around a console, a huge tape machine and dozens of outboard options. Besides the portability factor, there's the incredible edits you can get up to. Now you can do some freaky things, stuff that used to be pretty much impossible. The other big plus is that it makes collaborating heaps easier these days - which is what it's all about really. There's actually a link

between the studio and the home now, so you're not always waiting around for the next session just to get some work done. You can get the other parts right your own steam and with a much nicer mood in the room. I still do plenty of work with tape - easily half my recordings use tape, but usually just for drums - to get 'that' sound. Now of course there's all these things like the Neve Portico tape simulator. That sounds pretty cool. I can see myself using that kind of stuff more and more often!

"The quantising on the older version of Cubase just feels nicer... as obscure as that might sound, but then again this is a gear head magazine."

Moby talks us through the making of Play... just prior to it selling squillions and being on the front cover of every mag in the world.



It's Issue 7 and, finally, Brad Watts has found true love. Not sure if future wife, Jacqui, was on the scene at that point but this infatuation was the 'real thing' - a pair of Quested VS2108 self-powered monitors. Brad had seen his fair share of speakers over the years but these were 'the first ones that have really got me excited'. He's still got 'em, of course... The Quested review also prompted Simmo to talk 'coupling' and 'isolation' – tighten up your monitors' bottom end with some little cones under the boxes (pointy end down). Controlled bass continued as a theme with AT's chat with Josh 'Totally Addicted to Bass' Abrahams in his recently completed 'Fishtank' suite in the (now demolished) Festival Studios complex. Fishtank has moved back to Melbourne and the Josh juggernaut rolls on.

As does the convolution juggernaut, which only just started to gather pace back in Issue 7 with the release of the Sony DRE-S777 'sampling' reverb. Funny to think that Sony has taken its foot off the pro audio pedal now, as this was cutting edge stuff. Issue 7 also saw the first appearance of RME's PCI cards, Korg's Triton, and the Electrix processors (a company that's apparently coming back from the dead shortly).

In a coup masterminded by Simmo, AT had Rupert Neve as a columnist in those early days. As I say, quite a coup, and his articles are iust as relevant now as they were eight years ago. In Issue 7, before Rupert sails into the more serious stuff, he reflects on the changing face of trade shows - how they were quiet and reflective with 'no loudspeakers allowed'... "There seemed to be more time and there were certainly fewer choices: three tape machines, three consoles, three microphones. Oh yes, and there's that crazy chap trying to sell ready-made mic leads - obviously he can't succeed, we always make our own." Precious! – CH



READERS SPEAK STEINBERG CUBASE

"How do I love LE? Let me count the ways." Paul Hines

"I find the program easy for my spongy little brain to decipher. Nothing seems too hard and if it is my dopiness leans on the help section (written for spongy dopey old farts) which points me in a correct direction instead of bumbling around(which I do anyway) too much." Chris Slaney

"The Midi facilities are unsurpassed and now the audio handling matches it." John Gale

"It's replaced nearly all of my external hardware." Matthew Harris

"Best software package I have used: ease of use, performance: A+++." Travis Keir

"It gives me the opportunity for *all* the voices in my head to be heard!" **Paul Dixon**



WE LIKED...

This ad for soon-to-be defunct studio hire outfit, Studio FX. Mild-mannered studio honcho, Richard Mueke, surprised many (including his Mum) with his transformation to fullyfledged rock god for these ads. And those blue sneakers were definitely ahead of their time. As Richard's modelling attests to... \$300 a day (not including throw rugs and other assorted Copperart paraphernalia) spent on a Studio FX recording package will guarantee you a framed gold coaster.

WHY 2K

Issue 7 hit the streets in November 1999 and the world was in the grip of Millennium Madness. Every major capital city was vying for a stake in the oversubscribed fireworks stocks and Prince's 1999 was now looking like a prescient marketing masterstroke. Of course, there were still a vocal quorum of bearded, cardie-wearing boffins who rightly pointed out that the millennium wasn't over until the end of the year 2000, not 1999. (Apparently there was a riotous gathering for the naysayers the following year - hot cocoa, a sparkler and tucked up in bed by 10:30.) Regardless, the numeral 2000 had captured the imagination of the developed world, and

"It's all dry and mono – quite a daring record really!"

Engineer Jim Scott explains the secret behind Red Hot Chili Peppers' Californication album.

nothing was going to get in the way of the greatest party Earth had ever seen – except perhaps for the ultimate party pooper: the Y2K bug. That's right, as the world was locked in a cross-armed embrace, belting out a drunken and atonal version of *Auld Lang Syne*, many people were keeping half an eye out for passenger jets falling out of the sky, telecommunication melt downs, or, worse still, their main audio PC to go a bit mental.

For those too young or too drunk at the time, the Y2K bug stemmed from something called the RTC (Real Time Clock) in PCs, which used two digits to denote the year. So, naturally, come the year 2000, the RTC's natural inclination was to click over to '00', which it brainlessly thought was 1900, not 2000. This digital misapprehension had the potential to wreak untold damage, and the public and private sectors spent billions, paying otherwise-unemployable Arts graduates to check for Y2K compliance on computers worldwide.

Martin Walker, our PC Audio columnist, gave AT readers the tools to test our RTC, BIOS and Windows for a correct year 2000 rollover. Audio applications were largely untroubled by the Y2K ghoul, and according to Martin it was our Excel docs and databases that were most at risk. In other words, there were more important things to worry about - like beer stocks for December 31. Saying all that, if you chose to be in an aeroplane when the year 2000 ticked over, then you were a braver man/woman than I. - CH.



Y2K caused widespread panic. Fortunately, cool heads (like those at AT) prevailed.

JOSH ABRAHAMS JOSH ABRAHAMS Oviously I can't without my Mac, or my Apogee co Without them th nothing to recor I guess I could ri cousin and se if has that four-tra started on decad Obvious things a don't spend a da

Josh Abrahams: Well, obviously I can't get by without my Mac, ProTools or my Apogee converter. Without them there'd be nothing to record onto... I guess I could ring my cousin and see if he still has that four-track I got started on decades ago. Obvious things aside, I don't spend a day in the studio without turning on the racked-up pair of Neve 1064 channels, the racked up pair of Trident Series 80 channels, the dbx 162 VU, the Urei 1176, the Urei 1178, and the Neumann UM57. And on vocal tracking days, the AWA 'old boy' Limiting

Amplifier and maybe the Neumann 149.

On the guitar amp side of things, my desert island selection would be the Fender Twin Reverb and the Goldentone Bassmaster bass head.

I'd be useless without Logic, of course, and I invariably end up using [NI] Battery for drums, along with the 80GB sound library I have amassed over the years, accessed through either Battery or [Logic's] EXS sampler. When soft synths just aren't cutting it I will almost always turn to the

Roland SH-09 or SH-2, tracked through a Boss Graphic EQ pedal, and if I need a ripping real-world lead synth I can't go past the Sequential Pro 1, and/or the Korg MonoPoly. The Korg Polysix also deserves a mention - a greatly underrated piece of hardware, in my opinion. And finally, I can't do a dance track without turning on the Roland TR 909. 'Real' kick, clap and crash... If you've got it, use it, right?



It was Issue 8 and it was high time to unleash some serious controversy. Simmo was the culprit. For a bloke who just 'loves to be loved' Simmo found a unique way of mobilising the hatred of the entire audio engineering fraternity. Perhaps telling them they're all hacks might have something to do with it... Simmo, fresh from his ARIA judging panel duties had decided that all local productions sounded 'cheap, dry and two-dimensional and rarely possessed the polish, sparkle and depth required to make it world class'. Woah... fighting words. Sure enough, the industry didn't take it lying down. No less a figure than INXS rock royalty, Garry Beers, penned a letter to AT recalling a time when an Australian sound was passé in '80s: "Atlantic Records tried to get us to re-record Kick - their reasons echoed your editorial - we refused, and the rest is history." Put that in your pipe and smoke it, Greg. Studio luminary, Daniel Denholm, also expressed his concern, suggesting the criterion of 'does it

sound international?' is a hollow one. Finally (and also in the following issue of AT), Rick began stoking his gunpowder for a full 60-canon broadside aimed directly at SS Simmo. In his Last Word, Rick makes various 'numbers game' points about it being natural that the cream of the Aussie crop will want to play with the cream of the international crop etc, and Australian A&R aren't facilitating any of the hookups based on an informed view of the sound etc, etc. Of course, Simmo himself needed to face the music, which he dutifully did - recanting with a full mea culpa, explaining why the main thrust of his argument was ill-founded. Anyway, there was no shortage of passion, and in the end it probably did neither AT nor the industry any harm whatsoever. - ĆH.



READERS SPEAK MORE DAWS

Digital Performer: "I've been using Performer since 1988 in its pre-audio days. It just seems to do what I need without fuss." Ian Blake

SAWStudio: "10000000 times better than ProTools. Very CPU friendly too. Although it's not cheap it is worth every penny. I don't know why everyone is not using it. SAWStudio. SAWStudio!" Pete Clay

Cakewalk Sonar: It is now so full of tools and great plug-ins, I rarely need to go outside it to perform all of my recording/editing." **Bill Ruys**

Cakewalk Sonar: "I have used ProTools professionally and Sonar outshines it in every aspect! I couldn't record without it." **Daniel Page**

"As a teacher and audio technician I find Acid to be the most all-round user-friendly program I have ever encountered. If I can teach my 13-year-olds to use it then its magic.' Daniel Green

Access Virus TI: "Bridged the gap between soft and hard synths. Sounds amazing.' James Packer

START OF BIG THINGS... DIGIDESIGN DIGI 001

The 001 changed everything. Why? In effect, for under two grand you got ProTools. That's not to trivialise the PCI card and the breakout box but there were plenty of PCI/breakout combos on the market at the time - many of them cheaper, many of them better. No, it was ProTools LE 5.0 that tipped the scales. It offered 24 tracks of 24-bit audio, and some bundled RTAS plugs with the DigiRack suite. No, it wasn't ProTools TDM, and yes there were limitations, but it was ProTools nevertheless. The 001 went ballistic and transformed ProTools from a slightly arcane professional DAW platform into a household name - ProTools was now officially

stampede that no one bothered to note that the hardware looked like something you might find at Dick Smith's circa 1985 - slightly naff, with some strange spurious screen printed legending on the fascia and funny little 5¢ buttons. Anyway, it's not good to speak ill of a legend and the 001 laid to rest Digidesign's earlier attempt at ProTools 'Lite' with the ill-fated Session 8.

unstoppable. In fact, such was the 001

WHY THE FISH?

Did anyone ever really

According to Brent at

understand what Intermusic was trying to communicate by displaying boxes of dead fish

on its full-page ad? 'Come in

and cop a whiff of our boxes of dead mullet' perhaps...

Intermusic it was "Something

to do with religion... the miracle of creation, life and

everything. It was all to do

with where it all comes from

and where it all ends up... the

big picture, representing the

food, and the life, and all that

sort of thing..." Well, now we know. Thanks to Brent for

clearing that up!



"They all have a job as long as they do it my way!"

Audio impresario, Tom Misner, paints a rosy picture for the job prospects of the staff of Studios 301 (Castlereagh St) after he bought it and moved operations to his new complex in Alexandria.

INDISPENSABLE SCOTT WILLSALLEN



Currently working flat-out as the Audio Director for the 15th Asian Games that will be held in Qatar in December, and well known for similar work on the Melbourne Commonwealth Games and the Athens Olympics, SWA sent us this little snippet, which reveals a reliance on cutting edge and antiquated technology in (almost) equal measure.

SWA: Regarding indispensable equipment: For me the most indispensable piece of equipment is my scale ruler. I could say Lake Processors but I can, and have, used other processors.

I could say many of my favorite and preferred products but the fact is I can survive without them, I just prefer not to.

However, the scale ruler is something that I am never without and something that will never be replaced. A key factor in loudspeaker system design is the geometry of the space and the scale ruler provides the answers that are required before system design can even be considered

If you really want me to talk about equipment then I would say that the one audio product I would be least happy about replacing would be the Lake Contour, Lake Mesa EQ and the new Dolby Lake Processor

There is simply nothing that compares to these devices and once you have used them, anything else is a significant compromise.

I wish I could put more time into this but unfortunately the schedule does not allow it right now. Cheers.

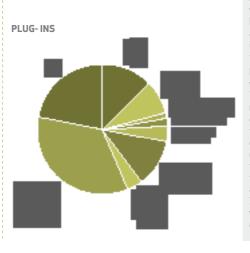


TOP PIC

Tom Waits turned 50 and released Mule Variations – his most commercially successful album to that point. Apparently he also discovered how unobtrusive modern hearing aids could be.



There are a million plug-ins out there and predictably there were a million different favourite plugs, from the well-known to the slightly more obscure (special mention must go to freebie plug Digitalfishphones Blockfish). But it was surprising what a hold Waves has over the plug-in market, with 34.9% of respondents nominating the Waves Renaissance suite as top dog.



Code Blue! Code Blue! Midi is under attack! After 20-odd years it seemed the grand ol' dame of communication protocols was being viciously clobbered from all quarters in Issue 9. Leading the charge was studio boffin and dance music pinup boy, Brian Transeau (aka BT) Such was BT's disdain of Midi he couldn't use the word in a sentence without prefixing it with the word f**king. "It's a totally bogus protocol that should have been done away with years ago," noted BT in a more reasonable moment. "Until we start to go optical, or Firewire... anything man. at least put modem cables in the back of our synths,

that's faster for f**k's sake." Fortunately for BT, there were changes afoot. Yamaha was hatching mLAN, an all-in-one communication protocol that sent audio and Midi down the one Firewire cable. It sounded like just the ticket. But one thing that many people forgot about Midi (with its humble 32.5kps transfer rate), was that its longevity was obviously not down to its pre-eminence as a system, it was down to the fact that such a quorum of agreeable audio hardware manufacturers (needed to establish Midi in the first place) was never likely to gather again. In short, Midi was crap but at least it was universally accepted crap. Which all might account for the fact we haven't heard too much from mLAN recently. – CH.





INDISPENSABLE GRAEME HAGUE



AT contributor and Technical Manager of the Bunbury Theatre in WA has this to say about indispensability.

For me, it's The Fader That Does Nothing. I discovered it at a jazz festival years ago. The acoustics of the venue were horrendous, the new-age jazz band were playing stupidly loud on stage and insisting it was a crucial part of their 'sound' and I was doing foldback and FOH from side-of-stage. A nightmare. The trumpet player was going 'blaaart!' into an SM58 at an obscene volume and demanding more and more level in his wedge. Flustered and in plain sight I accidentally nudged a fader that didn't

do anything and while I was thinking: "Foldback, you idiot... somehow find some more foldback", the guy goes 'blaaart!' (deafeningly again), then gives me a big grin and a thumbs-up and says "Brilliant! That'll do".

It was one of those moments when you go absolutely still and blink in wonder at the revelation. I'd discovered something: they've got no idea.

Very, very handy The Fader That Does Nothing. Now I never work without one.

Just the other day it was an artist (who shall remain talentless... sorry, nameless) sound-checking his foldback, too.

"Checkonetwocheckon etwoCHECKonetwo... have you got a bit more? Great, that's good. Checkonetwocheckon eCHECKonetwo... can you take out a bit of 4k? Yeah, good, good... Checkonetwocheckonetw oCHECKonetwo..."

I'm actually wiping the dust off the VU

meters. Yes, I'm being an unprofessional bastard, but there are some people who are just beyond help. And singers who quote EQ frequencies at me like it proves something are simply annoying.

"Add a bit of 2.5k? Checkonetwocheckonetw oCHECKonetwo... yeah, perfect! Don't touch it, will you? Leave it that way all night."

l haven't touched it for half an hour.

There's a Virtual Fader That Does Nothing on the DAW too or, if the client can't see the screen, a few quick hands of Patience does the trick. As long as you move the mouse and click a few times, it'll do. Don't tell anyone, okay?

Due to the incriminating nature of this contribution the author's photograph has been substituted with one of a trained actor.

BEST DISCLAIMER

dbx released the 386 tube mic preamp, figuring it was perfect for 'warming up' all those 'cold' digital recordings we were all getting six or so years ago. To illustrate the point. dbx Photoshop'ed a 386 into a drive bay of a desktop PC. Neat. Then. in a disclaimer right up there with what's printed on Mackas' polystyrene coffee cups (Warning: contents may be hot), dbx felt it necessary to explain: 'Actual unit is 19 inches wide and will not fit in your computer drive bay'.



"I've had these T-shirts made which say 'F**k Midi' in huge letters. Why? Because it's so shit."

BT consigns Midi to the early '80s scrapheap, and wants the world to know... if only the world had any idea what Midi was in the first place.



It was a muggy, overcast day in Sydney and Simmo thought it high time to try out the pot he had stashed up the back of his studio. Greg lived with me at the time and, to be honest, I was surprised to find he kept anything more than a bottle of Pernod tucked away for such occasions. Turns out his secret stash was of the potentiometer variety – a high-class Penny & Giles device, no less. I remember the pot in question: precise and transparent, with a \$600 price-tag to match. But it sounded a million percent better than the \$60 potentiometer he'd been using as an attenuator between his DAW and ATC powered monitors. The experience brought home to us both the significance of getting what you pay for with audio components. The good stuff inevitably costs a bomb compared to units that appear to offer the

exact same functionality. It was a big issue for high-quality gear. The swashbuckling Konrad Skirlis introduced us to the SPL Transient Designer, and cited the Rode NT3 as a 'classic to be'. TC's S6000, Lexicon's 960L and Sony's miniature Oxford digital console, the DMX-R100, were also on the agenda. Breaking news: Rick O'Neil bought a Jack Russell terrier. – BW

Issue 50 certainly seems like a big deal, but when I cast my mind back to Issue 10 I'd suggest that particular milestone was almost more monumental. It took an eternity to reach 10 - with all the new-magazine uncertainties, stupid hours, beer and arguments, Issue 10, for a long time, felt like a complete pipe dream. It was certainly a big enough deal for my wife, Sally, to bake a cake in the shape of the number 10. I wonder if there will be a '50' cake? - CH.



READERS SPEAK WAVES RENAISSANCE

"Whenever I've run out of ideas for a sound or a track (when creating my own music) I can always throw some Waves on it, and nine times out of 10 I will somehow 'stumble' across something fresh and inspiring to throw into the mix!" **Wayne Sunderland**

"I love these plug-ins – they always seem to give me a smooth almost 'non-digital' result." Wayne Hodges

"There isn't another software compressor that I dare put orchestral and choral recordings through! It means I can look the 'purist' clients in the face and say, "Yes, the pure un-processed recording path *does* sound good, doesn't it..." David Ringrose

"Our studio gets a lot of projects that start in the bedroom with all kinds of nasties from edit clicks, A/C or computer noise, even the occasional aeroplane. The Waves bundle saved my ass many times. In fact, when they got taken away (the drive failed that they were authorised to) I swapped my firstborn for an iLok code." Clayton Segelov

VAGUELY INTERESTING

This is what your Behringer mixer looks like to the bloke manning the X-Ray machine at the airport. Well, we did say 'vaguely' interesting.



SOME KINDA RECORD

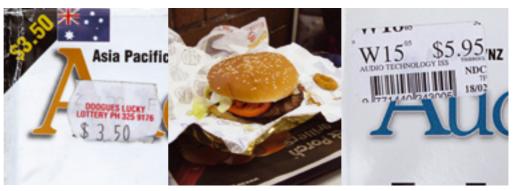
Issue 10's cover was graced with no fewer than five new products: the Sony DMX-R100, Rode NT3, Alesis Masterlink, Roland VP-9000, and Tascam MX-2424. Oddly enough, perhaps the least sexy item at the time, Rode's NT3, probably pips the other four in the success stakes and is certainly the only one still in production.

AT INFLATION

Issue 10 saw another AT price hike – from \$4.50 to \$4.95. The mag hit the market at \$3.50 – all up, a whopping 41% escalation in the pricing, which was at least five times the CPI. Personally I can't understand why Professor Allan Fels wasn't all over us like a cheap rash. Since then we've largely forgotten about the price of the magazine. When Andy came on staff he pointed out that anytime something like AT was cheaper than a Whopper with Cheese then you're bordering on being too cheap. Fair enough... so we cranked the price to be slightly more than a Whopper but still a bit cheaper than a foot-long sub... I'm not sure how we stack up against the Colonel's Zingerburger. – CH.

"Something has to be pretty ridiculous for me to say I'm not going to try it"

Nine Inch Nails producer, Alan Moulder, espouses about the only recording philosophy you can have when you're locked in Trent Reznor's freakoid 'mansion of doom' for months on end.



AT breaks the pychologically-important Whopper price barrier.

EARS FOR EVERYONE

Issue 10 featured Trevor Cronin's review of Shure's PSM700 IEM system. It heralded a new era of affordable IEM - 'ears for everyone'. My impression is that the take up of IEM hasn't been quite as dramatic as many suspected. One thing's for sure, just about any touring act of any note are using in-ear monitors. So if the pros have well and truly hopped aboard the IEM juggernaut, then why hasn't everyone else? I mean, price is now hardly the issue. In my view, there are a few factors

at work holding IEM back among the rank and file. First and foremost, there's still a reticence, a fear of the unknown - IEM is now relatively cheap, but 'what if we don't like it?'. Next, someone has to mix the in-ear monitors. Get it right and IEM guarantees you a consistent venue-to-venue sound; get it wrong and you'll be spending the night in foldback hell... it's pretty common to see earpieces ripped out and swinging from beltpacks. So if a band is going to hitch their wagon to IEM they have

to be convinced that there will be a engineer good enough and a console big enough to supply those mixes. Finally, there's still a dagginess attached to IEM. Sure those big touring acts are using 'ears' but they're 10 feet up and a crowd barrier away from the fans, while most bands are within groping distance of their audience and a bit more sensitive about looking 'wanky'. I've no doubt IEM will continue to gain ground, but price and availability is only half the story. - CH.





WHAT THE ...?

Could there be a more unlikely mascot for Sony's Professional Audio division? No, your eyes are not deceiving you, it's the Laidback DAT Rat, complete with headphones and blue gloves



READERS SPEAK UNIVERSAL AUDIO UAD-1

"The old Robin Hood theory: give the poor a chance to have what only the rich have. I love what the plug-ins can do - from the start of a mix to the end - giving what would be an average recording the chance to sparkle and make the grade." Daniel Bergan

"I have serious withdrawal symptoms when I'm using a machine without a UAD-1. Nothing else out there could make me seriously consider the purchase of a (damn expensive) Magma chassis them to use one on the road." Tim Hanlon

"It has placed great processing, sound quality and power in the hands of users who could not otherwise afford some higher-end analogue gear. Not necessarily at the same level, in some ways, as the analogue stuff but also without some of the issues too.'

Fernando Vicente

TOP SECRET

AT'S LIVE ENGIN

Engineer's name:

Touring band/musici

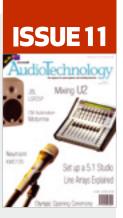
Please circle the corr

FOH mixing console

Analogue Digital (if 'analogue' skip next question)

Midas XL4 PA: L-Acoustics V-I Geo-() other Ah, the Olypmics... what a feel-good time that was for everyone in Syd-er-ney. It was a big deal for AT as well as we gained unfettered access to all the key personnel, and showcased some of the amazing innovations that went into the Opening Ceremony. Audio Director, Bruce Jackson, oversaw the operations of an all-Australian dream team of sound men and women. As mentioned, technical innovation was evident throughout. Take, for example, Colin Stevenson's brainwave when he realised the 2000-plus brass band would be best miked up using Sony lavaliers attached to the band's Drizabone hats (including the transmitter). Being an inveterate smart alec l posed the question: "how does an Akubra stack up against the Drizabone, when it comes to frequency response?". Of course, Colin had an answer: "We did find the Akubra had a slightly better sound quality. The Akubra is rabbit felt, while the Drizabone is made of wool, and I think the Akubra is a little denser and stiffer,

so I was getting more HF. But I was more than happy with the Drizabone on the night." Elsewhere, Bruce Jackson was leaving nothing to chance: "I would wake up at night in fear of what was going to fail, and then I'd immediately pick up the phone and put things in place," said a clearly relieved Bruce post the Opening Ceremony. In the end there were more redundancies in place than a Detroit car plant... or as Norwest's boss, Chris Kennedy, put it: "If there was not two of something in the main system, then it's because there was three of something." Rumour had it that North Korean chemists were frantically attempting to clone Bruce Jackson after Bruce had a particularly feverish night of paranoia. More seriously, it was a day when Australian technical expertise really shone and I'd like to think AudioTechnology did it justice. – CH.



IT CHANGED EVERYTHING...V-DOSC

L-Acoustics' V-DOSC line array had been around for years, but by 2000 had only really begun to snowball - ensuring the JBLs, EAWs and EVs of this world had their full attention. But as of Issue 11 the only kid on the block was still V-DOSC... oh, and the Clair i4, but you couldn't actually buy an i4 system. Thinking about it, L-Acoustics seemed to make it about as hard as they could for V-DOSC to be purchased as well. It felt like you not only needed the money, you needed to change your religion and put up your first born as collateral - just in case you contravened the L-Acoustics code of conduct. JPS had just signed on as exclusive V-DOSC partners and were, quite rightly, crowing about how wonderful V-DOSC was

sounding. It changed everything. In a big open space, like a festival, nothing could touch V-DOSC (except maybe the aforementioned i4) and for once a piece of audio gear could justifiably be called 'revolutionary'. In Issue 11 we talked about how a true line source array functioned, but in reality I don't think too many people cared that much - everyone could hear the difference and that's all that mattered. And what made it more frustrating than anything for Australian rental companies was that JPS had the line array monopoly - people were jumping out of their skins waiting for their suppliers to come up with an alternative... and fast.



It's all about making it sound good. If it doesn't

" If I have MTV on, it's surprising how often I think: 'that sounds good, that might be useful in this'"

Mix Engineer, Tim Palmer, doesn't mind a bit of distraction.

TOP SECRET

For those wondering, no, we don't really use this form. It's meant as a post-modern, self-referential media critique, ie. it's a joke.

OP SECRET	ERVIEW FORM	
ngiacer's name:		DIGITAL ADVANTAGES
ouring hand/munician:		(Please number in order of importance)
		Recallability Redundancy of outboard Recording/virtual soundcheck
lease circle the correct answer:		
OH mixing console: Digico D5 Yamaha PM1D Sidas XL4 other		ANALOGUE ADVANTAGES
A: L-Acoustics V-DOSC	JBL Vertee Nean	(Please tick most suitable response)
Seo-() other		1 don't trust anything with a computer in it
Vocal Mic: Share Beta 58 Audix OM5 other	Neumann KMS105	I just prefer the sound of a Heritage
Vocal processoe/pre: BSS DPR-901 TC Gold Channel Millennia HV-3 other		f'm just an old fart
		PLEASE CHOOSE THE FOLLOWING CLICHÉ
MIXING PREFERENCES		1 push up the faders and hope for the best

Having a group of such great musicians makes my

SHORT ESSAY QUESTIONS

Please recall an amosing EPA-related story involving your arrest or near arrest

Line array has changed my life for the better

Please supply a murky image of yourself at the FOH

Thankyou for your time AudioTechnology magazine



Issue 12 saw 'people' on the cover for the first time. Proving it wasn't a cheap ploy to get a bit of totty on the shelves, AT went for Ricky 'super bonbon' Martin... who happened to have some scantily clad Latina totty in toe. Where would world cup football be without 'la vida loca'? Probably exactly where it is now. Chris Holder interviewed legendary FOH engineer Rob 'Cubby' Colby, who used the occasion to let loose against imbalanced touring budgets: "I'm so against this lights/video versus audio, lop-sided budget nightmare. I'm over it. Nobody goes home humming to the lightshow". He was right. It is all about the audio quality.

ProTools guru Simon Leadley, went multichannel surround with version 5.1 of the program, and William Bowden prepared us for the second coming of Waves' lookahead limiting technology with the Waves' L2 hardware mastering limiter – a unit that has gone on to become a standard for many mastering establishments. These were also the heady days of dot-com stampedes, with countless contenders vying for the next big thing in Internet media delivery formats. Rocket Network had a good crack at the concept along with Liquid Audio. Liquid Audio kicked on and now partner with Wal-Mart stores delivering audio to their music download stores, whereas Rocket Network went the way of the dodo.

Simmo, ambassador to the industry that he is, was again asked to judge the Engineer of the Year ARIA award. Greg sidestepped the official awards and invented his own audio engineering encouragement award – a pair of Sennheiser HD600 headphones that went to mix engineer, Adam Rhodes. – BW.



READERS SPEAK PLUGS/SOFT SYNTHS

Waves SSL 4000: "I get a buzz out of thinking what it would be really be like to sit behind a real SSL desk – this is as close as I'll get but that's ok with me." **Tim Dutton**

McDSP Plug-ins: "These plugs are the first to suppress my desire to go out and buy the outboard equivalents. Which has probably saved my marriage." David Bonser

NI Absynth: "Gets better every release. Versatile soft synth capable of amazing textures and evolving pads." Joel Iedema

Audio Ease Altiverb: "Has become the one constant in my recording process. I might use different mics, pres, EQs, compressors, and whatever else from project to project, but Altiverb gets called up every time." **Richard Beechey**

NI Reaktor: "It's a quick and easy problem solver, as well as a monstrously powerful environment. If I want a simple delay effect with a slight quirk etc, I can just do it myself without the irritating and arbitrary limitations of other soft synths, and without it taking up three monitors worth of screen space." Ben Cook

complaining about the mix but when you

go and have a listen yourself, well, 'what

"It's also really important that they have

a good stereo headphone mix. Otherwise

"You've got to have pretty powerful amps

as well. A 50W amp won't cut it, not to

"Your headphone mixes mightn't seem

sounds coming out of the speakers but

in the end they absolutely do, because

it's going to make the band play much

better - more in time, more in tune, with

like they have a direct relationship to the

the hell are you listening to?!'.

things can get very mushie when

everything is in mono.

power four headphones.

order to get to grips with

PROTOOLS FOR FREE?!

It was the year 2000 and Digidesign dropped another bombshell. It had already put the cat among the apple carts with ProTools LE and now with limited fanfare those crafty Californians had put a free version of ProTools on its site. In the process, Digi had completed an upgrade path from penniless student running a junkyard Mac G3 all the way to the biggest studios in the world with its TDM systems. Did the PT Free ploy work? It went absolutely mental. In Issue 13, when I asked a couple of the Digi HQ techs about Free they said there were more than 150,000 downloads, "it took me three or four days of trying to download it myself!" – CH.

CHECK YOUR HEAD (PHONES)

I love the fact that when I spoke to producer Clif Norrell (No Doubt, Jeff Buckley, Jewel, Faith No More, Henry Rollins etc) he almost grabbed me by the lapels to talk about headphone monitor mixes: "I can't over-emphasise the importance of the headphone mix," he said. "It's important to go around the room and check everyone's headphones and ensure they're working properly. Check they're not blown, check they're not too loud, or too quiet, and make sure they're hearing the right things."

I'll paraphrase the rest of what he said, as it's timeless, rock-solid advice:

"If you notice someone playing out

"Some of the most aggressive guitar sounds have actually emerged from the classic little Pignose Amp – a tiny fiveinch box."

Stav weaves some Electric Guitar Magic.

of time a little bit, then check their headphones and make sure they've got a good blend of the drums and that their own instrument isn't obliterating everything else. If a musician isn't hearing things well in their headphones how can you expect them to play well?

"Some studios have mixing stations in the live room for the musicians to set up their own personal mix. Even then you still have to go around and check and see what sort of crazy mixes they've dialled up for themselves. Those little mixing stations are great, in theory, and often producers will think, 'one less thing to worry about', but you really do need to worry about it. The musician won't be

SNEAK PEAK OF OSX

Brad did his best to give us a healthy sneak peak of the yet-to-be-released OSX - as it turned out he spent the best part of a day "pulling out drives, ribbon cable, jumpers and hair" as he tried to coax the beta version into action. But sure enough. this is Brad the Mac Guru and he finally figured it all out. The verdict? "Stunning... icons animate and buttons flash like they're auditioning for an end of year Christmas special." Predictably, the first thing Brad highlighted was the dock. And it would be the first hurdle all of us would need to jump in

OSX. He duly noted how the dock icons can be magnified as you pass your mouse over them. At the time this seemed like an 11day wonder... pure science fiction. Now? Does anyone still keep this feature active? It's annoying and it's a waste of CPU. I iChat'ed Brad about this as I was typing and he agreed, then, Mac tragic that he is, wrote back: "hold Shift down when you minimise a window". And sure enough it slows things down like Keanu dodging a volley of bullets in the Matrix. "Cool huh?" You've gotta love Apple. - CH.

more accuracy and with more passion. Especially if they're hearing a really big stereo mix in their headphones, they're going to be that much more excited about their playing. Essential stuff."

Essential stuff, indeed. - CH.



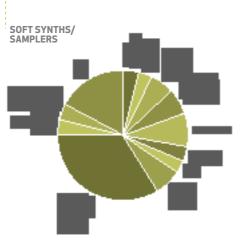


AT ADVERTISING PROMO

A poster! We could hardly believe our eyes - after recently opening a pristine copy of AT #13, a Sony DMX-R100 poster dropped out! Naturally it went straight onto the wall – what a gen. Please get in touch if you've still got a copy of this poster stuck on the wall from way back when... (photographic proof will be required) it may now be worth more than the DMX-R100 (just kidding R100 owners)



No contest, Reason owns the hearts and minds of more readers than any other software sound source, with a 33.9% share of the vote.



Packages like Reason, B4, and Melodyne, and brands like Arturia might feel like they've been around forever, but a quick revisit of Issue 13 soon disabuses you of any such misconceptions. It was the year 2000 and native PC-based recording and processing was only just coming of age. And, in my editorial, I make the point that laptops were finally becoming a viable alternative and the new vistas that extra portability opened up.

Thinking back, computers six years ago were still incredibly clunky. No one had any serious expectations that you wouldn't experience a periodic crash. Apple Mac owners would continue to remain smug, but if the truth be known, they were far from immune to locking up when placed under any sort of stress. But, regardless, the winds of change were blowing and serious software was being authored for an increasingly serious alternative to hardware-based solutions like ProTools TDM and Soundscape.

Native Instruments was starting to go ballistic and Propellorhead's Reason was reviewed for the first time in Issue 13 - and what a juicy prospect that was. TC had spotted the growing trend towards native processing and weighed in with its first iteration of Powercore. It was a PCI card with four Motorola DSP chips on board. And it was purely about adding extra grunt to your native PC-based system, ie. there were no I/O. This proved to be quite challenging to many people who spent big bikkies on the latest computer believing it would handle all their studio's audio tasks without extra investment - that's the dream that was being peddled. It's interesting to note that the Powercore concept is only now really starting to kick on. SSL's Duende and the Focusrite Liquid Mix (as well as the UAD-1 card and the more recent versions of Powercore itself) have really opened people's eyes to what could easily be

described as an outboard

effects/processing rack.

Seems like people are





hungry for guaranteed performance... and some sexy plugs into the bargain doesn't do any harm. – CH.

MUG SHOTS & CELEB ENDORSEMENTS



It's unusual to catch a pop star unselfconsciously interacting with studio gear for the sake of the camera. But Robbie Williams is no ordinary pop star. Issue 13 saw Robbie happily posing with a set of Beyer headphones and a DPA mic. In subsequent issues of AT, Robbie could be spotted sipping from a PMC mug, mugging for the camera and leaning up against some PMC monitors... What a guy! I'd hazard a guess that Andy is kicking himself that he wasn't on hand with one of his prototype PHDs (Personal Headspace Devices - see Issue 39) to get a free endorsement. – CH.



INDISPENSABLE **CLIF NORRELL**



US producer/engineer Clif Norrell (Jeff Buckley, Sting, R.E.M., No Doubt, Rollins Band) has some solid Australian connection, with his work with You Am I and very recently with Little Birdy.

"My world of recording has a lot of 'wants', but not too many 'needs'. Really, the only thing I absolutely need to make a great record is a great band and a great song, then everything

else just comes together naturally. That said, I always try to stack the deck in my favour in terms of the rest of the options I have at my disposal

"When I think back over the last eight years [since AT was first launched], it's my attitude that has changed more than anything. I used to think that I needed a state-of-the-art studio with a Class A recording console, like a Neve 8038 or a vintage API, to get it sounding amazing. Now, for me, it's all about having a room with the right acoustics to fit the songs and the direction I am after. After all, I can bring in whatever outboard gear I want, so I don't even need a console anymore. I

just recorded two albums that came out sounding incredible, both without using consoles – one in a guest house with good acoustics, and the other one in a very inexpensive recording studio, where about the only thing we used that the studio owned were mic stands and cables. So, my new No.1 most indispensable item is a good sounding room to record in.

"I also used to think that when mixing I needed to be in a top-of-the range studio with a flagship mixing desk like an SSL 9000J and loads of outboard. Now, I'm getting better results with a lot less frustration mixing in my own studio inside ProTools. This is

work for me, allowing me to get creative more easily, save works in progress, do instant recalls months later, and try out ideas without fear or needing to trick the technology into working for me. In general, for me, coming from the old school, being well-versed in splicing analogue tape, spinning the pitch dial on an Eventide H3000 with one hand and punching-in on the tape machine with the other, ProTools has been an absolute godsend. Although the young engineers coming up today take it as a 'given' that ProTools plays a part of the recording process, I have been doing it long enough to appreciate how indispensable it really is for me."

simply a better way to

"A young girl screamed... and screamed again"

Simmo melodramatically sets the scene... then sets it again, as a lightning strikes sets him off on a discussion of power conditioning.

ISSUE 14



By Issue 14, multichannel surround mixing was gaining acceptance, with the 5.1 format beginning to look like the emerging standard, Indeed, nowadays, it has become a standard for DVD audio production. At the time. however, the marketeers would have happily had us believe stereo as a concept was dead in the water. Monitor manufacturers were rubbing their hands together with glee and Big Rick (O'Neil) was rushing about organising a 5.1 monitoring and DVD authoring system driven by, of all things, a ProTools rig. Amidst the surrounding buzz, we ran an exposé on correct monitor placement and alignment for your typical 5.1 monitoring system. Despite multichannel fever, stereo as we know it is still the audiophile choice for music reproduction – perhaps that will change when we as a species, develop an extra four ears... and end up forever misplacing our sunglasses.

So while stereo didn't get the heave-ho, many were ditching their analogue mixing consoles in preference to digital control surfaces such as Digi's Control 24 and Mackie D&B. This period was quite a revolution for many small studio owners, as mixing consoles (both budget and not-so-budget) were relegated to back rooms, sold for a pittance or chained to a boat somewhere

Simmo, sensible chap that he is, pointed out the importance of clean. constant and spike free power, and Stav revealed the real way to drive a compressor. In fact, 'Cracking Compressors' soon became Stav's most popular and most widely ripped off article to date, and went a long way to convincing Mike that the only way forward was to commit his gems to a hardback textbook. - BW.



READERS SPEAK PROPELLERHEAD REASON

"The way Reason integrates with Cubase is ideal for the way I work. I use Reason as a sound module and occasionally a loop generator, but then bring all the sounds individually into Cubase and manipulate them there. I program the Reason sounds directly from Cubase. It's then a simple process to integrate or replace the sounds with live sounds. It has revolutionised the way I produce." **Phil Tweed**

"The Subtractor Analogue synth, and the Malström graintable synth, allow me the option to create virtually any sound or texture that I desire. The NN-XT sampler is one of the best soft-samplers that I've used." Sam Pye

"Heaps of gear for less than a grand and it sounds half decent. It makes sense (mostly), is easy to use, and can be rewired!" Sam Kidney

"Incredibly fast way to get original ideas out of my head and into the world." Kirke Godfrey

"Most fun you could have making music in your home studio!" David Rogers



YOU CAN'T HELP BUT LIKE... TC'S POWERCORE GIRL

I think someone from TC mentioned that their Powercore Girl was actually an employee of TC Electronic. I'm assuming she rocked up to work most days in a shiny jumpsuit waving around a Powercore card... which probably got the TC marketeers thinking. The result? TC Powercore Girl rocketed up the 'Thinking Man's Fanciable Charts' of 2000 to sit just under Sandra Bullock.

DYNAUDIO - YOU CAN CALL ME OWL

Dynaudio's BMGA ad in Issue 14 really pushes the whole owl shtick very heavily. Call me thick, but when I see Dynaudio's logo I never really make the bird of prey link... all I see are two particularly creepy eyes staring back at me. It's like the message is: 'Buy Dynaudio or you will be consigned to eternal damnation", or, "come to the dark side of monitoring Chris, your future lies with Dynaudio... it is your destiny". But going back to the BM6A ad, after a quick read, all becomes abundantly clear: "Strong vision helps The Great Horned Owl navigate through the woods at night. Although it is dark, it will see even the smallest detail clearly. It knows this and trusts its senses 100%." I won't go on, I think you can guess where that blurb's headed. So there you have it, it's all down to The Great Horned Owl. – CH.





ANDY 'STEWERT' WRITES!

When you're the editor of a magazine and you've found a decent new writer, you generally work a little harder to make sure they enjoy the process of their first article. Issue 14 saw the publication of Andy Stewart's first review in AT and, you guessed it, I misspelt his surname in the introduction. Thankfully, it was still the start of a wonderful relationship! – CH.

"I was beginning to think that some of the backline guys wandering around on stage were using earplugs to stop their brains oozing out their ears."

Chris Holder has his internal organs rearranged after inspecting AC/DC's onstage monitoring setup.

WHAT HAPPENED TO THAT U47?

Issue 14's classifieds had an ad for a U47. AT rang David 'Daffy' Williams to find out how it went. Like all U47s, there's always a story to tell.

AT: How did you go selling that mic David?

David Williams: The ubiquitous Mick Wordley ended up buying it off of me. It was a comparatively recent example and was the short body version. But it did have a new capsule in it.

AT: What made you part with it?

I used to have a studio in York Street, North Fitzroy [in Melbourne] and people used to give them to me. AT: !

DW: I had three of them.

DW: Which is crazy to think about now. But I think there's too much mythologising about mics like that now. For starters, no two U47 are the same. Daniel Desiere [he of Dex Audio fame] proved it. He brought together all the U47s in Melbourne – mine, Ernie Rose's, Platinum's – and lined them all up... sure enough, no two sounded anywhere near the same. So, if was a young bloke, I'd be buying a new microphone.

AT: Where are you now? DW: Castlemaine [VIC]. I'm planning on opening a studio in Daylesford. In fact, I've just bought a Neve V Series from the US - 96 input... in a road case. Some of the caps need attention but its in good condition.



ISSUE 15



Issue 15 grasped the nettle and tackled the paradigm shift to line arrays by talking to the technical brains of Meyer, EV, JBL, EAW, and Apogee Sound, all of which had just released large-scale line array systems. Putting this article together was a real eyeopener. What fascinated me most was that all the big PA manufacturers were quite happy to give L-Acoustics a 10-year head start with V-DOSC. Apparently no one from these companies thought - 'hey, V-DOSC is actually a really good system and maybe we should look into doing something similar'. Instead, they waited until the clamour from their regular customers was too loud to ignore. And when I pushed JBL's David Scheirman, asking him if a well implemented line array used in the right application was inherently better than a conventional PA, he started regressing into a politician: "if predictability and smoothness of coverage is better than unpredictability and spotty coverage then I would agree." The irony of all this was that Australia

didn't have much call for big-time line arrays at all! Again, L-Acoustics stole the march on the competition with its baby dV-DOSC. I'm guessing it was primarily designed as an infill underhang cab for V-DOSC, but it soon turned into a more flexible, install problem solver, going into theatres etc. Similarly, while the big boys were seeing how their humungo line arrays were faring, another company snuck in with a baby line array. That company was Nexo and the product was the Geo. With the benefit of hindsight it's fair to say that line array takes the lion share of the accolades as they head out with the U2s and Rolling Stones of this world, but it's still the conventional PAs that rule the roost. And now with the likes of EAW's NT Series it's good to see that there's plenty of technical energy

going back into bread &

butter PA. - CH.



READERS SPEAK **FXPANSION BFD**

This plug-in makes the impossible possible. When else can a project studio access a number of world-class drumkits, an engineer with years of experience, not to mention the thousands of dollars in equipment it takes to record a good drum sound. It makes my recordings sound like they were recorded in a \$1000-a-day studio, all for less than \$1000!'

Geoffrey Williams

"For anybody who has spent countless hours trying to get a good drum sound in a home studio situation this plug-in is a godsend. The plug-in also integrates beautifully into ProTools. The most useful plug-in ever - thanks FXpansion." Stuart Roberts

"Working as a solo artist/producer can be frustrating when you need a good-sounding acoustic drum kit and then a good drummer to play them the way you want. BFD has great sounding kits that you can customise yourself with a huge amount of grooves in the library to get you started. The most refreshing aspect of this virtual drummer is that he doesn't sit there drooling in between takes!" Brett Naylor



HOME STUDIO: STING STYLE

Yes, that's Sting in his leather dacks and ugg boots sitting next to eight Prism ADA-8s. It's all part of the man's home studio. Of course, when most of us talk about 'home' studios, we think of a PC, some software and a pair of monitors, but when you're a tree-hugging multi-millionaire your expectations are somewhat loftier. AT spoke to Sting's engineer, Simon Osbourne, about his portable mixer: "Sting decided to buy equipment so that he could record that album [10 Summoner's Tales] from his home. It's actually a mobile setup based on a 64-channel SSL G+ console, which divides into three and stacks into flight cases. It takes six guys and an articulated lorry to move around, but it can be shifted." Right... I think we can now all see the future of 'on-the-go' recording – a laptop and a three-bay, 64channel SSL.

APEX MICROPHONE SALVAGED FROM TITANIC

I wasn't quite sure if Apex microphones still exist but, sure enough, if you go to www.apexelectronics.com they still do. But back in Issue 15 it was a new brand making Chinese U87 wannabes, and for around \$500 was making a pretty good fist of it as well. Anyway, AT had commissioned Konrad Skirlis to review the Apex mics and as deadlines came and went I recall feeling pretty nervous about the likelihood of it happening - even after we'd actually sent our files off to the printer I was still

without the review. I'm not sure how I brow-beat Konrad into finally submitting the infernal article (I think I'd taken his girlfriend and his TL Audio rack hostage) it finally arrived. Like anything done in a mad rush, things tend to go wrong. Just look at the review's pic of the Apex mic... I mean, it looks like it was salvaged from the wreck of the Titanic! I can retrospectively reassure readers that the review model wasn't covered in rust and apologies must got to Apex. - CH.





"There isn't anything magic about line arrays. Currently all you hear is, 'oh it's got to be a line array', like somehow the sound coming out of a line array will be better than the sound coming from other systems...but that's just marketing stuff."

Never one to skirt controversy, John Meyer makes a powerful marketing case for his new M3 line array.

OZ FILM PRODUCTION KICKS ON

After completing Moulin Rouge there was a palpable sense in the air that things were happening in Australia - movies were being shot and, not only that, Australian crews were being employed and some of the post production was being conducted locally as well. It was exciting times. At the post production vanguard was (and is) Simon Leadley. His insight into the

progress of Australia as a movie-making destination, I think, reflected a lot of what many local engineers were thinking. He summed things up in Issue 15's Moulin Rouge article, thus: "The most heartening thing l observed was that we, in fact, have the people who know what they're doing, who are smart and inventive... and this goes for every department. The problem we have is we don't have

the infrastructure or the money to do the things you would like to do - we always have to cobble something together and come up with amazing results considering the resources we have at our disposal." As it happened, Simon and the rest of the Trackdown management team put their money where Simon's mouth was and opened the Trackdown Scoring Stage in 2003.





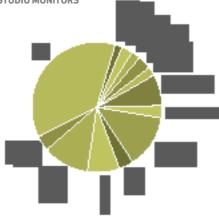
YOU'VE GOTTA LOVE... THE XTA GUY

l used to rent a house in the UK from XTA's Guy Lewis - really nice chap, and didn't get at all stressed when I accidentally blew up his hot water service. But I was as surprised as anyone to hear that he had decided to pose for this SIDD advertisement. From his expression it's evident the job was getting the better of him. Guy, if you're reading this, love to Sadie and the kids, and I hope your hands have grown back , mate. – CH.



Plenty of variety on display here, with Genelec's 8020As doing best with a 14.75% vote. Undoubtedly the owners of Mackie's HR824s were the most vocal in their praise of Mackie's one-time defacto nearfield standards.

STUDIO MONITORS



Issue 16 was big on mixing. Somehow Chris felt the issue's theme of mixing could tenuously be linked to his childhood aspirations of being the next Kim Hughes... not sure how that worked. But I think his point was that useful mixing information was difficult to come by. Most 'mixing' articles amounted to a prestigious outboard list, a totally unaffordable console and a bucketload of oblique 'tips' from a renowned mix engineer. Richard Buskin interviewed David Pensado regarding his trade secrets, and the first of Mike Stavrou's 'Art of Mixing' tutorials appeared, changing the information-bare landscape for all our benefit. Mike's focused explanations offered clear and comprehensible analogies to work with, and consequently gained quite an enthusiastic following.

Putting gear-lust into perspective, Andy Stewart pointed out the dangers of investing in audio equipment according to its visual appearance - might sound obvious but it's something most of us

are guilty of to a lesser or greater extent.

On the gear horizon, AT put no less than 11 stand-alone CD recorders to the test. Simon Leadley auditioned the very first Firewire audio interface, the MOTU 828, and I delved into the slightly odd-shaped world of the Spatial One monitor – they never quite made it to the mass production line but I still use the pair I ordered to this day. Marvellous things... it's just a shame only a handful of engineers were lucky enough to get their hands on a set! The Empirical Labs Fatso bellyflopped onto our test bench and Shure released a 75th anniversary boxed set of microphones. I'm not aware of anyone that actually bought the celebratory SM58 and SM57 set. Both are icons in their own right. These days you've got to make sure your Shures aren't Chinese knock-offs! Caveat Emptor, or in other words, don't buy Shure mics on eBay. – BW.



it required you to treat it like a new instrument. You couldn't play it like a keyboard to extract the cool KARMA stuff out of it, you had to buy into the KARMA modus operandi. As it turns out, not many people did buy into the KARMA MO. It was one for the aficionados... which is normally a euphemism for 'one for the dweebs'. Saying that, KARMA lives on in the pricey guise of the Oasys.

WHATEVER HAPPENED TO ... KORG KARMA?



Korg had a hard sell when it came to marketing the KARMA. It was expensive and was always verging on the cheesy. How so? Gordon Reid in his review of the KARMA in Issue 16 described it thus: "the hybrid offspring of a quasi-random arpeggiator and an auto-accompaniment synth, one that analyses the notes you play but is not bound by them". Right then... Sounds a bit cheesy doesn't it? In truth, the KARMA wasn't cheesy but

NDISPENSABLE THORNY'



Alexander Yuill-Thornton Il is a master system designer for large-scale event such as the Three Tenors' Forbidden City gig featured in Issue 16.

"There have been a number of things that were indispensable to me over the last eight years various tools and toys. acquired knowledge, and

accumulated experience to name a few. But the tools and toys come and go, and it is very easy to ignore the value of knowledge and experience so that it all becomes rather insignificant to what really is the most indispensable thing for me. It is the skilled and dedicated people I have met and worked with over those years that have been the really indispensable part of my professional life. As a system designer the truth is that without these folks none of what I want to achieve for an event would happen. As a system optimizer, the tasks that I need to successfully complete to ensure that the sound system fulfils my vision would be very difficult, if not impossible, without the contribution and support of these people. To state it another way, I could not do what I do without working with other professionals who all share the same common goal: that of making the event we are all involved in meet, and exceed, the needs of those that attend. And as obvious as this seems, it has taken me many years to fully come to terms with this concept. It is so easy to have a narrow view of what one does, and

then deal with the issues of conflicting needs on an adversarial basis. It is more difficult to take a wider view of an event, but when working with others that share the same view, I have found that what seems an issue really isn't, because when both parties share the same goal it is just a matter of making the necessary adjustments, given the discovered restrictions, to maximise the impact for those attending. The real prize has been the accumulation of trust and mutual admiration, which is, of course, indispensable."

"If I move Pavarotti's monitor fader half a dB, he picks it up... once l've got the monitors to their liking I don't touch anything. That area of the mixer becomes a total 'no go' zone."

The Three Tenors' engineer, John Pellowe, risks having a rampaging, stage-diving Luciano on his hands.



I recall my interview with producer Dave Bottrill very clearly. Studios 301 was still very new and Dave had been shipped over to produce the new silverchair album. It was a fairly rare interview setup in that I wasn't talking to him well after the event but actually midway through the recording of the album... there was quite the smell of adrenalin about the whole process and you could tell Dave's creative juices were flowing. Dave Bottrill had learned his chops at Peter Gabriel's Real World Studios. Real World has to be one of the best-known studios in the world - right up there with Abbey Road – and evidently was an amazing place to be a sound engineer. The most weird and wonderful musicians would record there - all absolutely top notch, I hasten to add - and regardless of your preparation there would always be some sort of technical curve ball thrown your way. Perhaps that's why Dave pushed musicians so hard and saw it as pivotal to the art of being a producer. It's not so much about taking artists out

of their comfort zone. it's actually more about ensuring they are in their comfort zone. But once there, Dave throws out some challenges. Here's how Dave challenged silverchair frontman Daniel Johns: "When Daniel was in the control room recording his guitar solo we had the lights off and I grabbed a lamp and started flashing it around underneath him. It was something to make him think, 'wait a minute, what's happening here?', and to get him inspired... Try and create an atmosphere that promotes happy accidents." I guess, in the end it's about risk taking. Most of us would be a little reticent to start swinging a torch around mid performance, but with the luxury of time and confidence it's worth the risk. – CH.



READERS SPEAK

MACKIE HR824

"I've personally not come across a pair of monitors that translate into the real world quite as well." David Grindley

"they tell me the truth, even when I'm lying to myself!"

Roberto Salvatore

"The only thing you hear in the studio when mixing (apart from the occasional fart or cooling fan) are the monitors. These are up there with the best, and, 'bang for buck', probably are the best." **David Russell**

"In its price bracket, the HR824s are unsurpassed in clarity, honesty and reliability and provide an invaluable tool for the modest recording set up." **Glenn Tinsley**

"Great monitor speakers. Flat response, give accuracy and detail to everything." Brett Wagland

"I know they say a poor workman blames his tools, but since getting these monitors I haven't had to cross reference on 30 different stereos to check mixes etc and re-work mixdowns 100 times! Very trustworthy monitors." **Robert Dillev**

9/11

Just prior to Issue 17, Philip and I were working on our first Asia Pacific edition of AT. It'd been something we'd been sweating over for at least a year and a half – it was a big deal for us. Looking back through the Word files for Issue 1 Asia Pacific, all the modification dates were 9th or 10th of September 2001. After finally putting the first issue to bed, that evening my wife and I were phoned by her brother in New York, telling us to turn on the TV. We were going to use the upcoming AES Convention in New York to make a song and dance about AT's new venture and, of course, that all went by the wayside. The convention's venue, New York's Javits Center, was being used as a triage centre and no one had any idea when some sort of normality would return to the Big Apple. It's ridiculous (and only human) to think selfishly when disasters like this occur. and for our part, we could hardly think of a less auspicious start to our international publishing adventure. - CH.

WHATEVER HAPPENED TO L.W. & S.P. AT JFK?

L.W. (or Lenny White) and S.P. (or Sammy Peralta) - a couple of American musos - were helping JBL sell their new baby THX-approved LSR monitors. Of course, this ad was drafted before the USA's War on Everything That Moves and it was perfectly acceptable to show scenes of customs officials and X-Ray machines. Post 9/11, word has it that LW and SP attempted to smuggle in non-American audio gear - some of it wasn't even THX approved - and were both quickly thrown into the nearest CIA-run jail for sedition and crimes against American audio. So it's from X-Ray to Camp X-Ray then... allegedly.



BEST SUCKY LETTER TO AT

Here's the opening lines of a gem of a letter from a reader in Issue 17. "I would like to begin by saying, I read quite a number of magazines on a number of topics, both local publications and international. I feel compelled to tell you that I always look forward to and anticipate with great enthusiasm each issue of AudioTechnology. Out of all the magazines I read and have read I feel AudioTechnology is by far the most outstanding creation. AudioTechnology has the most enjoyable writers that beautifully exhibit the art of blending tech-talk with fun and common sense to provide an easy understanding that does not diminish the importance, integrity and clarity of the issues covered. The layout is exceedingly tasteful in its presentation and very easy to follow. I have every issue so far and intend not to miss a single one in the future." Wow. A word to the wise, if you ever want a response from AT or be magically awarded some prize then this has got to be the way to go about it... flattery, indeed, gets you everywhere. Amardeep, if you're reading this – and you promised you would be! – then let us know how you got on with the setting up of your studio.

So what mixing console did you use while putting the album together? "We didn't actually have one. We still don't... the album was put together without a console."

The Avalanches' Darren Seltmann announces his recording's radical break with tradition. Of course, now, it's practically the norm.



Producer and songwriter, Brendan Gallagher, fronts Karma County and was the creative force behind Jimmy Little's album Messenger. Read more about the recording of his new CD, On Eve St in Gavin Hammond's Homegrown column. In the mean time here's Brendan's take on indispensability.

Brendan Gallagher: My pair of red Quad 8 channel strips are indispensable. They're mod'ed by Joe Malone in Brisbane and have great dynamic range and a lot of sparkle in the top end. I believe those consoles were used for Foley mixing in Hollywood in '70s. I use them for everything but I particularly like them for drum overheads and guitars: acoustic and electric.

l couldn't do without my

pair of O12 Oktava pencil ro mics. They're good all th 'round mics but I like them ba for overheads, acoustic guitar, percussion and they have the warmest, widest

I have a pair of Universal Audio 6176s. A great feature of these is you can split the 610 valve preamp and the 1176 compressor. For vocals, acoustic guitar, piano etc, I like to run Quad 8s into the 1176 (though the orthodoxy is the other way around). If I want a chunkier sound I'll use the 610 as the preamp, it's a bit more

sound on piano

rock, and you can drive the gain a bit. Very nice on bass, snares, etc.

My Herman Miller chair has been a revelation. I stalked a secondhand furniture place next to my studio in Ultimo for six months until I wore the guy down to \$700. After sitting in it for five minutes it was the best \$700 I spent on my studio.

Go to: www. brendangallagher.com. au for more info about Brendan's solo album.

GAV'S BACK

Readers of Australian audio mags would have been happy to see Gavin Hammonds name back in print. Gav gave me a call and we had a chat about what he was interested in writing and whether there was scope for producing a regular column that highlighted local talent making records in their own way and own time. The result was Home Grown, and it's turned into a real cracker of a series. There are so many Australians doing great work and making a comfortable living while remaining all-but under the radar of the press. What's more it's these musicians and producers who couldn't be happier spilling every last bean of the recording process – to the benefit of every AT reader. It really is real-world stuff, and I look forward to seeing how Home Grown grows in the future. – CH.

XP REALLY ARRIVES

When Widows XP arrived in 2001 it was the best news PC users had heard in years. Our regular PC columnist, Martin Walker, expressed his enthusiasm: "I've found Windows XP an overwhelmingly positive experience, and I suspect it's what most of us will be using within the next year."



READERS SPEAK HEADPHONES

Extreme Isolation Headphones: "I love the fact that I can hear my drums in the headphone mix *and* save my hearing at the same time. Plus, it's been years since I've had audible click in the my tracks! Flawless!"

Andy Zito

Beyer DT48: "They are as close to 'flat' that I've found... for hearing what is really happening in any part of the signal path, they are unrivalled." **Declan Cooney**

Sony MDR7506: "I can find myself working in any environment from fieldwork and studios to lounge rooms and home studios. Monitor speakers and rooms acoustics are so variable that a pair of 7506s are indispensable for making and checking critical decisions regardless of where I find myself." **Trevor Beck**

Sennheiser HD600: "I take these puppies everywhere. It's like taking your listening environment and your speakers all in one hit. Slip them on and you'll forget your wearing them in minutes... and the neighbours love'em." **Tony Mikajewski**

AKG K271: "Loud, precise and rugged... the auto mute switch built into the band is priceless." Andrew Simioni

LIKES HIS GEAR

I spoke to A-Grade mix engineer, Mark 'Spike' Stent, after he'd mixed Bjork's Verspertine album... blimey he likes his gear. When I asked him what he'd choose if I forced him at gunpoint to only keep a small selection of gear his reply was that of an unrepentant gear guzzler: "Hmm. ProTools, my SSL, my GML EQ, the LA-2A compressor, all of my plug-ins, Logic Audio - because I really like some of the plug-ins on there - my Eventide H3000, and probably these old Korg delay lines which I really love - the SDD3000 and the SDE3000. I could go on and on!" But Spike was just as generous with some good mixing advice. The two most

important factors of a good mix? Good monitoring and knowing the sound of your room – which is particularly relevant advice for home studio owners. – CH.



It didn't seem smelly at the time but I find myself reaching for a handkerchief now... Simmo gets the job of 'head of audio' at a Sydney audio school and his next editorial highlights the importance of education. I'm sure his intentions were as pure as the driven snow... but blimey, it doesn't look too good. The thing with Greg (and Rick for that matter) is they have an uncanny knack for submitting their articles about 15 minutes before deadline. And short of printing a blank page, you're mostly at the mercy of their 11th hour words. Rick's excuse was (and is) that if he's the last thing in, then his words are less likely to be altered in any way - which is Rick's biggest fear. Simmo's excuse was... actually I don't think he's ever given me a real excuse, except something about 'homework' and a particularly peckish dog. Regardless, Simmo's essay on the importance of education got up the nose of a few old-school audio types. Most of the

inauspicious birth. Even world-class educators like Tom Misner and his SAE schools started life as dodgy, shoe-box bookkeeping, make-it-up-as-wego-along, back-of-a-studio affair. Meanwhile, real sound engineers learnt their trade by listening and watching old pros doing their thing. Basically, it was an apprenticeship. Nowadays, those old-school academies of studio learning (the bigger studios) have all-but disappeared, and the pros are largely flying solo - meaning there isn't some kid learning the trade secrets alongside him/her. So, to my way of thinking, audio schools are pretty essential, as the traditional avenues of learning have disappeared. But it doesn't mean that the demise of big studios (and the 'apprenticeship' system), and the rise and rise of audio schools has amounted to a seamless educational transition. Schools or universities never replace on-the-job training. You might be a 'doctor' after completing a degree but you're no use to anyone unless you've





had years of practical experience under the tutelage of consultants and specialists. So it goes with audio engineering. The schools play their part, but unless students have the opportunity to learn the ropes from old pros, then they're really only getting half an education. Unfortunately, many of those old pros have either left the industry or are taking that knowledge to their graves. - CH.

WHERE'S ROBBIE?

antagonism stems from the

audio schools' particularly

Just when you thought it was safe to leaf through AT again, along comes Robbie Williams spruiking an expensive converter. You've got to wonder what his publicist was thinking at the time. Surely he could score a nine-figure sum singing the praises of some fizzy drink... and here he is on every second page of an Australian audio magazine endorsing arcane black boxes. Course, he'd have to lose the beanie if he was going to enjoy the full benefit of Andy's PHD.



INDISPENSABLE MICHAEL GISSING

Michael Gissing runs Digital City Studios in Sydney and has been writing for AT since day dot. Here he expresses his appreciation for some 'old digital'.

I love my studio: the gear, the rooms, the location... but if it were on fire and I could only save one piece, it would be my Penny & Giles dynamics processors When I bought the PP20s they were very expensive. Six channels, all-digital, low-latency and 32-bit floating point. But the crowning achievement of the units are the algorithms used to compress, limit and EQ. Since then, with compressor/limiters as plug-in and stand-alone units, I've not heard a system that is so good at containing dialogue and effects. I don't find them the best for music, but for the dynamics of location sound for TV doco's, the PP20s have not only made mixing a joy, they are an integral part of the character of my sound.

But beyond the tasks of dynamics processing, the PP20 has some brilliant EQ and a few tricks like width processing and hyper-compression.

The value of my PP20s was revealed many years ago when a thunderstorm caused a power surge that blew some power supplies, including both PP20s. I was able to replace the power supplies locally and quickly, but I did attempt to mix that day with another brand of dynamics processors. It was so difficult to achieve my normal-sounding mix that I was forced to cancel the mix until the units were repaired. Apart from that one instance, the PP20s have worked perfectly every day for over 11 years. No other piece of equipment has been as reliable or as vital.

Michael Gissing reviewed the P&G PP20 in Issue 1 of AT. "Contrary to popular belief, The Corrs could not actually be an Irish band because there aren't that many good looking people in Ireland, let alone in one Irish family."

Despite his surname, Rick O'Neil, lashes out at the Emerald Isle after an unsatisfactory night on the sauce in U2's Dublin-based nightclub – it's a long story... go read it again.



I enjoyed revisiting Will Bowden's kickstart to his 'Trash or Treasure' series of articles. The sentiment of it is just as pertinent today as it was in 2002. William examines that feeling we all know - regret at selling an item of gear that we'd kill for now – and turns it into a practical philosophy as to when and what to sell. My biggest regret by a long, long shot is selling my Selmer Super Action 80 tenor saxophone in the mid 90s and buying a Roland JD800 (digital synth with sliders). I bought the JD800 at the top of the market for around \$3000 and sold the sax for almost exactly the same amount. The synth served me well and in many regards I don't feel shafted by the purchase... but I do by the sale. The Selmer was a classic life-long investment. It would have been the same beautiful instrument now as it was when I bought it 20 years ago. I know it's not all about the money, but one thing's for sure, I simply cannot afford the equivalent saxophone now – I'd be up for around \$6000 – and as for the JD800? I've still

got it, and in many regards I'm reluctant to offload it because I know what it replaced. I have noticed a couple of JDs going for less than a grand on eBay... so l figure l'm a good \$5k off getting my sax back. Back in Issue 19 Will used the mixing console as a classic example of something that was out of fashion, yet a well designed, high quality analogue mixing console will keep its value and will keep it usefulness long after that 20-bit interface was superseded by a 24-bit (or 32-bit) model that was just around the corner. The sceptics amongst us will point out that the value of anything that's effectively based on computer technology will drop like a stone, while anything that's analogue and well designed will keep its value. That might be so, but just about all of us do need a computer and an interface and the odd flash-in-the-pan gizmo. Just so long as we get use out of it and enjoy the ride then that's okay. After all, buying gear was never meant to be a Warren Buffet-style investment system. - CH.



READERS SPEAK MORE MONITORING

Dynaudio BM6a: The Dynaudio BM6a's are so good that I have put my secondary monitors in the garage. To summarise in the Japanese tradition of Haiku poetry: The best monitors that I have ever worked with are Dynaudios Aaron Cupples

Yorkville YSM1P: "These monitors (my first 'Pro' set) have remained my reference point." Barry McConnachie

Duntechs: "Unflattering sonic integrity, without which there'd simply be no ability to pass objective or subjective critical judgement and hence how or whether to tweak – or not to tweak – elsewhere in the signal chain." Adam Dempsey

Genelec 8020: "Incredibly compact, beautiful design, outstanding bottom end for their size." Chris Henderson

ATC T16: "My mixes improved more from this one piece of gear than anything else I own... if I can get it right on the ATCs I know it will translate well to everything else." **Darren Thompson**



MOST UNLIKELY GEAR NAME – BIG TICK AUDIO CHEEZE MACHINE

French boffins, Big Tick Audio, released the CheezeMachine and Brad was all over it like an unpasteurised mould spore. Harking back to the days of the Crumar Performer or the Arp Solina, the CheezeMachine did tacky string machine sounds with ease. Some four years later, the CheezeMachine is still free (go to bigtick. pastnotecut.org) and Big Tick (presumably a reference to getting things correct rather than blood-sucking insects) is powering ahead with a new supersynth called, Rhino. [The Rhino-sonorous]

PIRACY THEN & NOW

Issue 19 was our big software piracy issue. No, that didn't mean we sold the mag with a cover-mount CD full of cracks and warez, it meant publishing a comprehensive exposé of what the industry and readers were thinking about piracy. Actually, just looking back on the previous 'cracks and warez' quip, I've unwittingly touched on one of the roots of the piracy problem - it's easy to make light of; I think we all find it hard to treat it with the seriousness that it deserves. One thing's for sure, back in 2002 piracy was absolutely rife. You've got to remember that this was pre iTunes and anyone under the age of 25 was programmed to believe that

"We routinely encounter [people] who simply tell us they're using pirated versions of our software. That always surprises me: 'Hi, I stole your intellectual property and I have some questions about it."

Syntrillium's Bob Ellison (2001) realises there's a long way to go to alter the cultural attitudes towards software piracy.

anything that could be delivered digitally – software, music etc – could and should be free. No one batted an eyelid about illegally downloading 'free' stuff. In 2002 it was also prior to most of the big moves towards teaming software with hardware. By which I mean, the Mbox explosion was yet to happen, and products like Korg's Legacy or Native Instruments Guitar Rig were yet to be released. So, in effect, the software companies were laying themselves wide open to the 'why not?' attitude of the consumers and the availability of cracks.

Some four years later it's challenging to consider what's changed on the high seas of software piracy. Who's actually doing the software companies out of their money? I'd suggest it's anyone who uses a particular software package most days and either relies on that software to make money or have fun - i.e., if it was taken away you'd have to figure out a way of buying it. As for everyone else who might have a crack of some program on their drive and never use it... well, I don't think that can be classified as a 'lost sale'. Just anecdotally, I'd suggest that more and more people are wanting to do the 'right thing' with their software purchases, which in turn has led to more and more discontent from legitimate customers who are

often being stymied by copy protection

measures. For example, please don't get Andy started on the iLok – the valuable hours he's lost thanks to a faulty iLok has turned him into a fanatical anti-iLok evangelist. Which is a shame, because for copy protection to work it really has to be invisible – it must stop the pirate in his tracks, yet be a total no-brainer for the legit users. I think it's fair to say that we're still some way from achieving that ideal. – CH.



AT IN WHIPPER SNIPPER SPRUIKING SHOCK!

AT used to help out with designing ads for certain advertisers - we still do on occasions - and we have to take some credit for this atrocity. I recall David Green (then of Syntec, now of TL Audio) had one of his brain waves. Figuring the bulk of readers were blokes, and the bulk of blokes strictly adhere to the philosophy of 'right tool for the job', then the bulk of AT readers would 'get' the advertising concept of likening a whipper snipper to a Fostex hard disk recorder/mixer - both

were tailor made for the job, apparently. The reason the memories are so fresh is because muggins offered to find the garden tool brochures from the local mower outlet. Of course the job took way longer than anticipated as I spent half an hour trying to escape the clutches of the shop assistant – I figured the quickest lie would be to say that I 'promised to pick up some brochures for my Dad' ... which of course led to the question: 'oh right, how big is your Dad's garden?' etc etc. Anyway, the appearance of these

various garden implements in the mag appear as incongruous now as they ever did, which, I guess, was the whole point. – CH.





MONKING AROUND

Recording the Gyuto Monks was the fulfilment of one of Simmo's long-held dreams, perhaps that's why the article was so earnest. If you hadn't noticed, AT generally likes a bit of irreverence laced with its sarcasm, but it became evident to me that any verbal hanky panky was strictly off limits. I figured this out after having a chat to Greg about the monks prior to publication, making a few puerile wordplays on the head monk's name, Phuoc Hue, and enquiring if his disciples were called Phuoc Hin and Phuoc Oerf...silence...awkward silence, followed by hasty assurances that I'd send Greg a proof of the story before going to press, and no l wouldn't do any jokey caption (as much as it would pain me). - CH



READERS SPEAK PRESONUS CENTRAL STATION

"The Central Station gives me several indispensable features for a very accessible price. Mono button, three speaker outputs (A, B, and/or C), cue mix bus and a remote with talkback mic!" Stevie-Leigh Batiste

"Makes 'mixing in the box' so much easier. Having a dedicated volume knob and speaker selecting device (which is totally passive!) where I can hook another two sets of monitors to is fantastic... having a mono switch (which I find totally necessary with a lot of DAW software not including mono switches in their master section)... I'd be lost with out it! Looks sexy too." Michael Robson

"The nerve centre of my monitoring setup and has a very clean-sounding signal path. With digital connection from my DAW and nice-sounding converters, the results are consistently good. The unit has lovely blue LEDs, so my rack is not short of bling bling, but best of all, there's a continuous volume control so the kids don't blow my HR824s when they hijack the DAW to play games!" Andrew Jerrim

By Issue 20 we were well versed in the art of slipping the occasional feminine figure onto the front cover - this time with no less than six of the fairer sex, all of whom were starkers.. that's right, no clothes on whatsoever. By way of good fortune these ladies didn't amount to gratuitous nudity but were living works of art, air-brushed in the covers of famous Pink Floyd album covers. So there was a Pink Floyd feature in Issue 20 then? Not quite, but there was an (ex Floyd-er) Roger Waters story. Regardless, there was a link and we reckon it was pretty

tasteful... fantastic stuff! Simmo bit on yet another bullet and delivered his sermon to bands on how to get a decent sound balance live - a seemingly impossible feat for many acts when using their local's underpowered PA system. 'Four Steps to Better Sound through Small PA Systems' delivered some highly salient pointers such as: play softly, play well, and don't attempt to out do each other. Coincidentally, Greg had just completed a live recording of the

Gyuto Monks of Tibet so I'm assuming he was feeling particularly Zen that issue. Incidentally, the article went down a treat and was reprinted in various other forums. If you're in a band and still finding your feet, then best get this issue back off the shelf.

Equipment reviews were aplenty, with useful bits o' kit such as ProTools HD, the Dynaudio Air series of digital monitors and the Rode NT5 microphone. Not so useful was the last of the Akai mega-samplers (the Z8), a Soundcraft digital mixer and another crack by Aphex at the Aural Exciter concept.

The entire back catalogue of Earth was being remastered in surround so we got the lowdown on the DVD remaster of Queen's A Night at the Opera whilst pondering the cultural validity of Bohemian Rhapsody in 5.1. Stav showed us how to record vocals without the aid of headphones and Rick O'Neil 'did his thing' with Madonna. Let's hope she enjoyed it! – BW.







TOOLS STEPS UP

ProTools HD heralded a new path for Digidesign and prompted a complete redesign of the flagship recording and editing system. With a marked increase in its DSP-assisted processing and the capability to work with 'high definition' sample rates, the HD systems were a welcome relief in a world where multichannel processing was becoming de rigeur. DSP power runs out pretty quickly when you're processing six channels of audio, and the previous Mix systems ran out of juice in a blink. If you decided to run the gauntlet, installing more than three DSP farm cards required a PCI expansion chassis - shaky ground if you needed SCSI and video cards

installed as well. The traditional 'yellow on black' styling that had become the Digidesign signature appearance, gave way to a more contemporary 'software plug-in' inspired design. The new look systems also upped the ante for I/O options, offering twice the connectivity and the ability to run a pair of the previous generation interfaces such as the 888|24 and 882|20. ProTools HD brought with it a much needed improvement in audio quality. The previous 888|24 interface had hit the market quite early on in the piece and Digidesign lost sales to the high-end A/D D/A manufacturers such as Prism and Apogee. By the time HD surfaced,

Digi had an answer with the 192 I/O - an interface with specifications to compete squarely with the upper-crust third-party options. Needless to say, the 192 I/O, and indeed the lowlier 96 I/O, both sounded scads better than anything the company had previously offered. Digi had implemented Midi into ProTools software long before this point, but the HD lineage included a dedicated Midi I/O capable of time-stamping Midi events and the remote controllable Pre featuring eight high-class mic preamps - further stamping ProTools hardware as the all-in-one DAW choice. - BW.

, TAKING THE RHAP

"I put [Bohemian Rhapsody] up, listened to it, looked at all the tracks... and almost started to cry because of the amount of stuff that was on there." As I was talking to 5.1 remix-master Elliot Scheiner I could feel the pain of rifling through a million 'mama mia' and 'beelzebubs'. In the case of Bohemian Rhapsody, there were so many vocal takes (or small grabs) that it took a forensic mind to cross check each vocal snippet with the stereo original.

There were 120 channels, and (to maintain the tonal quality of the original) an enormous quantity of old-school outboard - "I think we rented every 1176 in LA!". In the article I likened remixing Bohemian Rhapsody to a painter restoring the Mona Lisa - surely the fear of stuffing up would be the overwhelming emotion. But I guess that's why Elliot has the gig of remixing classic album after classic album - he (except for the odd tear) remains undaunted. - CH.



Wonder if Mambo had any idea Brian May was getting around in one of its iconic 'hamburger and cheese sandwich' shirts...

"Line array is a great thing. l enjoy it a lot. It's a lot more coherent, it sounds a lot better than the old arrays. I wonder what's next? Hopefully I'll be retired and fly fishing by the time anything else happens."

Larger than life FOH engineer, Trip Khalaf, is hooked by the i4.



One of the most fascinating comments embedded in Issue 21 comes from Gordon Raphael who, when asked how many tracks he used to record The Strokes' new album, replied: "Never more than 11 tracks per song... I rented a second [Digidesign] 888 [interface]... I thought if I could put a bottom mic on the snare my life would be better." Not one for overengineering, Raphael used a very simple, low-budget setup to record two CDs for The Strokes to wide critical acclaim. Proof that you don't need a zillion tracks or lots of time and money to hit the big time.

This was the issue where Chris warned people not to trust ads with quotes from famous people, Simmo broke out the Glen 20 so people wouldn't catch flu off an SM58, Elton John's orange wig took pride of place on the cover and . Rick extolled the virtues of wearing sunglasses to improve your hearing. Stav revisited monitor placement and encouraged us to put a board under our speakers and Howard Jones began showing us how to wire a studio correctly... the first time.

Buried in amongst the many gear reviews were two fairly modest items that were set to change the audio landscape forever: the Apple iPod and the Digidesign Mbox. Both of these devices have, in their own way, had a massive impact on the way we record and listen to music. The Mbox took the ProTools format and made it truly portable (provided you had a laptop), but, even more miraculously, the iPod made the MP3 format cool and desirable. Who would have thought? The iPod has since gone on to change not only the way we listen to music, but how we buy it, who buys it and how it's promoted. -AS.



READERS SPEAK

ODDS 'N' SODS

Sharpie textas: "I'm never asked 'can I borrow your dbx blah blah?'. I'm always asked 'can I borrow your texta?'." Damien Young

Damien Toung

Nashua Gaffa Tape: "Needs no explanation – it holds the industry together!" Craig Herbert

Microphone Stand: "An enigmatic mistress, the mic stand has the poise of Audrey Hepburn and seduction of Marilyn when treated with love, but her demeanour can turn to obstinate stubbornness when bent beyond her will." David Sims

Antec P180 compu

Antec P180 computer case: "I have lots of toys in my home studio but none of them come to anything without my quiet PC." Michael Hutton

VU Meter: "Using only peak meters or no meters is like flying blind, and while many of us think we can hear exactly what's going on, visual reinforcement certainly doesn't hurt. Hardware or software – just get one!" Adam Wilson



A COOL DEVICE, BUT CHECK OUT THE SPECS & PRICE!

When Brad reviewed the Apple iPod back in 2002 he hinted that it might have some impact in the future, but none of us realised back then that it would put Apple slap bang in the middle of a musical revolution. Brad was also gutsy enough to make the bold assertion that he thought MP3s sounded better through the iPod than the AIFF files. But the most disarming facts in his review were the iPods specs and price... "You read correctly. There's a five gigabyte drive in there." And the price of the 5GB iPod? \$895! The 10GB version a whopping \$1095! Makes the new fifth-generation 80GB iPod seem pretty cheap at \$499

WE HOPED NO ONE WOULD NOTICE...



Issue 21 had two of the most

extraordinary typos ever witnessed in the history of AT (and there have been some doozies!). Here's the background story: the terrible Quark layout program we were using to make the magazine couldn't (for reasons no one ever understood) reproduce the header font at the top of articles and reviews. Consequently every headline would have to be manually re-typed, and our enigmatic Portuguese graphic designer at the time, Miguel Trinity, took it upon himself on pages 92 and 94 to make history! Steinberg became Steinerg and TC Electronic became TC Electronnic. When Chris received the printed mag he went grey and almost fell off the balcony of the magazine's Dee Why office. There was nothing that could be done... there was nothing for it... it was time to get drunk! My other favourite typo that issue was the Music Link phone number at the bottom of page 111: even if you dialled the printed number, miraculously you still got through! – AS.



"I'm dearly in love with the iPod and I look forward to seeing how it matures. The design is a modern classic."

Brad Watts jacks into the white zeitgeist.



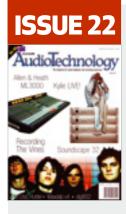
Pete is a highly experienced South Australian-based freelance film sound mixer. His credits include Japanese Story, Somersault and Robberg Under Arms.

Pete Smith: Being a freelance film sound mixer I tend to go with what I'm given, but there are a few essential pieces. The most important would be a good dialogue processing chain, which would have a compressor, EQ and de-esser (usually three separate items, I don't go for the combo that much). I like to have an analogue compressor for my dialogue something like a dbx 160 or Urei 1176 - although I quite like the Waves Renaissance software compressor series Linsert these over a bus and send all my dialogue through it, but I'm still able to insert compressors on individual channels if required, and not just let the main bus compressor do all the

work. De-essers come in a variety of hardware and software options but I prefer to have a variable threshold and a variable frequency control. More often than not this will mean a Waves De-esser and they can be inserted on individual channels as to not be stuck with the same threshold etc.

A good pair of VU meters is something I usually ask for, which is sometimes met with groans from facilities, but I do like to keep an eye on those levels. Sometimes they arrive in the form of an old analogue tape machine or analogue mixing desk, which turns the heads of producers who believe they're paying for a state-of-the-art digital mixing room. But we all have a laugh and get on with it.

Oh... and did I mention a comfortable chair? Indispensable.



The Crocodile Hunter movie might enjoy a spike in nostalgic popularity, for obvious reasons, but in Issue 22 it was simply another piece of Hollywood fluff - a vehicle for Steve Irwin to play with grouchy animals. The link I had into the production was via the film's composer Mark McDuff. He was actually good mates with one of our writers Scott Christie (hope you're well Scott!), so I was hooked up that way. My first introduction to Mark was during a final music mixing session at Trackdown Studios and I wasn't to know that he

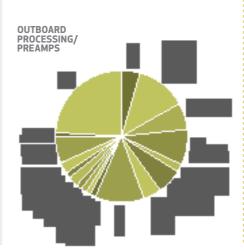
was in the final throes of a very long, very stressful process – "one day there will be alcohol" he muttered with a disturbingly straight face. Mark was the composer because he was the composer for the Croc Hunter TV series, which sounds fair enough. But he certainly wasn't a seasoned Hollywood composer, so the story offers an interesting insight into the Hollywood machine from the perspective of the uninitiated. It's a common theme for these film stories it was a truly Australian but, again, the temp score and the test screenings were part of the underlying stress. After the test screening the producers figured the plot was too confusing and Mark's music was identified as being a problem. So they changed it. Then they did another test screening, which, again, didn't go down so well. So Mark was flown over. And, get this, was asked to re-score almost the entire film in a week. Music Editor, Tim Ryan at Trackdown, had a similar introduction to the film, being asked to lay up the whole film in a

day and a half. Meanwhile,

Simon Leadley - long-time AT writer and one of the main geezers at Trackdown - has always got a tale or two to tell about his Hollywood adventures. I know Simon will hate me for saying this, but catch him straight after knocking another blockbuster on the head and he'll look like he's not slept for three weeks.. which is probably not so far from the truth. I remember that Simon was particularly upbeat after completing Moulin Rouge because production - which meant local filming, editing and post production... the whole lot. Simon loved that, and reading between the lines, he loved it because it meant there wasn't nearly as much of that Hollywood BS. It didn't mean it was easy to complete or it wasn't hard work, but at least you were in charge of your own destiny. – CH.



A real mixed bag of potpourri this one - the POD and the Avalon 747 the only devices cracking the 10% barrier. The Distressor has many vocal fans that's for sure, as does Brisbane-based audio guru, Ioe Malone. Read on.



NOTHING BETTER THAN SX

It's 2002 and Steinberg felt it time to drop VST – Virtual Studio Technology – as a moniker and boldly grasp the sauciest of all two letter combinations in the alphabet. SX. The Teutons were obviously excited and launched a series of teaser ads. And, evidently those same excitable Germans figured we were sharing their anticipation with the words: 'Your pulse is racing. Expectation. First Contact.' Huh? Then, to have readers reaching for their angina pills, some demure north Europeanstyle chick is pictured unveiling a giant 3D Cubase logo. It strikes me that the unveiling uses the same material as Powercore Girl's space suit - perhaps that just me. - CH.



AUDIO TECHKYLIELOGY

Kylie LIVE! Screamed the headline. Open the magazine and sure enough it's Kylie live, along with Kylie sashaying in a sheer night dress, Kylie posing provocatively against a glass wall... in fact, there are a total of seven Kylies in the magazine. One of the biggest stretches was getting Kylie onto Last Word... especially given Rick was taking Kylie's name in vain. Ah well, regardless, it was another opportunity to plant the singing budgie on the page. I can't remember whose idea it was to have Kylie sitting on top of the Mackie Soundscape modules on the cover, but it was pure bloody genius! In fact, it could well have been the best thing to happen to Soundscape in its long and ultimately doomed existence.

"I've recorded a lot of explosions before but this particular barn really came up well."

Location sound recordist extraordinaire, Paul Brincat, releases his inner pyromaniac on the set of The Crocodile Hunter movie.



COINCIDENCES

It was more a coincidence than intention, but two of the more unusual-looking mics going around shared a spread in Issue 22 - the Audix SCX-25 and the BLUE Baby Bottle.

As it happened both the

introductions for the reviews 'sucked'. SCX-25: "The Audix SCX-25 'Lollipop' is a new take on large diaphragm mic design. Konrad Skirlis says 'suck it and see'.

Baby Bottle: A mic that sucks? 'Au contraire, gurgles Andy Stewart.



INDISPENSABLE CHRIS PYNE



Chris Pyne readies himself for another Exhibition Centre load-in.

I struggle a little bit with the term indispensable, as it infers I simply wouldn't be able to do a gig without a particular item, when in fact any live engineer worth their salt should be able to do a gig with anything.. But what's verging on indispensable for me is a digital console like a Digico D5. That's primarily for its ability to store song-bysong info such as dynamics and EQ settings. Having that ability ensures a high level of consistency from show to show. And being able to store those parameters and the variations puts a whole new perspective on the production rehearsals

they're far more useful. In the days of analogue you could rehearse all you like but you couldn't store anything as a snapshot. Along with these digital consoles comes the ability to record a show, which is another big step forward. So whether that's plugging a Digico into its Digitracs software or teaming Digi's D-Show with ProTools, you now have the ability to mix last night's show like you'd mix an album in the studio. Why's that so great? It means you can fine-tune the show: try a different compression or EQ, take care of problem standing waves in a room... I mean,

when I'm mixing Kylie or Il Divo, I can't try a new reverb mid performance, but now I can... or at least I can virtually via this capacity to record the whole gig. The other big improvement in my working life comes from the accessibility of laptop-based analysers, like the Smaart system. It's tremendous to have the ability to tuck your laptop under your arm and analyse the room, and not have to cart around \$70k worth of SIMM hardware. Finally, having an exceptionally good front of house tech is truly indispensable. and thankfully I have Tony Szabo.



READERS SPEAK

ELI DISTRESSOR

James Boundy

Dirk Terrill

Peter Knight

Phil Eades

Stewart Long

Angelo Malavazos

use and sounds great!"

and vocal compression."

"If I had to be stranded on a desert island with

a single compressor, this would be the one. The

Distressor devours anything and everything you

perfect dash of its own colouration) every time."

Suitable for all ages, shapes and sizes."

feed it and returns it exactly as you want it (with a

"Takes the stress out of creating a bass drum sound.

"It's a high-end piece of gear, it's able to do a bunch

of different tasks, and I almost always use it for bass

"How can anyone possibly go wrong with this

compressor? Life can get pretty stressful in the

"It has saved so many kick drums for me... easy to

"It sounds fantastic, it looks fantastic, it's got big

fantastic knobs, it's just complex enough to make

give up. More of a de-stresser than a Distressor."

you feel clever using it, but not too complex so you

studio but this thing de-stresses me.'

002: 'TOTAL WINNER'

Quite unprompted, Brad Watts declared the new Firewire-based Digi 002 a total winner: "... for the sheer simplicity of connection and the ensuing pleasures of a stable and professional control surface, the 002 is probably my pick for product of the year." As it turned out the release of the 002 (and later the 002 Rack) marked another massive step forward for Digidesign, which was fast growing into an industry leviathan, sweeping all before it in the DAW market.

SUPER CHEAP

In 2002, items like mics and outboard gear were starting to get really cheap. Alto had a stereo compressor retailing for \$289, while Samson released a well-constructed \$199 condenser mic. Dirt cheap gear was penetrating deep into the suburbs and everything was changing.

WORTH ANOTHER LOOK

This was the issue in which big-time record producer and mix wizard, Joe Chiccarelli, continued his highly informative dissertation on choosing preamps, compressors and EQs for vocal tracking with some tasty tips on mixing vocals thrown in for good measure – well worth a re-read if you get the chance.

Highlights of Joe's article included some very helpful hints on understanding the tones of many famous and not-so-famous bits of recording gear. He was also very explicit about some of his recording chain choices but added this sober warning: "It's important not to always assume a retro, esoteric pre with big knobs will always be better in every situation." On EQ he noted: "If I'm reaching for an EQ it's often to pull frequencies out and not so much to boost anything. I've often found that by taking some of the Ik to 5k range out of the vocal it can do wonders to the track." His general approach to mixing was probably best summed up when he added: "A mix isn't about ramming a load of disparate, solo'ed elements together, you need to keep your eyes firmly on the bie picture."

AT's esteemed 'bookends', Messers Simmons and O'Neil, decided to go toe to toe in print over the concept of 'old digital' in Issue 23. Simmo saw 'old digital' as any good quality working gear that had simply been left behind in the race to reach 96k sampling rates, while Rick seemed more interested in simply offloading some old digital Neve gear onto Greg that had been hiding under the floor of Rick's house, which he'd acquired for a slab of beer. And I should know, I was the mug under the house getting handed the crap. "Don't let my partner [now his wife] find out this stuff is down here whatever you do," Rick said, as we neatly stacked what was, back then, already useless digital junk in its dusty grave. Whoops! Sorry Rick. I reckon we should have just kept the slab. At least we wouldn't be trying to dispose of the stuff by lugging it around the corner and placing it on some unsuspecting neighbour's nature strip! Actually Rick's Issue 23 assertion that it's nigh impossible

DSP-based and Native digital processing has gained support in recent times, although in some ways the whole debate has now become an irrelevance – good native processing sounds great, while DSP guarantees you a minimum number of instances.

But as debate raged between AT writers about digital specs and the merits of surround sound formats, the consumer end of music delivery was starting to head in the opposite direction. The explosion of the MP3 age – of compression formats and Internet downloading, file sharing and ringtone paraphernalia - had begun in earnest. No one buying music seemed to know about, or for that matter, care about, new hi-resolution formats, making issues like advancements in converter technology seem, to some at least, more like an expensive con perpetrated on studios worldwide than any true mark of progress. Sound quality and fidelity were being overtaken in importance (by the consumer, at least)



by a song's file size, namely, 'How easy and fast is it to

by a song s file size, namely, 'How easy and fast is it to download off the Internet, and can I get it for free?'. – AS.

WHY OH WHY DID UA DITCH THE 2108?

to distinguish between

One piece of gear that was reviewed in Issue 23 (by yours truly) was the UA 2108 stereo mic preamp. Incredibly, the unit has since been discontinued and replaced by the UA4110 and 8110, which still haven't seen the light of day after well over a year tangled up in production drama. The 2108 sounded great, looked incredible and had the potential to deliver a very 'rock' overdriven sound from its preamp stage. But it was also versatile and well spec'd

- no 'one-trick pony'. I couldn't fault it (apart from complaining that the output didn't go to 11) and still contend that the unit is a fantastic piece of gear. Perhaps what the market said of this product was that two preamps for in excess of three grand is just too high a price to pay. A classic piece of gear nonetheless... if you bought one, hang onto it. - AS.



INDISPENSABLE HUGH COUNSEL



Abercorn Recordings and Pitching Woo's Hugh Counsel talks about his four-pronged approach to indispensability.

Hugh Counsel – An indispensable preamp: A great-sounding preamp is absolutely indispensable. As far as the recording chain goes, the preamp is the key link in my book. Whatever mic I'm using I find the source material responds a lot more sympathetically to EQ and compression with a high quality pre out front. Stuck on a desert island I would choose an SM57 with a fantastic pre over a U67 and a cheapie any day.

An indispensable plugin: Echofarm is my indispensable plug-in - the RE-101 and Maestro settings are my particular favourites. I really love it for that vintage Lennonesque vocal echo, dub echoes and timed delays. Echofarm delays just seems to sink nicely into the track unlike other delay plug-ins.

An indispensable guitar pedal: the Ulbrick Megalodon Super Solo guitar pedal. For me, the name disguises the true nature of the beast. It does not change the tone at all, it just makes it sound better. When playing chords it sounds like an amp at full tilt. You get that full-frequency driven clean sound that is definitely not a low-cut distortion/fuzz. I've also found the Megalodon to be extremely useful for picked guitar parts. Clean or driven the pedal gives parts a healthy consistency and evenness that I could never get from an outboard compressor.

Links: www.myspace. com/pitchingwoo or www. abercornrecordings.com "Your mic preamp choice can change the sound of a mic as much as the mic can change the sound of a voice."

High-profile studio engineer, Joe Chiccarelli, talks vocal recording.



We put the M Audio Tampa on the cover of this issue. This was prior to Siev-X etc and Tampa had no connotations other than sunny Florida and classic Art Deco. So, in all, it should have been clear skies for M Audio to move into uncharted waters - professional microphone preamplification. To torture the metaphor a little more, Tampa sunk almost without a trace and it's interesting to consider why. Sean Diggins reviewed it and reviewed it darn well. Sean trusts his ears and his instincts. He'll happily go double-blind with his

listening and stand by any conclusions he might come to – regardless of the name and reputation of the devices involved. When we chatted about left-of-field products he'd reviewed that appeared to bomb, he instantly mentioned the Tampa and the Blue Ball microphone: "Funnily enough, they're both good products in their way, but they just didn't 'fit' the market in the way the manufacturers hoped," remarked Sean. "Tampa in particular is much maligned for some reason, but it is a good unit considering the price - I use mine regularly when the task fits the bill. I guess punters like to see the various manufacturers stick to their respective price points and not step too far outside of their box It's all about perception." Sean's spot on I reckon. It is all about perception and it takes a lot to realign perceptions. I'm just trying to think of an example where an audio brand has reinvented itself or repositioned itself in the market successfully, and

it's difficult to come up with

examples. I guess there's

Dolby, which has gone from making stuff to licensing stuff. My guess is that PreSonus's move upmarket is less of a stretch for its customers. Roland's move into sound reinforcement with its Digital Snake is an interesting one - great product, for a different market that may not even know who Roland is. Rode has successfully tackled the boutique end of the mic market. I'm sure there are other examples but they largely prove the rule that 'perception is everything'. At the time of writing this I couldn't actually find a secondhand Tampa for sale on the web, but I wonder if the eBay worm will turn upwards after people read Sean's comments... - CH.



READERS SPEAK HIGH-END OUTBOARD/FX

U-Audio 6176: "It turns a \$2000 studio into a \$200,000 studio for only \$3000! Of course, you may end up spending \$200,000 over a couple of years but that's all beside the point." **Radi Safi**

Focusrite Liquid Channel: "Having a preamp of this calibre means less work for me down the line." **Joel Saint Clair**

AMEK PurePath DMCL: "Not pretty to look at nor is it loaded with personality but it always adds class without requiring a lot of attention." Craig Harris

TC System 6000: "Really elegant interface and a great array of downloadable licences." Neil McIntosh

Universal Audio LA601: "My mic sounds fantastic through it... Can get a killer bass DI sound... Fender Rhodes sounds amazing! All round winner!" Jarred Doueal REMEMBER WHEN... DVD PLAYERS WERE ACTUALLY WORTH SOMETHING? It was 2003 and DVD players were yet to be \$49 95

were yet to be \$49.95 disposables you picked up at Big W. Of course, being AT readers, you're more than aware that a \$2000 DVD player may well have more to commend it than a device badged 'Fony' that comes free in a show bag. Nevertheless 2003 represented a critical nick in time where a product like the vLink (RRP \$449) could be successful. It didn't feel like it was built to any great exacting standards but it did have the capacity to replay just about any manner of video, picture or audio. Michael Gissing reviewed it and liked it, and the AT team decided to get a job lot... Andy's pretty tough on his hardware and broke it within a matter of months, but mine's still punching quite happily. – CH.

Right of Reply: Andy Stewart: "What rubbish! I'm not hard on my gear... it just stopped working for no good reason!"

THE GEIGER COUNTER MADE ME DO IT

Rick buys himself a genuine vintage 'nuke-o-meter' which sets him off on one and a half pages of dire warnings. That's right, Rick published his annual (there hasn't been another since) 'Dumb Things I Have Done So You Don't have To'list. In it, Rick catalogues new and exciting ways in which he electrocuted himself, along with highly personal and embarrassing anecdotes... In short, it was required reading. How about another instalment Rick?

KEEPING PACE WITH THE PIRATES

If you think software cracks are

generated by some lonely German kid in his bedroom, then think again. The best crackers work in international teams, which work with an unbelievable level of synergy in order to obtain commercially developed audio software months before it's released, and work together to 'crack' the software so it can be distributed online. Teams are comprised of software 'leakers' (those who work within or close to those developing audio software and provide the software to the crackers), crackers themselves, packagers (who are responsible for re-packaging the software into an installable format), graphic designers (in order to develop

graphics and installation instruction sheets), and audio producers (who believe it or not, develop extremely cool installation music). The outcome of this work is a completely self-contained single setup file which allows any user to install an entire program without a single serial number, activation code, and without the biggest beast of them all; the dreaded dongle.

But in recent times, since the vanishing of an elite ('133t' if you're a geek) cracking group and the introduction of the Pace iLok, it appears that the vast amount of audio software being cracked and released has diminished quite rapidly. For years, cracked software was released on the same day the commercial product was launched (this is referred to as a 'Oday' release), which must have been utterly demoralising for the manufacturers. These days 'Oday' releases are becoming far rarer given the complicated nature of the protection, which now takes months to crack, if it is cracked at all.

As I write this I shouldn't be surprised that a new cracking group has recently been announced as the successors to the elite team and yet another bundle of Pace iLok software has been cracked and released. Piracy will undoubtedly always exist, but its impact seems to diminish each day. – Anthony Touma.

"Get the smelliest onion you can find. Slice off a wedge ... put a thin layer of tissue paper around it. Stick in your ear when you go to bed and when you wake up your earache will be gone."

Stav's never-fail earache cure... don't knock it until you've tried it.



AT columnist and broadcast/production guru, Michael Pearson-Adam, looks back on the changes wrought by eight years of digital audio.

"Eight years. Wow. Eight years ago I was swapping between analogue and digital studios, depending on which complex I was working in at the time. Half the time I'd be working on ProTools 4.3, and the other half I was working on a Tascam 24-track. The analogue side got squeezed out, and digital was in 100%. That was the first big change for me in that time period, and digital has played a

dominant role in all things audio ever since.

"Plug-ins, and more specifically Waves plug-ins, changed my life in a major way, giving more freedom to create sound the way you hear it in your mind's eye and ear. The development of plug-ins to soft synths also was a big road change, and again was huge. So on the computerbased front, the digital era was altered in a major way by the advances in plug-in technology.

"The MBox from Digidesign was nearly worthy of putting on a pedestal. I produced a No. 1 hit with it on a freakin' plane somewhere across the Pacific! That to me was amazing, that I had the freedom to be able to do that.

"Taking digital audio out of the equation, computers have got smaller, and faster, and more reliable. My current laptop I use on the road for audio and video production, is half the size of the one even three years ago, and if I think back eight years ago I have memories of my Apple Mac G3 that I thought was the best thing since sliced bread and butter."



WHAT HAPPENED TO... **PETER GABRIEL?**

Paul Tingen spoke to engineer Richard Chappell about Peter Gabriel's new album release Up. But what most of us were shocked to discover was that Peter Gabriel had turned into a bald-headed gnome, barely recognisable rom his Sledgehammer days Everyone read the article but no one remembers a thing about it, only that Peter Gabriel had become Pappa Smurf, seemingly overnight!



READERS SPEAK SUB \$2K OUTBOARD

TLA Ivory 5021: "This compressor does so much for so many different sources, whether it be kick, bass or vocal." Simon Chan

TL Audio FatMan: "As a self-taught engineer having some compressor presets was a massive help in getting my head around compression. Everything I track at home goes through it, it rocks!" Adam Howden

FMR Audio RNMP: "Brings to life all the character of my mics. It gives me confidence in the signal I'm sending to my DAW and is so simple to use' **Cvril Moran**

FMR Audio RNC: This comp anyone can use. In my bass rig live, inserted over a kick or vocals, it will do anything very well.

Tom Isaac

FMR Audio RNC: "I still have trouble hearing the effects of compression but with the use of the RNC, I can be sure of a great recording.' Jeremy Elliott

Joe Meek VC3: "You can plug anything into it. It's big and clean and warm or compressed and fuzzy - with flavour to taste.'

best musicians in Australia; the aim

of this 35-piece showband being to

combine excellence with versatility,

and not to sound 'square' - i.e., old

of the showband's recordings took

place at Studio 320 (on the corner

Melbourne) and these were captured

using mono full-track Rola-Plessey

701s and ancient EMI TR90s. Later,

as stereo took hold and multi-track

recorders appeared, the recording

and eventually an eight-track!

Harold recorded countless tracks

even recorded a combination of

process moved to an Ampex AG440

with the showband and at one point

of William and Lonsdale Streets,

fashioned or conservative. Most

Sean Bennett

A RECORDING RETROSPECTIVE



Harold Aspinall looked back over many years working with the ABC Melbourne Showband and gave readers a fascinating account of the working methods and technology of the time. Starting back in 1968, Harold worked with some of the

HIGH TIME FOR PIE TIME

Stav spent Issue 25 talking about planning your time in the studio, noting that, "the client is often not in the best position to provide an accurate estimate of how long the job will take." He broke out the Pie Chart and cut it up into equal serves of recording, overdubbing and mixing, but essentially concluded that: "The key is to predict the future and to be honest with yourself and the client" to avoid things "ending in frustration

and disappointment as the session spirals out of control." He's right of course, but I wonder how many people still persist in spending time at the beginning of a session nursing a coffee and talking about, as Stav puts it, "what they did last night" and wind up 16 hours later "in a blind panic fighting for every last second.



Greg Simmons kicked off Issue 25 sounding more like a stockbroker than an audio tragic, talking 'long-term plans' and 'buying strategies' - all sensible stuff, of course. He talked about 'buying up' and 'adding down' and compared client A to client B in some quasi-economic rationality curve - client A seemed to 'get' Greg's idea of the studio as 'an on-going investment' (i.e., a bottomless pit) and resisted 'owning budget equipment' which, of course, resulted in client A creating less 'wastage' for himself. Client B was a chump, unfortunately, and wound up buying too much gear that 'slowly migrated to the bottom of the rack to keep the dust bunnies company'. Client A was the winner economically (and sonically, apparently) but neither of them sounded like they were having much fun! What Greg was essentially saying was that if you're mad enough to be in this game over the long term, buy expensive stuff because it'll cost more in the beginning, cost more over the long

the Showband and the Melbourne

players!

Symphony Orchestra - a total of 130

More than anything, Harold's account

of this period in Australian recording

where, in many ways, everything was

achieved using the reverse of today's

quality mics, stands, musicians and

only one track. Today it's often one

quality mic and stand, one musician,

people and microphones recording

in the one big space is something

most home studioists only dream

of... Recording the space and live

musicians? Now there's an idea! - AS.

processes: there were dozens of

and dozens of tracks! Lots of

history, revealed a bygone era

term and again at the end, but there will be less 'wastage', your long-term strategy will realise better audible results... and the dust bunnies will have to be content with their own company!

Chris moved to Victoria and used Issue 25 as an excuse to go to every sporting event Melbourne could throw at him, rubbing shoulders with Richie Benaud and Mark Taylor etc, while Rick O'Neil declared his head to be a "virtual minestrone soup of useless facts about old, obsolete audio junk" and admitted that he was addicted to trawling through junk shops, auction houses, storerooms and rubbish dumps looking for "the stuff you want, but you're not quite sure why." Neve-itis he called it. - AS.



SHAPE OF THINGS TO COME - DIGICO D5

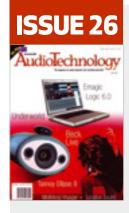
Issue 25 saw the introduction of the Digico D5. Where most new releases take time to be digested by the market, the sound reinforcement sector was totally primed for the release of the D5 - rumour and conjecture was rife. The reason for this anticipation was Digico's decision to send out a prototype D5 with engineer Lars Brogaard to mix a Rod Stewart tour. The console had been spotted around the traps and it looked 'right' - four

TFTs, lots of control, black and sexy. As it turned out,

"They had a Tolkien scholar translate the English back into Elvish for us... everything had to be approved to make sure we had the correct Elvish pronunciation."

When too much nerdery is never enough: Lord of the Rings tragics, The Élvish Impersonators, find themselves out-tragic'ed.

the D5 arguably made large-format digital mixing in the live field acceptable. Sure the PM1D came prior, but I'd contend the D5 did more to win over the hearts and minds of live sound engineers than any other digital console. Which wasn't bad from a specialist post production console company (Soundtracs) that was finding itself dying a slow but inevitable death. - CH.



Andy's always got to have a reason for doing anything. If he was an actor he'd be constantly collaring the director to ask 'what's my motivation here?'. So it was when he bought an iPod years back. Most people were buying iPods because they liked the idea of it or it looked cool... not Andy. He was mostly interested in acquiring Apple's latest gadget because he wanted to understand what all the fuss was about, and he wanted to be using the same playback device as an enormous chunk of the record buying public So it's no surprise that back in Issue 26 he was immediately a card-carrying member of the iTunes revolutionary vanguard. And sure enough, Apple's US launch of iTunes pretty much changed the whole music buying landscape. Finally, the record companies had a weapon against rampant music piracy. I'm sure they signed up to the iTunes circus very reluctantly - if the record companies had proven anything up to that point, it was their luddite credentials - but

after claiming 250,000 downloads on the first day, it was obvious that Steve Jobs had (once again) read the mood of the market perfectly. Of course, it took some time for Australia to have an iTunes site of its own, but now that we have, it's amazing to think that today's consumers are just as happy to buy iTunes refill cards from their local service station as people were to brazenly pirate music from Napster a few years earlier. What can we learn? You don't change people's behaviour by telling them how naughty they are, you change their behaviour by offering a better, cooler, more attractive alternative. One wonders if there's anything to be learnt here when it comes to plug-in piracy – a centralised, Switzerland of a website that allows people to purchase and demo/compare a whole smorgasboard of plugs from every developer... well, it's worth dreaming about I guess. - CH.



READERS SPEAK JOE MALONE OUTBOARD

Esteemed Audio designer, Joe Malone, has a vocal fanclub. Here's some of what they had to say.

JLM Audio Dual 99V Pre: "Every mic sounds amazing through this pre. My go-to pre for anything. It's also an Aussie product." James Bett

JLM Audio 99V Pre: "It covers clean and dirty applications in a way that no other two-channel combo can! Hand made and designed by Joe Malone in Brisbane, the 99V has fast transient response but goes silky and Neve-like when driven." Ben Tolliday

JLM Audio Preamps – "I've been working in a studio with 10 preamps based on JLM's circuitry and supplies, both valve and solid state, each with different input and output transformers to give a great choice of colours. It's become my studio of choice." Linc le Fevre



WIRELESS TIME MACHINE

EV's new RE1 Wireless microphone system was promising quite a bit in this advertisement, and when EV promises it generally delivers. But not even the most ardent EV acolyte would contend that the RE1 could take your gig back 30 years to a time when blokes had beards, long daggy hair and Hang Ten T-shirts. But sure enough, plain as day, that's the photo they used... 30,000 Doobie Brothers fans.

HAPPY BIRTHDAY...DONCA MATIC ROTARY ELECTRIC AUTO RHYTHM MACHINE

Korg had turned 40 and all eyes were on the Keio DA-20 Donca matic Rotary Electric Auto Rhythm machine. It was Korg's (or 'Keio' as the company was then known) first product release and it was a beauty! For Issue 26 I spoke to Korg founder and chairman, Mr Katoh. Mr Katoh's English may have been far



"The Future? You're hearing the future, my friend."

Joe 'the greatest white black musician alive' Zawinul evidently believes false modesty is tantamount to mediocrity.

better than my Japanese (as they say), and perhaps it was something to do with the language barrier, but I was surprised how frank he was in his answers to my queries - there was no hype or spin. For example, after asking Mr Katoh what excited him about the (then) current Korg range his answer was: "not much has genuinely excited me recently". Wow, can you imagine a Yank saying something like that? He then hastened to add that something genuinely exciting was on the near horizon - which turned out to be the Oasys supersynth. It's foolish to make sweeping cultural generalisations based on a chat with the founders of only two Japanese companies (Mr Katoh

and Roland's Mr Kakahashi) but on both occasions I found their candour and their desire to 'make a difference' really refreshing. As an example, I asked Mr Katoh what product release does he look back on with the most satisfaction and sure enough, it wasn't the M1 (which probably made him a very wealthy man) it was the WT-10 tuner - the world's first electronic tuner - which Korg had designed for brass band ensembles. The WT-10 replaced the ludicrously expensive (thousands and thousands of dollars) strobe tuners of the day and made reliable tuning accessible to anyone and everyone (only a hundred dollars or so). That was 1975 and it occurred to me

that if such a breakthrough occurred in 2005, that product would most likely be released at an inflated price and then slowly, slowly new and cheaper versions would be made available to extract every last dollar out of the market. But that wasn't for Mr Katoh, he wanted to make the product immediately available to every brass band in the country (guitarists would pick up on it later) and he priced it accordingly. "So, if I had to chose one career highlight," he said. "That would be it. It may not sound like a glamourous choice but with that tuner we really did change things for the better... and I'm particularly proud of that fact." - CH.

ANOTHER NAIL IN MIDI'S COFFIN

Midi was again in the gun this issue, this time from Underworld's Rick Smith. Underworld was looking to hone their on-stage rig, investigating the option of playing audio straight from hard disk, rather than triggering samples (via Midi) from an Akai sampler. "In the past we ran two systems concurrently and they were linked via Midi clock," Smith told AT. "When I looked at this in more detail, I found out that the Midi clock's accuracy is ±20ms, which is outrageous. It's useless. I really couldn't believe

that I put up with it for so long. In the past I always blamed myself if I'd fired the groove and it didn't sound like the night before. I put it down to slight timing errors on my part, or perhaps a slightly different EQ balance, which can also affect the groove. But what I found was that 10% of it was me and 90% of it was the 40ms variability in the Midi clock. I decided I didn't want machines influencing the groove like that anymore." Hmm. Remember samplers? Just to remind you, see the accompanying image.

Anyway, Underworld opted for the radical move of taking Apple Powerbooks on the road - to think of it! Unfortunately, the (Titanium) Powerbooks at the time were designed for horn-rimmed business types to inspect the day's reports on the train into the office... and not to be chunking dozens of tracks of audio in a hot, smokey club in the Mid West. "The Powerbooks failed, both of them. We don't really know why. They're fragile things and you're talking extremes of temperature and atmosphere." Rick later discovered that using external hard drives, plenty of fans and cooling on stage, and not leaving the laptops on all day, helped matters considerably. Times have sure changed. These days it's hard to imagine a DJ/dance music PA without a lappie. – CH.



GRATUITOUS CUTE-NESS

Neumann's TLM127 hit the market, illustrating its 'birth of a classic' slogan with a cute little bundle of fluff. Critics suggested it cheep-ened the Neumann reputation.





READERS SPEAK LINE 6 PODXT

"It is by far the most important piece of gear I own. My studio is built on a shoestring budget, and I certainly can't afford to have a room full of expensive amps, mics and pres. The PODxt provides me with the means to record excellent DI'ed tones. It's even a great preamp for bass and vocals (especially for harsh crunch and/or distortion). The onboard parametric EQ is decent, and the whole unit is solid enough to gig with." Jarryd Nielsen

"Whether it's for live or recording, this little beauty can make even a mediocre guitarist like me sound great. Even the valve amp purists out there would have to admit that poking an ordinary Fender Strat through one of these can produce simply amazing results."

Sid Whiting

"From both a demo stage through to a master mix, the POD xt is indispensable for its sheer capacity to arm you with any sound. You'll find your sound eventually on the POD xt."

Craig Knight

Chris got very hot under his "made-in-Fiji-becauseyou're-living-in-thebloody-factory" collar in Issue 27 over the gall of those that move into inner city neighbourhoods and immediately complain about the noisy pub down the road. Chris went 'ape' over these "30-something professionals", with their 45-minutes-getting-myhair-to-look-this-ruffled" hair-dos, who bemoan any sound that rocks the foundations of their "profiterole tower". The passion was flowing and the fake fur was flying! I've never heard anything like it from him, before or since!

On the gear front it was interesting to see quite a few digital products hitting the market from companies traditionally known for their analogue purity. Names likes SSL and Nagra were classic examples of these. SSL had always been known as the analogue console 'world champion' (despite a few early attempts at digital), and yet here was its new C100 digital broadcast console - though they were still in the several hundred thousand dollar

the open reel analogue field recorder stalwart, released its Nagra V, to the unbridled excitement of Greg Simmons, who began his review of the 'V' by explaining how he was attempting to sell his mother on eBay to pay for it... Nice one! Yamaha had a new digital console on offer too, the DM1000, but thankfully Michael Gissing wasn't prepared to offload family members to acquire one. MOTU released its new flagship digital interfaces with 192k sampling rate potential... and at 3am the night before the mag went to the printers, I decided - in my wisdom - that the photo of the stack of these units would look better the other way around. Man I must have been tired that night, not to notice that you can't just flip the image horizontally without turning all the writing inside out! Apologies for that... Roland also released its VariOS hardware and then, on the 23rd of June 2003, right as we were finishing up, Brad Watts was literally screaming, "Hold the press!" as the announcement of

price bracket. Nagra,



the new Apple G5s seemed imminent. Bizarrely they had been advertised on the Apple US online store a few days earlier, apparently by accident. But no sooner had word got out about their release than the new G5s vanished again. Presumably Mr Jobs had someone's head on a plate that day... - AS.

MORE COWBELL BABY

Tony Visconti took Richard Buskin (and AT readers) back to 1977 to recall the recording of David Bowie's seminal masterpiece, Heroes. This was a fantastic article that really put us in Visconti's shoes for the recording sessions (which took place at Hansa Studios in Berlin). Amazing tales of recording methods were a real eye-opener, one of the most notable of these being Tony's use of noise gates to open up a second and third vocal mic as David Bowie's vocal tracking went to a single track of analogue tape. As Tony described it, this was done because they'd "snookered themselves" in terms of having enough tracks left to also record and bounce the backing vocals. As Bowie's performance got louder, the

second and third mics, which had been placed further and further into the huge recording room, opened up, producing the enormous vocal sound that Heroes is famous for. This was a classic recording session where imaginations ran wild and limitations became the mother of invention. At one point an empty tape reel was used as a cowbell, because an actual cowbell was not immediately to hand. Meanwhile, Robert Fripp was standing on chalk marks on the studio floor as he recorded his fearfully loud guitar parts, each mark established as the best position to stand to induce sustained feedback for each note. Who does that any more!? Amazing stuff. - AS.



"Brian [Eno] goes on record as saying that he's a non-musician – he even tried unsuccessfully to have that listed as his occupation on his British passport."

Über engineer, Tony Visconti, on Brian Eno's modus operandi.

SPECIAL K

It was in this issue that I finally got to check out Sing Sing's new K-series SSL - or the 'K Room' as it's now affectionately known. I'd heard that the room was being built, but hadn't seen it finished until the day I walked in to talk to Kaj Dahlstrom, Sing Sing's owner, and the man who built the room. The 'K Room' is, in fact, five rooms in total: there's the main mixing room, of course, and on its right there are two quite substantial overdub booths. As you

walk in there's also a large private lounge area and a dedicated machine room. The facility is quite amazing... total luxury - which I later had the privilege of working in for three weeks when I mixed The Whitlams' album, Little Cloud. My main memory of talking to Kaj that day was my utter astonishment when he basically admitted to me that he'd never done the sums; never added up what the studio had really cost: "We never really added it up and we

never really want to, to be honest. If we did that we'd probably just scare ourselves to death!" said Kaj quite nonchalantly. I thought only home studio owners were fearful of adding up how much money they've spent on their equipment list, but clearly *no one* in the audio industry ever wants to know!

I also talked to Paul McKercher about the new K; he'd already worked in the room by that stage. When I first asked Paul what he thought the board response: "It's an absolute sonic weapon that thing. When you open it up you realise how much other consoles take away from the signal that's coming off the tape machine." He was already pretty convinced that the board was a winner, and on the strength of his opinion, I was pretty keen to work on it myself sooner rather than later... – AS.

sounded like, this was his





Issue 28 was a big one for stage, screen and orchestra. Everywhere from Jupiters Casino to New Zealand's Wellington town hall, through to sound and scoring for the movie, *Terminator* 3.

We also dropped by Melbourne's Forum theatre to check in on Ernie Rose, who was in charge of the recording of the Little River Band (masquerading as Birtles Shorrock Goble) for a live DVD release. It was the first time AT encountered the Digitracs hard disk recording system (which Pyramix operators will find remarkably easy to run) and immediately Ernie had cottoned onto its significance: "Being able to replay those pure stems back in the same venue that I just mixed the show in is fantastic," he said - a sentiment subsequently echoed again and again by savvy engineers worldwide.

Gavin Hammond's Home Grown column was going from strength to strength. This issue he caught up with His Dodginess, Bob Scott, who was guilty of reviving a long-forgotten recording method devised by the Grateful Dead's live engineer – the ominously-named 'Bear' who's apparently retired to the bush in far north Queensland.

The secrets behind great sound were proposed by Simmo in his First Word. Forever the educator, Greg proposed his ideal of the three 'T's: Tubes, Transformers and Tape. Back then we could hardly have predicted the near extinction of two-inch tape manufacturers - a shock that resonated throughout the entire audio industry years later. It was an editorial that dovetailed nicely with our Daniel Lanois interview. Daniel is the producer's producer, and he graced us with an insight into the process behind his critically acclaimed album Shine - one of the decade's finest examples of the recording craft. – BW.



READERS SPEAK HIGH-END OUTBOARD

Crane Song Spider: "Cleanest, quietest and most transparant multichannel mic/line preamp available."

Bruce Jacobson

Thermionic Culture Phoenix: "This is the best compressor, alongside the 1176, I have ever used. It determines my sound. It has its own character that suits my needs." Jacek Milaszewski

Grace Design 101 Preamp: "It's the most honest thing I have. Its transparency tells me if the mic choice is right or wrong, if I've put the mic in the right spot, and whether or not what I'm recording is any good."

Jason Mannell

Millennia Origin STT-1: "Great versatility: it has the option of (HV-3) tube and (M-2) solid state preamps plus discrete transistor. Sonic quality is amazing! Great unit!" **Evan Long**

Sebatron Thorax: "I use it on every session. It warms any signal up and gives it depth and life like nothing else."

Morgan McWaters

NEURON SHOCK TREATMENT

If you had a spare \$10k laying about and felt like investing in the 'next big thing' in synthesis, the Hartmann Neuron promised to have the savvy synthesist programming soundscapes never before dreamt or heard. According to Hartmann, the Neuron synthesis engine as a concept was, "technology that in the near future will reshape the entire computer industry". As it turned out, the 'near future' held oblivion for Hartmann - after releasing the (comparatively) affordable Neuron VS, the company filed for bankruptcy. - BW.



THE PHENOMENON OF... TOM MISNER

The SAE global network of audio schools has brought Tom Misner unimaginable riches. He's widely regarded as the wealthiest man in the audio biz. In fact, everything about Tom is big - big man, big business empire, big ambitions, and a big ego. He's not the most ingratiating of blokes either - often his manner is abrupt - and with that he hasn't exactly attracted a legion of admirers. As of Issue 28 Tom had just opened SAE's \$40m global HQ in Byron Bay. Andy flew up there to case the joint and spend some time with the enigmatic Misner. Andy's interview took no prisoners and he discovered the real story behind the dismantling of Festival Studios, and

relocation of the Festival Neve up to Byron Bay; the real motivation behind spending millions in Byron; and the real reasons (according to Tom) why there's so much animosity towards him in the audio industry. Really it boils down to a couple of simple factors: Tom has bundles and bundles of available cash, and he's a gear freak like the rest of us - he loves studio gear, making music, studios... the whole process. That's a very potent combination, as it means hardly any commercial entity in the audio biz is 'safe' if Tom has you in his sites. Witness his purchase of Neve. As a business decision, buying a big chunk of property and selling it off in smaller

chunks is a guaranteed money maker, while buying Neve is a labour of love - and I'm sure Tom would be the first to admit that. So, in effect, he bought Neve because he could and probably because he'd rather not see the company disappear. Interestingly, I expected the usual truckload of Tom scuttlebutt doing the rounds after the Neve purchase, but it didn't eventuate... it was almost like the resentment evaporated. Can it be possible that Tom has been assimilated into the ranks of the respectable audio citizen?

Dr Tom Misner: described by Andy Stewart as 'a recalcitrant steamroller'.

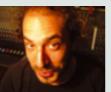


"Rick O'Neil slept most of his life, twiddled equalizers, and then talked the paint off walls."

Rick offers this self-assessment in Issue 28's Last Word.

AT 80





In Issue 28, Dodgy Studio's Bob Scott was walking us through a Wall of Sound... this issue he relates an indispensable technique for realigning your mix perspective... or he may not be treating his 'indispensable' responsibilities with the seriousness they deserve - you be the judge.

"For me, the most indispensable studio tool would have to be the mute button.

"I find analogue mute buttons sound warmer, of course. I like the way you can see the valves glowing red inside – the digital ones can be a bit cold and lack detail.

"Sometimes the best mute button is the main monitor cut – the big red one. I've found this one's real good for transparency in the mix. Also good for fatigue. I mixed a whole album using this technique the other day. The results were surprising!"

other da dio tool surprisin the mute



One of the most fascinating things about this issue related to two rooms that were not only capable of producing surround sound mixes, they were actually producing surround mixes for the real world. Simon Leadley's Trackdown Studio - on the lot of Fox Studios - had been built to cater for what he perceived to be a whopping hole in the marketplace: somewhere in Sydney to professionally record a full orchestra. And what's more he was determined to build a facility that could cater to surround sound audio production for the film industry. Trackdown has

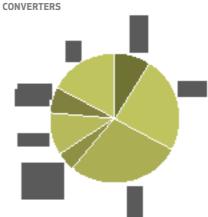
since gone on to achieve great things and has proved to be a resounding success, producing countless surround sound mixes for film and television, including Peter Weir's epic Master & Commander and most recently, Happy Feet. Meanwhile Nick Launay was in Sing Sing's 'K Room' in Issue 29 mixing silverchair's surround sound, live in concert DVD. I visited Nick while he was knee-deep in the process and he offered me a fascinating account of how he was approaching this new world, where six speakers (five of them trusty NS10s) brought the silverchair concert to life and a whole new delivery format was being wrestled with. He'd just received some advice from his long-time cohort – none other than Bob Ludwig. Bob's advice was that "at the moment, you can only guarantee that the average [surround sound] system's left and right front speakers will be adequate." I thought this advice was quite ironic at the time.. Bob was effectively saying that the left/right stereo

pair were the only two

speakers you could rely on to be working properly on the end-listener's system. Nick took the advice onboard, and commented when I questioned him about what this advice had meant to him: "I had the mixes setup with the vocal solely in the middle speaker [initially] - not in the phantom centre of the stereo speakers at all, so when you muted the centre monitor the vocal almost completely disappeared. I toyed with the idea of going against the odds.. but in the end there was just no way I could be that reckless." – AS.



'Converters' was a poll category mostly bypassed by readers. A first-class converter could hardly be more important to some (such as mastering engineers) but is far lower down on the list of priorities for a 002 owner, for example.



CRAZY PROG

Chris mused - in the introduction to his article on Rick Wakeman - about the two camps Prog Rock ruthlessly divides the world into. Camp A sees Prog Rock as, "Tedious noodling, hysterical crashing about, labyrinthine chord changes, bizarre and unnecessary time signatures... a genre requiring a proctologist to extricate any tune that may have once existed." Camp B hears, "Sublime musicianship, visionary song writing, exciting new sonic textures and a fearless disregard for song structure that pushed music to new boundaries." Chris goes on to state that he knows which camp he sympathises with, but neglects

to tell us - well, no prizes for guessing that it's Camp A. - AS.

If you'd sat through countless late-night, boozed-up prog sessions at Philip's place (like I had) you'd rather jump off the Alchemedia balcony than put yourself through yet another Phil Collins record from his '70s 'everyone else is an idiot' era. Saying that, Rick Wakeman was one of the funniest guys I've had the pleasure of talking to. - CH.



NICK LAUNAY SWALLOWS PIL

One of Nick Launay's more famous assisting roles included a gig with Public Image Limited. It unfolded something like this: during the session Nick was promoted to the role of engineer by John Lydon (aka Johnny Rotten) himself, who was so fed up with the engineer at the time that he locked him out of the studio. When the engineer tried to get back in, John told him: "Your position has been taken, kindly f##k off!"



DOES ANYONE KNOW...

. the two chicks fighting over the Quest speaker in Group Technologies' ad on page 27? We're just curious about which of the two girls ended up taking the speaker home. Gotta love the old guy in the wheelchair – loitering in the background – we reckon these two are a class act! - AS

Brad Watts concurs: Quest Engineering's marketing department had no doubt been dabbling in some reality distorting substances when they came up with this little advertising gem. A pair of young ladies looking like extras in some nightclub scene for Desperately Seeking Susan or a Billy Idol film clip, standing on Chapel Street fighting over a Quest MS801W indoor/outdoor powered monitor. Where on earth did they find their wardrobe designer! Dancing with the Stars? And those guitar pick earrings! Unbelievable! Nice nod to the Sex Pistols however.

WHINE BAR STRIKES CHORD

James Telford wrote into AT in Issue 29 saying: "I just read an article in AT titled Pub Rock or Whine Bar?... it has been reproduced on my mate's band's website. Anyway I just wanted to congratulate AT - without sounding like a tool – on a sweet piece of sarcastic, yet basically factual writing. Not only did I nearly piss myself (several times), but I also got inspired to send you this little thankyou note

"[In those days] if you wanted the sound of birds singing, you went down to a parrot shop. Nowadays, engineers ... say: 'oh yeah, we can do that, I'll just bring in a BlazzSprunket 19573 and we'll get that done for you tomorrow."

Yes keyboardist and 'grumpy old man', Rick Wakeman reflects on then and now

INDISPENSABLE **VERNON CONNOR**

Gavin Hammond spoke to Vernon in Issue 38 about The Far Out Project and Zooom Rooom Studio. We caught up with him recently to hear his take on indispensability.

Vernon Connor: The products that have excited me the most over the last eight years have all been under \$1000.

Sony Acid: When I tried Acid for the first time, it was like 'wow!'. It's just so fast to put loops together, put any audio in time with the Beat Mapper and

change the tempo with a click of a mouse. After using the [Ensoniq] EPS 16+ for so long, Acid was a huge buzz.

Nord Micro Modular: this is another one that rocked me. Great sounds with computer editing and a very cool vocoder. I use the modular on just about everything, and the sound possibilities are endless.

Roger Linn Adrenalinn: This is a great one on guitars - sounds huge - and is also very cool on keys with the tempo sync effects. It just adds new life to your

sounds

Digidesign Mbox 2: just got this with ProTools 7. It sounds great! It's versatile enough to bring home and combine family time, so I can still get my music fix no matter where I am.

Link: www.zooomrooom. com



STAV'S BOOK ARRIVES

The readers were getting restless, Mike Stavrou, one of AT's star players, hadn't taken to the field for at least a couple of issues and there were mumblings... grumblings... 'Where's Stav?,' they were saying, 'Had he been transferred?' 'Had he suffered a career-ending injur?' AT closed ranks and maintained the party line: "Stav was fine and he was still a valued member of the AT team, he was just taking time out to pursue some other interests, including a book." A book? Yeah right.

Sure enough, come Issue 30 Stav was back with his new book 'Mixing With Your Mind'. It didn't take long for news of Stav's book to reverberate around the world like Krakatoa's shockwave, and soon, unsolicited messages of gratitude came flooding in. Personally, I've never witnessed anything like it. Forget about Oprah, Dr Phil, or those 'inspirational' calendars you can buy at the post office... Stav's book has genuinely changed readers' lives. Huzzah! – CH.



READERS SPEAK CONVERTERS

Benchmark DAC-1: "Benchmark DAC-1 has a killer converter, beating every other DAC on the market. The result is a crystal clear sound capturing even the most subtle nuances of the signal. True hi-fi." **Ill Lee**

Apogee AD-16X: "In the age of digital you require A/D converters that have the flexibility to not sonically inhibit any musical performance. Contemporary technology has changed the face of audio engineering and our A/D converters are on the frontline. This is why my vote goes to the Apogee A/D-16X." Jay Davis

Apogee AD16X: "When you plug in to an Apogee it just sounds right." **Kitch Membery**

Prism AD-124: "The most important tool in integrating the analogue and digital domains in today's production environment is, in my opinion, the A/D converter. I find the Prism converter to be an incredible piece of equipment, preserving the quality and depth of analogue signals when transferring to digital." Glenn Santry Greg Simmons' Issue 1 editorial was a sober affair, comparing the sound of diabolically expensive gear with marginally less insanelyexpensive equivalents and pontificating on the value (both perceived and fiscal) attached to the logarithmic approach of the cartesian audio perfection axis... yadda yadda. In other words, it was serious-minded stuff for the thinking reader kicking back with AT on a Lay-Z-Boy recliner in their tartan dressing gown and fez. Come Issue 30 Simmo had had enough and decided to release the inner angry ol' fart that lurked microns below the surface. According to Simmo, 'Pepsi' pop music was unadulterated crap and the best way to rage against the machine was to pour scorn on it. Simmo's budget allocation for cracking the big time went something like this: 10% on recording (generous, as no one cares about the audio quality of the song), 40% on gym membership (if you're going to pierce your belly button then you need a

belly button worth looking at), and the remaining 50% on the video clip (obviously the most important thing). A simmering Simmo unleashed salvo upon salvo of derisory brickbats. To those who were propagating facial 'hair art' he railed: "soak your face in moisturiser and dunk it in a bucket of pubic hair". Yuck. And for anyone about to employ the mandatory, rent-a-rap dude for their video clip, Simmo had this sarky recommendation: "keep him up the night before and then pump him full of Red Bull so he's looking 'hard', make sure he's speaking into the wrong end of the microphone and doing those special 'I've got chewing gum on my fingers and it's getting stuck to everything' rapper hand movement." Hmm... tough love from the Simmosonic. - CH.





YOUNG, SAUVE & MOBILE

Mobility... I wonder what it means to you? In a recording context we're all far more mobile than we once were. Years ago, 'mobile' recording meant having an OB (Outside Broadcast) truck, while now, thanks to laptops, bus-powered interfaces, battery-powered synths etc, we can stretch our legs and work on a real tan rather than a studio tan.

A couple of adverts in Issue 30 exercised my brain some more.

First up, there's the Digi 002 dude. The ad makes the inferred and unverifiable claim that Digidesign is now very good in bed. By way of some friendly advice to Digi, a smattering of pizza crusts would have upped the authenticity of their ad no end.

Then there's the Microkorg ad, with polo-necked bloke finding new and interesting places to tweak his groove machine. Apparently this impresses his girlfriend no end. On a personal note, I once tried impressing my future wife with my tweaking prowess on a Novation BassStation and it nearly ended our relationship... obviously I'm in the minority here.

When the Mbox arrived it broadened our mobility horizons considerably. In this

ad we're meant to believe the Mbox has stayed upright all the way from Coney Island on the A Train. (Just a word to the wise... don't try this on any of the Connex boneshakers, it'll end in tears.) AT's graphic designer, Heath McCurdy pointed out that if a set of white earbuds is an invitation for muggers to take your iPod, you'd imagine the conspicuous use of an Mbox and a iBook might be chancing fate somewhat. There again, the muggers would probably be more interested in recreationally kicking five different kinds of crap out of the adjacent geezer wearing the tea-cosy on his head. - CH.

INDISPENSABLE ROSS A'HERN



Long-time boss of Sony Music Studios in Sydney, Ross A'hern, now spends much of his time doing on-location recordings... jazz ensembles being a speciality. He tells AT about the indispensability of good monitoring.

"For me, good monitoring is indispensable. If you asked me this same question a few years ago I probably would have said, good front end was indispensable, but I've had a change of heart – if I can really hear what I'm doing, it makes it a lot easier to use the tools I've got.

"I've used ATC monitors for years – Sony Music Studios started up a relationship with ATC right back in the early '90s. The SCM20As are great... but all the ATC monitors are excellent. People find them a little difficult to handle at first, as they're so different. But once your ear becomes accustomed to the sound, there's no going back. By the time we left Sony Music Studios I'd converted all the staff to ATC.

"I don't generally take monitors with me when I'm location recording. There are inherent problems with taking monitors into the field. You're inevitably listening to them in a vague or variable acoustic space. The only time they're useful is if there are other people involved who need monitoring. Otherwise I use headphones.

"I've recently stumbled upon a brand of headphone called Grado... and they're fantastic. They're an American company and brought into Australia by Decibel Hi-Fi in Brisbane. The SR80s were the ones recommended to me and they came on a 14-day, money-back trial. So I figured I had nothing to lose.

"I power the headphones with a little Grace 902 headphone amp. That's another lovely product." "People expect things to be cheap these day: 'Oh I've got this plug-in – it's a Fairchild'. 'I've got this plug-in – it's a Prophet 5'. Bulls**t it is – you've got a f**king piece of s**t that looks like one!"

In Ben 'Juno Reactor' Watkins' humble opinion software emulations (as of 2003) had some way to go before they could challenge the original hardware. He eventually calmed down.



Issue 31 saw Stav reveal a typically counter-intuitive approach to getting a chain of compressors working as a team on a stereo mix. Unlike the conventional wisdom, which typically places a group of compressors in series; the first providing low ratio, low threshold 'gentle compression,' the second working harder but at a higher threshold, and a third compressor finally acting more as a limiter to catch rogue signals that have slipped through the net, Stav posited that it was far better to set up a chain of compressors

in reverse order to this conventional wisdom. "Place the peak limiter at the start of the chain, with the softer compressor(s) last... you'll find they work over a much wider range - triggering earlier on the quiet sounds while not over-compressing the loudest ones." Great advice and a great technique from Stav – well worth coming to grips with.

Other highlights included Joe Chiccarelli's insights into his recording of Rickie Lee Jones's The Evening of My Best Day, which Chris Holder parochially - and somewhat bizarrely - compared to a Gary Ablett 12-goal haul. Joe's insights into the production of this album were fascinating; from his opinions on recording techniques and production philosophy, to his approach to mixing the album and delivering the musical result Rickie Lee was searching for. His over-arching philosophy was probably best summed up in his response to Chris's question about whether or not he had 'a sound': "When you're working with a real visionary, I think as a mixer

you have to put yourself in their hands and just say, 'okay, I'm you're driver here', as opposed to, 'I'm going to paint my picture and you're going to like it' - I don't really subscribe to that at all. It's your job as the engineer to get inside the artist's head, decipher their picture and help paint it for them." His attitude to the solo button during mixing was interesting as well: "Don't solo. Personally I try to never solo anything. Lused to do it a lot but l've learnt that it's an absolute waste of time... sure if there's a problem and you can't figure out where a conflict is, then hit the solo button, but otherwise stay away from it." Sage advice. - AS



AKG's 414 wins by a short half head (13.7% of the vote). Rode fans will be interested to note that all the Rode mics accounted for a whopping 42.7% of the vote. It's worth remembering the criteria of this poll (gear released and purchased in the lifetime of AT). Many readers not quite cottoning onto the parameters went into bat for the Shure SM58 and 57 - especially the 57 – which is fair enough and made for interesting reading.

STUDIO MICS



OVER THE MOON?

What about Tony Peel's response to winning the Aphex 207 stereo mic preamp: "Fills a gap in my studio nicely." Such unbridled enthusiasm, such gratitude! Bloody 'ell... nice to know our generosity is warmly appreciated!



SYSTEM MELTDOWN?

We loved this news item. No it's not a G4 sprayed in Christmas tree flocking, it's what a Mac looks like after barely surviving a fire that ripped through Kosmic Sound in Perth. Apparently it booted up first time. which all sounds a bit too good to be true (insert your own jokes about 'Firewire', 'hot swappable', or 'blazingly fast' performance here somewhere). - CH.

NEVE IT TO BEAVER

BJB's mix room construction was continuing in earnest and during the second installment of my article on the studio's progress I found myself caught up in the installation of the Neve - having had some experience of this type of event before. It was a hellish night: it was hot, the stairs up to BJB weren't getting any shorter or shallower, and the Neve 'buckets' weren't getting any lighter. We worked tirelessly into the wee small hours putting the console together - there's even a picture of me in among the time-lapse series of photos underneath the console screwing the bastard together. But a fun time was had by all... I think.

- AS.

MY WORD!

There was a massive reaction from readers to Greg Simmons' First Word in Issue 30. Everyone seemed to concur with Greg that a hit single was more about suntans and gym memberships than songwriting or singing talent... let alone sound quality. Some readers 'were on the floor in stitches, others 'laughed their heads off' and readers like Bogdan Weiss "started laughing uncontrollably in the newsagent and walked out with the magazine!'

There were also a couple of very funny letters reacting to Rick's Snakes & Ladders article from Issue 29. Wayne Huf found Rick's words "inspiring" while Nick Carmichael revealed that, like Rick, he

"I used the mic on the lead vocal at one of my band's gigs... and, yes, there were a few guffaws from the band and a few weird looks from the audience."

Sean Diggins takes the Blue Ball microphone on the road to the general amusement and bemusement of anyone within eye-shot.



and his business partner also had a song about non-paying clients... there's was called "2003 - The Year of No Charity". Nick probably summed up things best when he said: "I don't expect Coles to give me my groceries for free because I have a talent for shopping ... "Well said! -AS.



INDISPENSABLE J. WALKER

Mr Machine Translations talks indispensability.

J Walker: Since AT's inception eight years ago, my studio has changed almost unrecognisably from tape to 'Tools

and from four-track to 48-track

Over that time the attrition rate has been pretty high - especially when I was living on the beach. The most consistently used devices in my setup remain my Ibanez DM-1000 digital delay and my Yamaha SPX90.

l got through a lot of records with these as my main effects and I still use them to this day - even though they're ridiculously limited and out-of-date by modern standards

Radio Shack PZM

boundary microphones (and a Sony lapel mic) were my main mics for many years and I've spent countless hours holding onto and singing into those awkward metal squares, though they don't come out so much these days.

My Yamaha two-tone organ has also survived the eight-year journey and still gets a gig. I remember opening it up once after many years of shows and spilt beers, and the insides were completely covered in fungus. I just shut the lid and kept on playing it

anyway and it still goes (though the As don't work just now).

Other honourable mentions go to Teac and Otari tape machines, a Seck thin-line mixing desk and my unbreakable Numark headphones.

Go to www. machinetranslations.org for the latest on all things Machine Translations.



QUADRANT DRUMMER

Rick's story about a drummer called John, from one of his earlier sessions as a producer, was very good value. It's worth re-reading, but the story's hook is the drummer tunes all three of his toms to A440. "Umm, John, you've tuned them all to the same note," I stammer in disbelief.

"Yeah A... 440 Hertz exactly," boasts our not-quite-on-thesame-page drummer hero.

"Umm mate? You've rooted your drum kit. Look at the lugs." Priceless.



READERS SPEAK AKG C414

"As a home studio music hobbyist (as well as a video professional), I have a pretty strict budget for gear. I've found the AKG C414 to be my perfect 'desert island' mic. It serves as my main vox mic plus has been used extensively on a range of acoustic instruments... sweet!" Anthony Rizzuto

"If I've learned one thing from AudioTechnology mag, it's my understanding of just how important room sounds are to a professional-sounding recording. The 414 just rocks my world when it comes to drum room sounds. I now always place one of these up the stairwell in omni. I love watching the looks on the clients' faces as I bring the room fader up alongside the close mics – they can't believe the drums sound so big! The 414 is my 'go-to' mic for room sounds: cohesive bass, articulated midrange, sweet highs and I just wouldn't be without it." Mark Paltridge

"A great studio sound begins with a great studio mic (used well, of course). This is a really good-sounding, versatile mic for many studio applications." Ken Scarr

ven Scari

SIZEMIK SOUND VOCALIST MODELIZER

When I debuted the Vocalist Modelizer on an unprepared world I figured it wouldn't take long before it was way more than an April Fools. And sure enough, last year saw the arrival of Antares' Throat (part of the Avox package), a new vocal tool that allows you to process a vocal through a physical model of the human vocal tract. Let's compare my bogus introduction to the Vocalist Modelizer with Antares' opening explanation of (the all-too-real) Throat:

"I s'pose it had to happen, and it has. We've had mic modelling; some of the most revered outboard ever has been 'sampled'; and now for the first time the vocalists themselves have been modelled. Original multitrack recordings of some of the most famous recordings ever made have been sourced, and the unique 'fingerprint' of each of the vocalists has been painstakingly modelled." (Issue 32, April 2004)

"Throat is a radical new vocal tool that, for the first time, lets you process a vocal through a meticulously crafted physical model of the human vocal tract. Throat begins by neutralizing the effect of the original singer's vocal tract and then gives you the ability to specify the characteristics of the modeled vocal tract." (Antares website 2005)

Yeah right... clearly the so-called 'Throat' plug-in isn't a patch on the Vocalist

Modelizer. Antares needn't call until it can belt out 'Sweet Child of Mine' using a Beyoncé vocal with the 'Gold Lamé' parameter fully cranked. To all those people who got in touch to learn more about Sizemik's innovation at the time (you know who you are), here's a Version 2 GUI to drool over. – CH.

Antares Throat (upper right): clearly not a patch on the Version 2 iteration of the all-conquering Vocalist Modelizer.

your ear off about a 'digital this' or a 'wireless that' you can tell him about Dave Natale... probably won't shut him up, but it's worth a shot. But, more seriously, if the interview with Dave Natale teaches us anything, it's the fact that technique and preparation wins over gadgetry every time.

For all those live sound

engineers who feel a

bit guilty about not

investigating digital

consoles, don't panic,

you're in good company.

Issue 32's interview with

live sound leviathan, Dave

Natale, revealed that he

wasn't riding the wave

of bleeding-edge digital

technology. He was happy

with his PM4000, thanks

very much. In fact, it took

migration from PM3000 to

totally convinced it was just

4000 as he wanted to be

as rock solid as the older

model. And if you thought

you were the only one to

not progress any further

than Patch No. 1 of your

SPX, again, fear not, Dave

Natale is right with you on

that one as well: "you turn it

on, it sounds good". In fact,

for the Fleetwood Mac tour,

Dave Natale even managed

tide, preferring leads on the

vocal mics and the guitars.

this: Dave Natale is one of

the great FOH engineers

and has a list of big-name

'clients' longer than your

arm. So, if some whipper-

snapper starts chewing

And let's be clear about

to hold back the wireless

him a while to make the

But, still, gadgetry is nice. Just ask Tony Maserati. In Issue 32 he'd just won a Grammy for Beyonce's Dangerously in Love and was happy to divulge some of the secrets behind his mix techniques. Tony's been mixing a long time and obviously knows what he's doing, but he's not someone to restrict his equipment options. For example, on the Black Eyed Peas Elephunk album he was throwing the kitchen sink at Will.i.am's vocal – Waves Renaissance EQ, McDSP compression, Neve or API EQ, then onto a Neve 33609 or Pendulum compressor.. and that's before it had even hit his SSL console. So if the interview with Tony Maserati teaches us anything, it's the fact the technique and preparation, in combination with all





the latest and greatest gadgetry, wins every time. – CH.



INDISPENSABLE JACK THE BEAR



Enigmatic Melbourne mastering engineer Jack the Bear offers AT a more lateral response to the concept of 'indispensability', a response that very few people could refute. Jack the Bear: There are many things that I would consider indispensable in my professional world. But after much thought it occurred to me that no matter what choice I made, none of this exceptional gear could prove its worth without the 'other' driving force behind these indispensable items. I'm speaking about clients.

To achieve what I have in my 26 years in this crazy music/audio industry has always required clients. They bring me the music to work with and the much-needed legal tender to be able to invest in, and nurture, what is my current mastering facility, not to mention the most important thing... a gig that is unsurpassed in terms of job satisfaction – mastering.

It's easier than ever before for people to do their own mastering, especially in the digital domain, given the ubiquity and quality of the tools available today at quite reasonable prices. As a result, people like me really need to step it up and offer something different; something better than what can be done at home. Thankfully there are still plenty of people who can differentiate between the two alternatives and are discerning enough to seek a quality service. So I take my hat off to the many clients past and present and hopefully future. Without you, all the other things that I would have considered indispensable would still be a pipedream. "Why oh why do elderly people sit directly in front of large black and loudlooking speaker stacks, then complain constantly that it's all so horribly deafening?"

Graeme Hague ponders the imponderable.

ISSUE 33



The good old surround sound discussion was alive and well in this issue of the mag, with two main protagonists offering totally different insights into what the surround sound format meant to them and their businesses.

Mark Opitz and Tony Wall from 'Best Seat in the House' were extolling the virtues of the 5.1 format and their experience in this area was already patently obvious. They'd done several surround sound projects including a live Kiss DVD and their latest effort – which was the subject of my article – was INXS's I'm Only Looking 'best of INXS' DVD. Mark and Tony had a very different opinion to the one Nick Launay (and indirectly, Bob Ludwig) had offered me a couple of issues earlier; Mark's opinion on the use of the five main speakers was pretty strident: "If someone hasn't got their system plugged in the right way, it's not our problem - we'd like to think that the final listener has at least got a standard working setup. We're not going to compromise how we mix to accommodate a faulty setup," adding, "We're not scared to use the format." Their confidence in this approach was obvious and the final product would seem to vindicate their position. Mark and Tony's philosophy at the time was that: "the fans are the 'owners' of these [INXS] songs now, in a sense. Tampering with them is a can of worms which usually only upsets people. You can't change a song that's already in everyone's head; it's folly. So we simply made the stereo mixes come to life, if you like, in 3D." And

Meanwhile BJB's Chris Townend had quite a different sense of urgency about whether the new mix room at BJB should immediately be capable of 5.1 mixing: "About a month before we finished we realised that the budget was starting to get a bit stretched so the 5.1 mixing has had to be shelved for a few months – but not for good!" As it turns out BJB has been so busy mixing in stereo that the surround sound system still hasn't materialised. This is by far the more common 5.1 story; will it or won't it take over from stereo, and will the work be there? The answer to both these questions (with a few notable exceptions) seems so far to be a resounding 'No'. - AS.



READERS SPEAK RODE NT1-A

"Good, clean *cheap* condenser for someone on a tight budget like myself." **Ross Quinlan**

"Because it's easy to use and set up, quite reliable. Clear and accurate sound." Dave Robertson

"My first and most versatile condenser mics. Even after a few years my mic collection has expanded, the NTI-A is still my first choice to record vocal, acoustic guitar and drum overheads. Great Rode quality."

Pandria Dewangkoro

"It is the most versatile piece of equipment I have. I use it on vocals, acoustic guitars, overheads and electric cabinets." Andy Youkhana

"Any system no matter how much you spend will only reflect what it 'catches' from your air space. Getting the best sound in requires that you use the best microphone, the Rode NTI-A. Indispensable!" Justin Roll THE RODE TO SILVERWATER

We visited the new Rode Microphones manufacturing facility in Sydney's Silverwater during Issue 33 and Rode boss Peter Freedman showed us around his utterly spotless hi-tech facility with great pride. Not too many audio products are made in Áustralia these days, and Peter couldn't be happier to be bucking the trend of manufacturing everything offshore. He's an enigma, no question. When Chris asked him whether he was concerned about the explosion of Chinese imports, Peter responded: "It's not all about price. With manufacturing in the western world, if we're smart, we have a lot more to trade on than that.. As far as I'm concerned the more 'cheap' product that comes into the market the better. It just introduces more people to what's out there, and people aspire to having quality." His business advice... "For starters I don't recommend anyone work with their parents - not a good idea. I loved my dad but we were always knocking heads." – AS.



RELIEF AT BJB... ANDY FORCED TO HOOVER

they did.



For six months leading up to Issue 33 I'd been following the progress of the construction of BJB's new mix room in Surry Hills, Sydney. This issue we were going to reveal the finished product – after holding it over from Issue 32 because the construction was behind schedule. I remember the day I went in to take the final photos – when I got there the new Neve room was a shambles. There was crap everywhere, tools, coke cans, dust... but I had no choice but to take the pictures then and there. So I swallowed my pride and spent the next two hours cleaning up. I vacuumed, I dusted, all the while grumbling about how slack the boys had been not having cleaned up before I got there.

What came across in the final instalment of this story was the palpable relief Scott Horscroft and Chris Townend expressed, having finally turned the studio on to discover that their half million dollar, six-month, night and day investment was working well and sounding great. Scott: "Spending half a million dollars on a studio at the age of 26 is a pretty scary undertaking – and really quite nerve wracking. There are times when you wake up in fright at the enormity of it all, and because there's no returning the goods for a refund, feelings of apprehension can quickly turn to dread." About the console Scott added: "I had nightmares about pushing up the master fader and it sounding like a piece of shit... it was a huge and nerve wracking leap of faith to assume that it would work and sound good." Chris, who'd done the bulk of the carpentry himself pitched in with this gem: "In some ways the thought of picking up a hammer now or building anything makes me feel ill." – AS.

"The health and safety brief given before each show contained all the usual things – including what to do in case of a mortar rocket attack... nice!"

FOH Engineer, Chris Pyne, heads to Iraq – not a place generally associated with the words 'health' and 'safety'.

A GIG AT THE PALACE... NO, NOT ST KILDA

Chris Pyne was part of a team that flew around the world entertaining British forces, and of course in 2004 he wound up in Iraq, setting up a show smack bang in front of Basra Palace – Saddam Hussein's former 'weekender'. Entertaining the troops has a long history but I'm sure Chris must have had his moments wondering how, as a FOH engineer, he had come to need a flak jacket and a helmet to do his job in relative safety. I know FOH engineers can cop a bit of flak now and again – but not literally! Thankfully the show went without a hitch and Chris got out of there unscathed. As Chris commented: "I thas to rate as one of the more surreal experiences I've ever had".





AUDIO IN SPOTLIGHT

Holosonics isn't a principal many of us would be familiar with, but Issue 34 annexed an interesting idea, conceived by one Dr Joseph Pompei. His design and subsequent invention of a flat transducer disc is capable of producing a beam of sound. That sound beam can then be accurately aimed and projected toward a specified area. Outside the beam's projected space, the measured attenuation was in the realm of 30 – 40dBA. Remarkable. The Holosonics site doesn't look particularly vibrant, but apparently 1000 systems have been installed worldwide, included theme parks, information kiosks etc.



READERS SPEAK RIBBON MICS

Royer 122: "This mic is going to be a classic! We all know how good the Royers sound on guitar amps, but I just love how great these mics sound on acoustic instruments. Violins tracked with the 122 sound beautiful and woody, with syrupy tops, while a recent experiment with upright bass was also amazing. Great fundamental tone, and surprisingly tight bottom end!" Lachlan Carrick

Royer 121: "My recordings come out sounding fantastic, with little else needing to be done." Matthew Weston

AEA R92: "I record a lot of metal, and for the heavy vocal style, condensers are too bright. With the AEA R92 I can get a very aggressive sound with lots of heavy bottom end and not too much hype in the top end, but still with all the detail I need. Amazing for the price!" Andy Kite

AEA R84: "For the majority of recordings I make this microphone seems to come out the most frequently, often as a room mic but also as a close mic. It has a beautifully natural sound to my ear and for recording *real* sounds it is simply fantastic." Samuel Bester

Issue 34 jumped straight into Simmo's scathing bombardment on Melbourne's inclement weather. He didn't stop at impromptu precipitation either. The Yarra and John Batman got a stern going over into the bargain. Greg inevitably had his Melbourne visiting rights revoked by the southern capital's Lord Mayor, and to this day contends it was the best outcome for all concerned – himself and the city of Melbourne. He copped a fair amount of flack for his comments, but brushed them off, as the majority of it originated from Victoria

Rick O'Neil opined that the studio business is actually an arts and crafts pursuit, and on many counts he's right. There's a whole bunch more 'cottage studios' out there these days than full-scale 'professional' installations. Rick decided he and his bedroom brethren are all slowly going broke for a living and I reckon it's true. Like Rick, most of us are too crazy to get out of the game. Why? No doubt like Rick, we're all fixated by the darkened

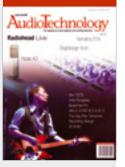
rooms and smell of Caig Deoxit. We just can't get enough of this recording lark!

An interview with Radiohead's live engineer Jim Warren gave Issue 34 it's international flavour, as Andy Stewart and Jim discussed the perils of changing to a digital FOH console. Meanwhile, Mark O'Conner on the home front investigated the building of Brisbane band George's second album, Unity.

We also spoke with Al Smart of Smart Research fame and dispelled many of the myths surrounding one of the industry's best kept secrets, the C1 Smart compressor. The affable Henry Brister took the Chandler TG1 compressor for a spin and Stav examined the seemingly simple (yet complex) phase button, in order to get us flipping and sliding our waveforms about to greater effect.

Shots of Guy Sebastian hard at work in the studio appeared in a few ads endorsing Audio-Technica microphones. Let's hope he wangled a few mics out

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of them for tracking his 'difficult second album', Beautiful Life. – *BW*.

RODE K2 – PEAK PERFORMANCE?

By 2004 any tittering and snide comments about Rode's microphones had largely evaporated. Most people now knew that the enormous Rode factory in western Sydney was a good indicator that Rode mics weren't made in China, and the hundreds of thousands of microphones the company was shipping overseas was a strong hint that lots and lots of people liked the Rode sound. Most commercial studios had a Rode of some sort in their cabinet - the NT5 instrument mics have been a particular favourite - but when it came to 'best vocal mic' status... well, the Rodes weren't in the same ballpark as a U47, U67, C12 or the like. Old German and Austrian microphones still ruled

the roost. With this in mind, Rode boss, Peter Freedman designed a new capsule, the HF1 (the initials of his father, Harry). The HF1 was not quite as excitable in the top-end - a characteristic that many old hands in the studio had an aversion to - and, when combined with a 6922 valve and Class A electronics, the result was the K2. AT's reviewer, Konrad Skirlis, gave the K2 a thorough going over, while we also invited Joe Chiccarelli in LA to offer his thoughts. Joe's recorded the vocal performances of Elton, Frank Zappa, Beck... lots of luminaries. And for someone who 'wasn't too wild about the previous Rodes' he'd heard, Joe gave it the thumbs up.

The K2 was hardly going to put Neumann out of business, and the classic mics of yesteryear are still a very highly desirable commodity. But the back cover of AT was heating up as a spot for Neumann and Rode to (literally) face off – Rode on the back cover, and Neumann on the inside back. I wonder if this led to this confrontational 'road sign' ad... double entendre very much intended one would think! – CH.





a maximg on? - Lang the word performs at the Roundeland Joley steps.

CN: All for redundency's using? WC: And for options. You below guine know what particular combination of new resource of

HEY! IS THIS THING ON?

Luna the wolf gives it all she's got at a Soundelux Foley stage. The results would be used for the Day After Tomorrow blockbuster, Van Helsing and Scoobie Doo 2. All up, this has got to be one of my favourite AT pics and captions of all time. - CH. "By some fluke or other I met Colin Sanders – who had basically designed the original SSL on the back of napkins and fag packets at two in the morning during sessions in a little studio called Huge!"

Al Smart recalls his fortuitous meeting with the man responsible for the SSL console.

ISSUE 35



This was the issue that saw Greg Simmons use his First Word column and a review of the MCS Silent PC to extol the virtues of a computer that doesn't pollute your control room with fan noise. First Word – Before and After Silence - revelled in puns like this gem: "I don't know much about Arp [the 20th century surrealist who apparently hated machines that made noise] but I know what I like." He kept the Silent PC and appropriately named it 'Arp'.

It was the issue where Halle Berry became a virtual AT centrefold. The topic? Sound for Catwoman. I remember trying to proof read the first spread. took me about 40 minutes! Stav gave us confidence to record using little more than our imaginations: "when you're short on equipment, don't let the limitations of your gear limit the power of your imagination... it costs nothing, requires no power or mic stands and can generate some of the best sounding recordings you will ever want to hear." True enough.

included the BFD XFL expansion pack, which Brad Watts compared to a club sandwich. Then there was the Green Machine II amp simulator, and Native Instruments Guitar Rig. Steinberg (with a 'b') released WaveLab 5 and Sony released Vegas 5. There were two converters reviewed, one by Benchmark, the other by RME - both seemed worthy units. But probably the most significant releases were Digidesign's utility device, DigiDelivery, for transferring files over the Internet, and Focusrite's Liquid Channel. Simon Leadley described DigiDelivery as "brilliant". According to Simon it was: "simple to set up and administer and even simpler to use on a day-to-day basis... a must-have if you're into large file transfers and require a simple and secure system." High praise indeed. The Liquid Channel was described by Adam McElnea as a "somewhat unnerving experience, as the [models] really do sound like their analogue counterparts." - AS

gear reviewed in Issue

35. Software highlights



READERS SPEAK RODE NTK

"Tve tried and tested quite a few mics with my voice and have spent many (expensive) hours in studios using high-end condensers, but left unrewarded. For the cost, I've found the NTK is a warm mic that suits my vocals and acoustic guitars perfectly. I now save heaps of money and time tracking these at home." **Tyrone Wright**

"One mic to rule them all. Use freely and imaginatively. Just about everything sounds better with this bad boy. As the owner of a tiny but tidy studio I need all the professional sound I can get. This magic tube just keeps sounding better and better. The voice is king, long live the NTK." Adrian Symes

"With limited cash I decided to buy the NTK as it seemed to be a decent all-round mic. It has been a lifesaver in the studio! From snare drums to guitar amps to acoustics to vocals. I couldn't ever record without it! Even now, with a few more mics, I'll always be loyal to the mic that was so loyal to me." Andrew Macken



STUDIO MAKEOVER

Rick put forward "a bunch of things to make your studio better" in Issue 35. These included almost everything imaginable – apart from audio equipment. The most famous of these was the 'studio lounge that Rick strongly contested was the way people judged you and your studio: "Long after your clients have forgotten what kind of microphone you own, they've made a permanent decision on the grade of your studio... on the basis of the place you offered them to sit." Then he batted on about his new Herman Miller chair that had saved his back and was worth every cent. He then suggested buying some paint for the walls and some plants to liven things up, arguing that, "the old cliché of 'who cares what it looks like as long as it sounds good' is the war cry of the next broke studio owner!" He followed this up by encouraging readers to get some instruments into the studio, label things professionally, take a five night holiday on a south pacific island and make sure the studio smells like roses! A stream-of-consciousness article that somehow made perfect sense. – AS.

There was also lots of

ALMOST MAKING AMEIL OUT OF IT

Flicking through Issue 35 I came across something I don't remember ever seeing before: an ad for Beverdynamic featuring Amiel – the singer who's perhaps best known for singing on Josh Abrahams' hit single Addicted to Bass. The ad immediately reminded me of the night I was stage-managing the Falls Festival (not sure what year it was). Josh was on stage doing his DJ thing and the crowd was suitably fired up. But it was very late and most of the main stage hubbub and changeover mayhem had ended. I think virtually everyone apart from Henry Brister had knocked off for the evening, and all the bands that had played that night had either gone home

or were partying backstage. Although there was still action aplenty courtesy of Josh Abrahams, the large stage (which is the size of a tennis court – and the reason I know this is because I built it!) was strangely empty of people and gear. Josh was cutting a fairly lonely figure out front-and-centre and the normal throng of side-stage onlookers (which I've always been happily tolerant of) was long gone.

There was, however, one girl sitting side of stage that I didn't recognise. She had no stage ID either, and for a brief moment I thought to myself; 'should I be a bastard and kick her off the stage?' to which I quickly thought, 'No, she's not harming anyone or getting in anyone's way, leave her alone'. I carried on doing whatever it was I was doing. Five minutes later the girl nonchalantly gets up and wanders on stage with a wireless mic in hand, and to great applause proceeds to rock the 15,000 strong crowd with her vocals on Addicted to Bass... Disaster narrowly avoided! Proof indeed that it never pays to prejudge someone, and that sometimes it's better to give people the benefit of the doubt! – AS.



"Now I can say: 'I want to put a mic in *this* part of the room, put it through distortion and then push it up in the mix'... using the studio as another instrument, which is a really exciting thing."

John Butler on the inspiration he drew from the production on Beck's *Odelay* album.

THE NAME BEHIND THE MANE



"Don't let the ZZ Top beard fool you, there's nothing that isn't razor sharp about John Meyer. In fact, when you talk to John you promptly feel like a single-processor PC trying to interface with a multi-processor mainframe... it's hard to process all the gigaflops of multi-threaded data flying your way." This is how Chris Holder described meeting John Meyer – "the mad audio professor of choice for the LSD generation of A-list musicians." The fact is, John Meyer is

one of the nicest, most fascinating gentlemen in the audio world. I spoke to him myself at Entech last year... I think I asked him a question about his HD1 monitors, and I didn't get to speak again for 45 minutes. John retains an almost child-like passion for audio technology and his interest in all things audio is infectious. When Chris asked him about the development of his original MSL-3 enclosures, John remarked that "It's not just a thing you're building, it has to fit into

a culture". John Meyer might be one of the more scientifically-minded audio designers going around at the moment but the motivation for all the science is keeping things simple for the operator: "I got the idea of the LD3 [digital speaker controller] from driving a car... I'd much rather just step on a pedal and have it go forward... than have a series of complicated command structures." - AS.





Issue 36 looked to be one of the few issues without another recording artist of note on the front cover. Instead we had Peter Jackson's post production crew hard at work on the final Lord of the Rings installment. The vista depicting Park Road Post in Wellington New Zealand is probably one of the few times we've had actual audio engineers on the cover – unless, of course, you include Dr Tom Misner's cheery dial on the cover of Issue 28. [Well... there was Tony Maserati on Issue 32's cover, and Brian Eno on the cover of Issue 42 is another notable exception - CH.]

40 years on the planet, and proudly declared that he'd managed to survive an entire four decades. without once donning a suit. True to some degree, but his claims were shot down when I pointed to the clothesline of the apartment we shared. It was completely overrun with Greg's washing for the week – no less than 14 pairs of grey Kepper trousers and another 14 cotton T-shirts – again, in the same uncompromising shade of grey. This particular washing array certainly wasn't hand tailored menswear, but it did become known around our place as the 'Simmo Suit'. Not everything Simmo wore left him looking like a Melbourne refugee - figuring 'grey was the new black' – there was the odd splash of colour throughout the wardrobe courtesy of a couple of '7 nights in Rio' underwear packs. Soon afterwards Greg announced his planned escape to the Himalayas to record as many Buddhist monks as he could get his Nagra near.

Simmo celebrated his first

The forever-charming Gavin

Hammond remained real with the Hilltop Hoods and sussed out some of the DIY tricks commandeered by Australia's best-known hip-hop collective. Andy got shouted a junket to Shenzhen, China, to experience first hand just how hell bent on quality the country's population can be. When it comes to manufacturing Wharfedale speaker drivers they know their stuff - shame they're not quite so fastidious with all those microphones. Finally, Rick O'Neil managed to weave Sophie Monk's nipples into another ripping audio tale. - BW.



READERS SPEAK MORE MICS

BLUE Bottle: "Absolutely the best mic I've heard." **Robbie Adams**

BLUE Baby Bottle: "The Baby Bottle has such an amazing midrange! It's a unique sounding mic, which allows me to create some really freshsounding recordings.' **Clayton Bowles**

DPA 4006: "such a versatile tool for classical recording. The smooth frequency response is awesome when used in a Decca tree configuration." Alexander Stinson

Audio-Technica AT4050: "It's clean as, and tells no lies when recording guitars, vox and whatever else you sit in front of it (or around it for that matter)." Terry Latham

Pearlman TM1: "This is the most mojo mic I've ever heard for under \$3000." Matthew Powell

SMPRO MC03: "When I heard my voice through the MC03 I realised that this was the missing 'link' for me. Paul Cairns



PHOTO OP FADER PUSHING

Why is it that photo setups involving engineers always need to include some fader pushing? For example, take this chap with Michael Waters (sorry, not sure of his identity) with his hand on a fader of the Yamaha PM5D console. The fader isn't about to go away, as he appears to have quite a firm grip on the blighter. The concentration is palpable. Critically, none – repeat none – of the other faders look as if they're up to much, even those over in the background on the DM1000s. So with that many to choose from, just why did he go for that one in particular? Of course, the answer is: it's a photo op and all photo ops require some fader pushing and the choice was random. If you look closely, Michael Water's fingers are twitching - he can scarcely bear not to push one of those faders. - BW

WHAT A KNOB

Is knob a rude word in the US? I get the feeling that it isn't - they sure had no idea about the whole 'Free Willy' debacle. But I'd hazard a guess that Mackie knew the connotations and went ahead anyway. In the mean time, teenage audio knuckleheads (and some older ones as well) have constantly trotted out the 'I've got a big knob' double entendre... probably to this day. Mackie's advertising has traditionally never assumed too much of its readers' intellectual prowess and this ad ensures there are no issues with identifying the eponymous Big Knob.



BEAK PERFORMANCE

Miles Roston's personal insight into the world of scoring for film and TV ('Music for Pelicans & Other Birds') made for fascinating reading but was difficult to illustrate. Which may have something to do with Andy feeling the need to call in the puffin cavalry. I recall Andy staring at this puffin for hours as he lovingly found the exact right spot for him in the story "just take a look at this little character," I recall him saying to no one in particular. "You can just tell he's up to no good." And the caption? Truly inspired.



"All I'll say about computers is that they annoy the hell out of me. As soon as you turn one on, the session slows down... musos slack off because they can be edited to sound half decent."

Paul McKercher's strident views on computers, and after producing/engineering about a gazillion albums he's got a right to them.

INDISPENSABLE MILES ROSTON



Music producer, globe trotting documentary film maker and occasional AT writer, Miles Roston, lets us in on what goes on behind the closed doors of his hotel room.

Miles Roston: My own personal favorite since the advent of AudioTechnology is the portable Oxygen Midiman keyboard. As lo-tech as it may be, a mini keyboard I can carry in my suitcase from Australia to Kenya, South Africa, Thailand or even France and just hook into laptop GarageBand is music to at least my ears. Funnily enough, on a

composing level, having gone from the 88-key Kurzweil years ago, to a one and a half octave plastic grey keyboard has actually made creating parts more concise. Gone are the days of four octave string pads or endlessly cluttered piano/keyboard/ mallet/horn parts, which one can be tempted to do just because one can. There's an old story about John Coltrane, when asked why he played the way he did, (beautifully, may I add) breezing over scales at racing speed. He said he was searching for the right note, to which Louis Armstrong responded, that he just played the right note. And when one is faced with less notes to

play, at least there's more of a chance that I can find the right note. So though I would never put the Midiman in a league near Coltrane or Armstrong, it's certainly been a comfort, when I can slam on a pair of headphones, bang away in the middle of the night, with a glass of wine or two at hand, and no one in the hotel has any idea what I'm doing. Though nothing will ever replace my old Stratocaster in my own affections

TOM HIDLEY

In issue 37, veteran acoustician, Tom Hidley, took us through 30-odd years of studio design. Aware that the huge Westlake-designed studios of the '70s have all but had their day, Tom was also a wealth of practical information for the home/project studio owner. For example: "you can get rid of a lot of high-frequency and mid-frequency nastiness between parallel walls just by inserting a simple cotton velour drape down one of the walls." Also: "never use monitors that are too big (low frequency-wise) for your room. If you have a monitor system that goes down to 20Hz and you attempt to put it in a room that's incapable of reproducing that frequency, what will happen? The monitor will attempt to produce 20Hz and the room will say, 'Sorry, I can't deal with that'."



- in the

Tom Hidley tries to get reception from an early mobile phone masquerading as a portable audio analyser.

MACKIE BACK IN FORM

Mackie made its name with high-quality small format mixers, so I guess it was fitting that it was an analogue compact mixer that put Mackie back in form after being in the digital doldrums for a while. In Issue 37 James Wilkinson investigated the Onyx 1620. The drawcards were: the Onyx preamp, the Cal Perkins EQ, and Firewire I/O. Well designed, affordable and flexible, it was a mixer to be contended with.



READERS SPEAK MORE RODE

Rode NT2A: "I've used it on every session since purchase. It was cheap. It performed better than I expected. It sounds better than mics 10 times its price and more."

Brent Williams

Rode NT3: "It can go anywhere – away from phantom and away from a warm, safe room. It may not always get the exact sound you're after, but it is consistent and dependable in almost any situation." Brendan Petty

Rode NT5: "These mics are compact, bulletproof performers that cover a huge range of tasks. Be it overheads for 'live' sound reinforcement on kit, or a simple stereo setup for recording a wind quintet in a church, these mics are very handy to have." **Brett Douglas**

Rode NT5: "Great value for money. They can record almost anything and provide a fantastic sound for the price." Michael de Hoog

Rode Classic 2: "It all starts at the front end. – 'garbage in Garbage out' – and I can't get better vocal quality for the price. I try to produce as natural a sound as possible and don't like to process vocals too much. This mic makes that a snap." **Patrick Tilley**

Mackle Onv 1620

Simon Leadley was brought up well. In my experience he's always minded his Ps and Qs, opened doors for ladies and thrown salt over his correct shoulder. So who better to lay down the laws of digital etiquette? Simon's tutorial in Issue 37 chronicles how session notes have gone the way of plate reverbs, tape ops and leg warmers. But session notes aren't just some quaint anachronism, they were seen as essential, and, furthermore, they adhered to Simon's 'Dead Engineer' ethos - ie. if someone gets hit by a bus then the show goes on (after a respectful period of mourning, a wake, etc). Simon proposed a four-prong session documentation standard, which must include: 1. Cross-platform and application-independent files. 2. A tracksheet and comprehensive session notes that contain info such as the lineup of the digital recording equipment, session times, equipment used, etc (a digital photo of is a good quick way of documenting certain setups). 3. Any video files

session notes with related info. 4. Midi files should also be incorporated. According to Simon's reckoning "we must assume that a project will need to be taken to another studio at some point, possibly not now but even years later for a remix in 20.1!"

Logic and Cubase went head to head in Issue 37. Apple had only just acquired Emagic and it was only at the 11th hour that Andy saved us from a terrible faux pas by remembering to prefix Logic with the word 'Apple' on the cover. SX3 was looking the goods, sporting the introduction of its Freeze function and the Studio Connections collaboration with Yamaha, among other things. Issue 37 was also the first time we saw Rode's foray into the live arena with the S1, along with Sabine's 'kitchen sink' wireless system that included mic modelling, Sabine's customary feedback extermination, compressor/limiter, parametric filter and de-esser. Rick O'Neil relinquished his position on the back page due to, as Andy put it "extraordinary

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circumstances – Rick had nothing to say!". – CH.

KINDA BLUE

should be listed in the

Can't those wacky guys at BLUE design something that's not totally screwball? No one's suggesting BLUE mics aren't well made and well regarded and, yes, it's refreshing to see mics that haven't fallen out of the same Sino U87-clone mould, but it's also nice to know your limits. Take BLUE's foray into preamplication, which we flagged in Issue 37's news pages. I mean, as Lleyton might say, come on... most people would put this guy on their bedside table and spend an hour trying to find the 'alarm on/off' button on the back. What's more, BLUE has christened the Class A preamp, Robbie. My son's name is Robbie. And having a preamp called Robbie is as ridiculous as my wife

and I calling our son 1073. Just to give BLUE a reality check I'd love to send them a picture of a Robbie retrofitted with a homemade rackmounting kit (that's the preamp with rack ears, not my son). They do make good gear though... – CH.



INDISPENSABLE ROBIN GIST



Erstwhile Girl Overboard guitarist and all-round recording legend Robin Gist figured the most indispensable link in his production chain was the one that significantly helped him achieve his creative goals... Robin Gist: There are many choice pieces of gear that I have access to, including vintage microphones, preamps, compressors and the like, but I made my decision based on what had most improved my work and actually helped me realise my creative endeavours.

My most indispensable piece of gear therefore has to be my digital audio editing software, which in my case means either Samplitude, Logic or ProTools. Of these three, Samplitude sounds the best. This program's had floating point architecture audio since version one – I first ran it on a 386!

I love the sound of tape, it has a depth and a resolution unsurpassed by digital recorders to date, but compared to the creative options, the degree of control and editing ability digital has to offer, analogue recording falls very short. There have been countless sessions where, if all I'd had to work with was a tape machine, a razor blade and a grease pencil, I simply wouldn't have been able do the job. The ability to edit

and manipulate audio at a microscopic level appeals to me greatly and has facilitated the previously impossible.

I know that some software doesn't sound great and that the sonic aspects of digital versus analogue will be debated until The Eagles freeze over, but working in the digital domain allows me to say to my clients nine time out of ten times, "Yes, I can do that." "If you don't like the sound you're getting from a mic, then move it. You've got to be prepared to get out there and move things around, and if doesn't sound any better then just move them back."

Jet's monitor engineer, Mark Crawley, urges us to not get too comfortable.

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It's 2005 and Andy declared it 'The Year of Protecting Your Hearing'. Which seemed like a nice announcement but perhaps a bit unilateral – I'd like to have seen some UN backing or at least Rotary Club support.

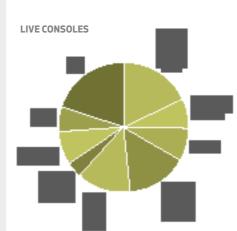
Simmo was still pretending to be another item in Joe's studio, this time his monitors. To this day, I think many people have no idea why Greg was banging us over the head with the 'Joe' shtick. For the record, there was a famous series (probably in Reader's Digest or similar) that outlined various health issues with the angle of 'I'm Joe's Liver', spleen, bowel etc. In other words, it's a classic setup for an article and that's the reason why Simmo was pretending to be a pair of monitors/computer etc. Right... glad we cleared that up.

There were some ripping yarns in Issue 38. There was Henry Brister's account of his work on the Falls Festival; Miles Roston's recollections of his first gig as a producer recording blues legend, Junior Wells; and, of course, the phenomenon that was Regurgitator's 21-day residency in a 'bubble' at Melbourne's Federation Square. There were enough metaphors and hidden subtexts to the Gurg saga to keep a lecture theatre full of media undergraduates busy for a year... but at it's simplest the bubble experience is a great example of artists applying artificial constraints on themselves and seeing how that impacts on the result. Constraints in the studio have slowly disappeared. It's common to hear how people find it hard to know when to stop fiddling with

a production. Years ago that point was evident to all when the studio kicked vou out. Now, it couldn't be easier to tweak and massage a track for half an hour before breakfast. and so on for the rest of the day/week/year. And what did Regurgitator surmise? Quan from the band put it this way: "I'm happy with the record ... although I don't think it possesses the outstanding artistic merit of the actual experience ... I think it'll be interesting to see what our music is like now that we've gone through this experience." The 'bubble' was obviously an extreme example of creating artifice to draw more out of the inmates, but it does remind us that there's never anything wrong with a darn good challenge. – CH.



A fairly even spread here. But if the written responses are anything to go by, it's the A&H MixWizard owner/operators that are most loyal to their rackmount workhorses.





MOBILE RECORDING - THE TRUTH WILL OUT

Back on the Issue 30 page I noted that 'mobility' wasn't all it was cracked up to be. Companies like Korg and Digidesign were misleading us with the suggestion that getting 'out and about' with studio gear was cool and impressed girlfriends, when in fact it's my experience that the exact opposite is the case. Well, finally, the truth is out. One whistle-blowing advertiser has had the guts to come clean - mobility leads to guitar rage. Guitar Rig might be a bit snazzy and may have won a few gongs but Native Instruments were forced to admit that its product, when used outside the confines of the studio (like this campsite), leads to distress, rage and eventual destruction of the guitar. NI should be commended for tackling this problem head on. – CH.

WHAT THE ff?

We'd just given away a Focusrite ISA220 with the winning entry to the competition nominating the Focusrite 'ff' as standing for 'Fabulous Freebie'. At least one reader felt short-changed by this decision sending us this magnificent missive:

"I was fairly flummoxed if not fully flabbergasted to read that the fine folk at Electric Factory had awarded the forenamed Focusrite prize to the fortunate fellow who coined the fortuitous and faintly funny phrase 'Fabulous Freebie'. Whilst fully familiar with the "no correspondence will be entered into" terms of the contest, I (and others) are frankly fixated on the

"After I hit on this technique ... my days of placing mics all over the amp and the room in the blind hope of capturing a magical guitar amp sound were over."

Australian super producer, Mark Opitz, whets our recording appetite in his tutorial on guitar amp mic technique.

firm fact that the winning words did not convey what the 'ff' could be perceived to stand for in regards to the Focusrite logo. The fine phrase flagrantly fixes on the flash prize, not the logo.

All congratulations to the winner, but – without wishing to sound flighty or flakey, "Fabulous Freebie" is a little far-fetched as it does not focus fittingly on the logo. Fair feedback?

Fond farewell, Steve Donelly, Stage Right Song Productions



This picture of Mixmasters' Mick Wordley deserves another guernsey.

PHONOGRAPH TAPE

This is a precious little excerpt from an ancient copy of an Australian edition of Life Magazine... 1913 to be precise:

Everyone is aware of the time limit - it may be a merciful limit - that is imposed on the gramophone record. We now have discs and cylinders that will run for four minutes; but if success attends a new system that has been patented recently, the time limit will be extended almost indefinitely.

Substitution of tape, like that of a stock-ticker, for the old disc and cylindrical forms of phonographic records is a striking change that may soon be found in the talking machine. There will not be a great difference in form between the moving picture reel and the new record, except that the phonograph tape is to have a width of only about one-fourth of an inch. Celluloid, just as in the film will probably be used, as the experiments to date are described as highly satisfactory.

The promise is made that an entire evening's opera of two or three hours will be as easily reproduced as a two-minute brass band march.

A better developed mechanism to run the tape records will be necessary, of course, than for the present forms. Direct current or storage battery probably will be the motive power adopted for the longest records, although an attempt to determine the popularity of the new kind will be made before extensive manufacture is begun. It is expected that several months will elapse before this innovation will reach the general market. (Thanks to Des Todd for

(Thanks to Des Todd for this.)



COPPING A SCHEINER

Elliot Scheiner gave us his insight into stereo mixing and 5.1:"I don't want to live in a stereo world for the rest of my life – it's just not natural to me... I think [5.1] is the best thing that has happened to music."

On the topic of engineers earning a sustainable income: "In my view, most engineers, if they want to survive, are going to have to buy rigs to put into their homes or into small leased workspaces..."

On the ABC OB van's Neve console: "When I was told the only OB truck that would meet my requirements has a custom-built analogue Neve console from 1975, I thought, 'Geez I can't imagine it'll work that well', but sure enough it's one of the most beautiful consoles I've ever heard in my life!"



READERS SPEAK ALLEN & HEATH MIXWIZARD

"Just a great, versatile mixer with knobs that actually do stuff." Simon Eyles

"This console does it all: four sends of foldback, onboard FX, direct outs to record, inserts, mono out and all in a compact frame. She's reliable too, and road tolerant of the knocks!"

Jim Morley

"I encounter this particular desk almost three times a week these days and without the simple and vast routing provided, many of the small venue gigs I mix would not be nearly as good. Great straight up mixer, almost fool-proof!" Alex Beck

"Does what it says on the box and keeps on doing it night after night. It's also built like a tank, sounds great and fits in the back seat of my car."

Rob Colson

Issue 39 was Simmo's last instalment of the 'Joe trilogy', in which, this time around, Greg was wrapped in a thin metal chassis disguised as Joe's computer. Joe's stripped down Windows XP was working well because he regularly gave Greg a 'dose of salts' to de-frag his hard drive and optimise his files. For the life of me I still don't understand how Joe never noticed Greg Simmons standing in the corner!

Rick was giving us a history lesson on summing boxes at the back end of the mag, urging us all to think long and hard before forking out thousands on yet another panacea for our mix woes, and rightly arguing that "a good arrangement is the best mixing device". His attitude was (and still is) that summing boxes are just the latest in a litany of products that distract us from the real issue - of learning how to mix songs, and, better still, arrange them properly.

It was in my Ed Space this issue that l'fessed up' to some of my most embarrassing moments

in the audio industry: taking the mickey out of a singer during a take without realising he could hear every word, erasing the intro to a song I was about to mix from a master two-inch reel.. and I encouraged others to write in and share with us their worst moments. In the following issues there were some excruciating tales told... the one that really made me wince was John Haeny's account of stepping on the vintage Les Paul and snapping it in half

We also heard from legendary engineer, Elliot Scheiner, who was in Australia recording the follow up to The Eagles' *Hell Freezes Over DVD* at the Rod Laver Arena, in Melbourne. Many of us were astounded to learn that The Eagles had picked this venue to record the DVD but according to Elliot, "They love it here." Doesn't every American say that though? – AS.

.. ouch!

ISSUE 39



intake. It was funny at the time... but I s'pose you just had to be there. – AS. I think that was the key Andy: everyone did realise it was a bogus review but sadly no one thought it was funny... as opposed to my riotously amusing Sizemik Sound fake review of Issue 32, which actually attracted some pre-ordering as well! – CH.

THE IN-JOKE NO ONE GOT... THE PHD

I simply cannot pass up making mention of a product I reviewed in Issue 39 that I think deserves a special retrospective nod. Although it was only a short review hidden amongst others 'In Brief', the Personal Headspace Device (or PHD as I dubbed it), was in my opinion the most groundbreaking product I'd seen in ages. And I don't mean groundbreaking in the 'technologically-advanced' sense, the 'most-indispensable' sense or even an 'aesthetically-pleasing' sense. It was exceptional for one reason alone... it was a fake ... an April fool's joke. The scary thing was, no one seemed to realise! I figured sentences near the end of my review like; "Well worth a look if you have an HET (High Embarrassment Threshold)" would tip people off, and if the words didn't convince you, surely the 'MAD comic' photo would. But no one wrote in, or rang... the silence was deafening (from inside my PHD of course – which had 48dB of attenuation down to 28Hz, don't forget).

Two things were memorable about that review from my perspective (apart from writing it and amusing myself for many hours). The first was colluding with our graphic designer, Dom, to mock up a 'photo' of the unit, which involved a lot of instructions like, 'No I don't think those headphones look right' and 'can we get more reflection off the glass?' to the point where Dom, Chris and I were literally rolling around the floor in hysterics... it was one of those moments where we all truly lost it and I was almost physically sick with laughter. The other memory I have of 'designing' the PHD was reading the review out loud to my partner in the backyard of our house in Balmain wearing a fishbowl (PHD prototype) on my head. If you'd looked over the back fence that day you may have been excused for thinking you were observing an escapee from Callum Park Asylum. Crazy thing was, it sounded appalling, fogged up in seconds and caused near asphyxiation due to a lack of oxygen

HOW TO ASSEMBLE AN ATOMIC BOMB

The big-ticket story of the issue was Strother Bullins' interview with Carl Glanville, who was the engineer responsible for the recording of U2's How to Dismantle an Atomic Bomb. Carl regaled us with stories of supergroup excess... of recording sessions that fitted around picking up kids from school, and endless days of tracking (except during school holidays). Yep, assembling U2's 14th studio album involved serious hardcore mayhem!

Actually the sheer time taken would have been enough to dismantle most engineers' mental faculties - full-time on one record for two-and-a-half years would be hard to take no matter how much kudos was doled out afterwards. What with The Edge saying: "You know that guitar we have? It's a bit too thin... let me play it again with a different sound," and Larry Mullen Jr. re-recording his drums yet again during the umpteenth mix session... there must have been moments (after the first two years!) when Carl wanted to do his own impersonation of an atomic bomb. As he said "there were no rules" and "all involved were only concerned about how things sounded, not about

how they were done", but presumably this 'no-rules' philosophy didn't extend as far as the engineer ever saying 'no'."You've always got to be ready to go," said Carl, who added that he "needed to have 18 channels available to re-track the entire band at a finger's snap."

One interesting anecdote to come out of this story



was Carl's recollections

of the Vertigo mix, which only involved 24 channels:

"We just sat there for days

"The high quality dualconcentric drivers in the PHD capsule provide for superb audio performance with the added 'openness' afforded by the 'off-ear' design."

Andy's radical PHD makes its press debut.

ISSUE 40



The highlights of Issue 40 included an interview with the Dust Brothers, aka Mike Simpson and John King, who've been 'instrumental' in the creation of classic albums from the likes of The Beastie Boys, Beck, Linkin Park and The Eels over many years. Regarded by many as the 'Godfathers' of Sampling, the Dust Brothers showed us 'round their new studio and gave us an insight to their thinking, and their gear. T'was fascinating stuff. Meanwhile Greg Simmons rugged up and headed for Tibet where he embarked on a field recording adventure involving some

pretty esoteric subject matter. He recounted the tale of the local nomadic Tibetans who would, "even in the middle of absolutely nowhere... pop out from under rocks whenever the microphone appeared". Apparently he was a bit of a hit with the locals! Greg aimed his customised portable rig at some unsuspecting indigenous musicians, many of whom had probably never seen a microphone before or since.

Stav ushered us into his world of the 'Black Backdrop', a concept that essentially warned us against distortion and excessive use of top-end frequencies in our mixes. To quote Stav, "The overriding impact of a nice and expensive Black Backdrop is the ability to silhouette the instruments so they stand out against the blackness of empty space". He wrapped up the article with some salient advice: "Leave the listener with the overwhelming urge to turn things up, not down. It'll be much more satisfying that way." Other highlights included

Brad's look into DAW controllers, where he came to the conclusion that adding a controller to your arsenal would "change your life far more than yet another software synth' And, finally, Rick was tuning into to the dulcet tones of his off-peak electric hot water service switching in... even though his system was gas. He contested that he could hear the tone of the off-peak frequency 'switch' in the walls of his house, and when he rang the electricity board - presumably to complain - the conversation apparently went something like this: "You can't hear that, electricity is inaudible ... " "No it isn't." "Yes it is." "No it isn't." etc... – AS.



READERS SPEAK LIVE DIGITAL MIXERS

Yamaha M7CL: "The best desk for the buck – compressor, gate and EQ on every in and out. SPX 2000 processors x 4, it's got the lot." Kevin Farrant

Yamaha M7CL: "This console offers all the benefits of digital desks, with reasonable quality, reliability, ease of use and a short learning curve – all this at a price point that makes this technology accessible to a larger market segment than ever before" Joseph Rabel

Mackie TT24: "It's intuitive and bullet-proof. Everything is within easy reach but you still get all the advantages of a digital console. It's an ideal fit for amateur theatre shows (where having scene-by-scene recall of EQ/dynamics is great) and mid-sized churches. The channel count is generous, it's expandable, onboard DSP minimises the need for outboard, and it still has a compact footprint – an all-round winner in my books."

Jonathan Woithe

years engineering hundreds of shows for

Elvis Presley in the US, to establishing

Apogee Electronics and most recently

Streisand. In short, Bruce is a deadset

only by his humility and modesty

Probably the funniest story Bruce

designing for Lake Technology and Dolby

while still touring with the likes of Barbra

phenomenon; his impressive CV matched

recounted during the interview involved

of Elvis, a story which almost had me

choking on my side-salad: "I would fly

down from Pennsylvania to Memphis

with the back full of mic stands, leads,

monitors and bits and pieces, and be

(about 800 miles) in my little plane

a bizarre insight into the rehearsal habits



SIMMO ON ROOF OF WORLD

Greg's article on his trek through the Himalayas with a pair of Schoeps and a Nagra V included some amazing photography. My favourite is this combo – Tibetan troubadour in full flow on an instrument that could hardly be more 'traditional' if dropped out of the *Lord of the Rings* prop department; followed by the shot of him listening back to the recording... careful not to mess up his white beanie. (pictures: Alistair Bray)

BRUCE 'NATIONAL TREASURE' JACKSON

It was a real treat in issue 40 to catch up with Bruce Jackson, one of Australia's most highly respected audio engineers and designers. As I wrote in the introduction to the story at the time: "Bruce is one of those people who seems to have had so many experiences in his life that when you do a rough calculation of how old he must be, the number would seem to indicate that he's been dead for several decades". Before he'd turned 22, Bruce had built his own radio station, established Jands, got his pilot's licence and mixed Elvis Presley live - a list of achievements that might see most people content with their lot. But Bruce's career certainly didn't stop there. Since

"We don't necessarily want you to play things right, we want you to play things cool"

The Dust Brothers reveal some of their funky manifesto.

then he has gone on to achieve so much that it's simply beyond the scope of this synopsis. An abridged version of people and companies Bruce has contributed his expertise to include: Clair Brothers, Fairlight, ProTools, Lake Technology, Dolby, Apogee, the aforementioned Elvis Presley, Bruce Springsteen, Barbra Streisand, Dianna Ross, Johnny Cash, Fleetwood Mac, Stevie Wonder, Rod Stewart, Barry White, Jefferson Airplane and Ozzie Osborne... the full list simply goes on and on, trailing off the page, down the hall and out the door.

Over lunch, Bruce and I talked about all sorts of things; from his early career as a co-founder of Jands, his extraordinary

EDITORIALISATIONING

Issue 40 was the first time Greg went public with murmurings about relinquishing his First Word column, encouraging us to look forward to his 'educational articles'. Greg was becoming frustrated by the single-page format and was keen to sink his teeth into writing more tutorial-styled articles that were longer and could therefore go into a bit more depth than the First Word format. That was 10 issues ago now... Greg!

(Apparently he's working on them, but I haven't seen any evidence of them yet.) It was also the issue where I talked in my Ed Space about my trip to Bali (before the second round of bombings). Bizarrely, it was right at the point where I'd sung an appalling rendition of Hotel California (on Jimbaran Beach) with some local buskers, that one of those bombs later went off! [I'm sure the two occurrences weren't related Andy

- CH.] Yikes. I had recently come to the realisation that I was addicted to electricity: "How is it that I've got 25 power sockets under my desk and there's still nowhere to connect a lamp?" So my holiday was essentially a trip away from electricity, and all those devices with the annoying lowercase 'i' prefix: "I turned off iChat, powered down my iBook pulled out my various Loks and iSight cameras, put the iPod in a drawer,

bought myself a new surfboard and scampered off to Bali for an iBreak. It was either that or tell AudioTechnology that iQuit! I was up to my iBalls in work, but regardless, iWazoff!" – AS.

met on the tarmac by Elvis's bodyguards. They'd unload the gear out of the plane and we'd drive back to Graceland where I'd setup in the racquetball court. But often that's as far as rehearsal would progress! Generally the band and I would just sit around in the 'jungle room'





REMEMBER WHEN SONY MUSIC STUDIOS WAS STILL AROUND?

Here's one of the last hurrahs for Sony Music Studios, a half page ad in Issue 41, before Sony closed it down. Sony Studio's Ross A'hern is still going strong as a freelance engineer – location recording mostly. We'll aim to talk to Ross in a for thcoming issue.

ED ACHE

I love Andy's Ed Space this issue. He very cleverly illuminates the apparent absurdity of mixing an album on a million-dollar console only for its merit to be based on how well it translates as a \$2 Nokia ringtone. "I rush out of the room to the studio office, ring myself on the mobile, then rush back in and listen to the mix on speaker phone, with everyone crowded around me agreeing that it sounds' pretty cool". If it wasn't so funny you'd probably want to cry... - CH.



READERS SPEAK MACKIE MIXERS

Mackie Onyx 1640: "My Mackie 1640 brings computer tracking/production and live sound together in a way that I am sure we will see much more of in the very near future. The 1640 has a great live sound – the preamps and the EQ especially. The routing is flexible enough for my band's needs for both gigs and studio work. And with the Firewire option, setting up for recording live gigs could not be easier. Apple even has the driver in OSX so there is precisely zero installation and zero configuration! I like that!" Mana Waite

Mackie Onyx 1620: "It's versatile, acting as a fantastic live mixing console with plenty of routing options and then doubles as either a live or studio audio interface that is equally useful and simple."

Chris Swinkels

Mackie Onyx 80: "This would have to be the smoothest-feeling compact mixer around. It is easy to use and is so reliable." Norm Smith

Andy's invitation to get readers to relate their 'Worst Audio Experiences' went down a treat. We read spine-chilling tales of flaming consoles, busted Les Pauls, dead RF channels (and dead air time), a feedback destroyer that reset itself mid gig, erased tapes and cups of tea in a Roland VS1680s. It was enough to make readers' toes curl... in fact, I think we should do it all again soon. Rick laid down his 'seven golden things to keep you out of the mud, and predictably they were solid gold. The main thrust was, as Rick put it: "to get a great mix, arrange your songs!" But I particularly like Rick's advice when it comes to taking on certain new bands: "If the band you're working with hasn't got it together enough to think of a band name they can all agree on, don't waste too many days making them sound better than they

Issue 41 saw a purple patch of new and innovative gear. I make further mention of the Smart Console and the Mesa Quad EQ elsewhere,

really are."

but another real 'that looks different' bit of gear is the Bose PAS (Personalised Amplification System). Bose is used to ploughing its own furrow and the PAS is unapologetically 'out there'. The main sytem component is a six-foot high column of small drivers (a line array, if you will) and the idea is you use the columns for foldback and as the main PA. It's a great idea, and I can't believe every café or pub that has a bit of live music wouldn't be looking into the PAS.

Finally, after Brad breaks the news to his Mac affiliates that the next new Apple will have an 'Intel Inside, he sings the praises of Tiger and its multifarious widgets... Personally I've never bothered with widgets, the only time I remember they're even there is when I hit F12 instead of 'delete'. But Brad makes a compelling case for acquiring a widget habit, what with the ability to view real-time footage of anything from Times Square to San Diego Zoo: "I've got enough web cams on my dashboard to make the man who fell to earth



AudioTechnology



look like a couch potato". Which I'm sure would be side splittingly amusing if I had any idea what he's talking about. – *CH*.

AUSSIE INNOVATION

How many genuinely radical new bits of gear do we see in any given year? I'd suggest that most years we'd be lucky to see even one new truly innovative item. Well, in Issue 41 we showcased two such miracles in the one *issue*... not only that, they're both Australian designs.

The Smart Console is so different that it's probably suffered from a market wariness – just about everyone I've talked to who's used it or seen the demo thinks it's amazing but it's *such* a departure from conventional console design that there's probably a innate reticence to make the leap. Saying that, the first Smart Consoles were pretty darn expensive as well... but that's changed with the release of the Professional version, which really brings the price down. Anyway, it's not for me to sell this console, but knowing Stav well, and getting the full'demo' of the console when it was still literally on the drawing board, I hope the Smart console reaches a critical mass of users as it deserves success... it's hard to remember a device that does things so differently and it's hard to recall a company like Smart AV with the guts to actually put it in production.

Meanwhile, the Mesa Quad EQ from Lake (a Dolby company) turned EQ on its head.

Using a totally different 'raised cosine' EQ 'algorithm' (for want of another term) the Mesa Quad can tonally manipulate a signal in ways never before thought possible. Andy, in his otherwise soberminded review, describes the Mesa Quad as "the velociraptor of EQ - dangerous in the extreme when let loose on an unsuspecting audio signal". Live sound



engineers familiar with the Lake Contour or the more recent Processor will have already tasted the power of this EQ, but the Mesa Quad is just as relevant for studio applications. Again, I'm not here to sell this stuff, but, as I say, it's not often that we can get genuinely excited about new gear. – CH.

INDISPENSABLE TIM POWLES



Powles - Lord of Spacejunk III, says: "In the studio I can't live without my clock - custom made for the timebandit by the Camels and has 99 hours in a day. The RTA stole my mission statement. 'don't die for a deadline' Let accidents thrive and treasure the mistakes. The most non-contemplated performances are the magic ones essentially required. And don't leave home without a matched

Timebandit - aka Tim

pair of Distressors. The EL8 only leads to Elation and will elev8 your mission to the spot you hoped for... easy. Try linking stereo and stereo image link. Another temple for the advanced worshipper, phase and level locked but with independent ratios and times from left to right. Used for Tracking, mixing and mastering. And nobody tangles with the SPL Transient Designer and lives to be non-plussed. Joe Malone, you made

me something I simply cannot live without: the MPEQ-2 stereo pre and EQ; Pultec-style equalisation and simply awesome. But, none of this is worth a dime when placed next to the real king of indispensability. *Self Belief.* Keep it with you everyday." "The whole idea of perfect music is just ridiculous to me, unless you're making dance music and you want that hypnotic effect. I find playing to a click and then gridding things insane."

Hard rocking producer, Joe Barresi, would rather keep it real.



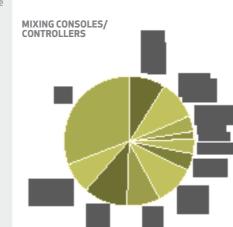
It was 2am, it was deadline and the files for Issue 42 should have already been uploaded onto our printer's ftp site. The sticking point? The cover. Our graphic designer, Dom, might have been present in body but his spirit had long since gone home to bed. Brian Eno was going on the cover and he was finding it hard to comprehend – 'how can I design a cover with an old bald bloke on there?!'. Dom knew who Eno was, but it was late and nerves were frayed so he was being intentionally provocative. And, given it was so late, Andy and I took the bait like

a couple of snapper and the barny was on. Dom was banished to the next room for a kip on the couch, while Andy and I came up with the brain wave of putting the headline almost inside Eno's 'old bald' head – 'Inside the head of a studio genius' it read... and I think the cover works nicely. Thinking back, the 'old, bald' quip was quite telling. AudioTechnology is a magazine for people who are shamelessly attracted to an Eno cover. He's the king of studio dweebs and even if you don't revere Eno there's something nagging inside you that tells you that you somehow ought to. What amazed me was how unimpressive Eno's home studio was; full of nicknacks that most of us could easily afford with stuff stacked fairly haphazardly on top of each other - one pair of his monitors was on barstools for heaven's sake! It certainly brought home the truisms about your approach being far more important than your gear. Other lasting impressions of Issue 42 other than a shouting match at 2am? How about Simmo testing the DPA WindPac by driving

around Sydney with the zeppelin sticking out the sunroof recording the ensuing gale? Gear-wise it was great to see Korg continue the rich tradition of the super-expensive super-synth with its Oasys. When I spoke to the importers prior to the review I made a few noises about it obviously being bit of a hard sell... Not on your nelly. Apparently they were getting a container load in simply to take care of pre-orders. I don't know who buys a \$15,000 synth, but whoever you are, you have my gratitude, because without you we wouldn't have the \$2000 spinoff products, which we can all afford. – CH.



This category didn't evoke too much passion among readers except for some DM2000 owners. Jim Atkins was fairly typical of how the DM2000 has impressed: "I vote for the Yamaha DM2000 for redefining power-for-size in a bulletproof package."



REMOTE TIE LINE

A nice piece of Photoshop work here from Dom for Paul McKercher's remote recording story. I won't mention which particular piece of countryside it is, as I'm sure the farmer wouldn't take too kindly to AT pilgrims paying their respects.





YOU GOTTA LOVE... THE ATT ROBOT ATT Audio Controls gets

serious with this little robot character going haywire. Classic

elieve are different to

send a pic of yourself hand on the knobs, ely as you make an

THE RISE & RISE OF ABLETON LIVE

Issue 42 saw Anthony Touma examining the latest Live iteration. Live was (and is) kicking butt. It's immediacy (on-the-fly arranging) and its real-time warping of loops has made Live the go-to application for anyone who doesn't want the interface to get in the way of creativity. Producers of the calibre of the Dust Brothers (see Issue 40) turn to Live for just that purpose. The only fear I harbour for Live is it will fall foul of version-itis - where Ableton may feel compelled to up the level of sophistication with every new version, turning it into yet another behemoth.

TOP SECRET



(FRONT OF) HOUSE PARTY

Here's a great ad for Sennheiser's (small-e) evolution mics. The inference is: use (small-e) evolution mics and people will randomly start launching teddy bears in your direction. Remarkably, the engineer in question (who looks a dead ringer for AT regular, and now Jands staffer, Glenn Helmot) remains focused and in control - bearing up well, you could say.



TOP SECRET

For those wondering, no, we don't really use this form.

Engineer's name: Artist or project name:		Acoustic guitari Neumann U87 AKG404 Neumann KM84 Other Vacal: Neumann U87 Neumann U47 AKG C12, Other	SHORT ESSAY QUESTIONS
			Describe, in 100 words or less, two funny, silly or outragrous things that happened during the sessions
Please circle the correct answer:		Cra, Contras	
MICROPHONES		RECORDING MEDIUM Analogue tape, ProTools Other	Comments (any techniques you believe are different what every other pop/lock engineer does):
Kick: AKG D112, Senabeiser 421-O	aber		
Stare top: Shure SMS7 Bo Other	leyer MC201		Controversial opinions, if you have any (the occasion profanity is acceptable).
Snare bottom: Neumann KM84 A	AKG 451 Other	MIXING MEDIUM	
		ProTooh Other	
Toms: Senaheiser 421 Shure SM57 Other		PREFERENCE	Thank you for your time. Please send a pic of your siming at the mixing console, one hand on the knob looking like you're instruming interply as you muke as
Overheads: Neumann K.M84 A	KG 451 Other	Analogue Digital Wity! (please tick): Sounds better More versatile	adjustment. Also, if available, a picture of yourself wearing headphones the wrong way around, or generally 'goofing around' for the camera would be great for some light relief. Thankyon for your time.
Bass: DI box, Neumann U47 0	Ither		
Electric guitar: Share SMS7 N Royer 121 Other	Seumann U87		

Thankyou for your time



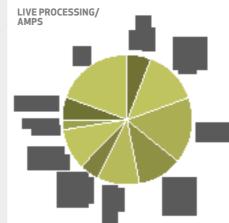


On a personal note, it was the first time one of my photos had made it onto the cover of AT... which, for a writer, I'm strangely gratified about. Saying that, Garbage's Shirley Manson is eminently photographable, it's more a matter of trying to catch her in a moment when she's not flying around the stage like an enraged pixie. I also recall the gig very vividly because of a splitting headache. I was waiting near front of stage with my camera and the moment I trundled past the subs was the precise moment that the band and FOH engineer Tom Abraham decided to hit the big green 'Go' button. BANG! I was less than a metre from the bins and I guess I copped 120dB and loose change – it felt like someone had taken an axe to my cranium. Needless to say, my enjoyment of the show was somewhat impaired. But it didn't detract from the cutting edge nature of the production. Sound guys talk about 'quiet stages' but generally they're referring to the introduction of in-ear monitoring. When Garbage talks about a

'quiet stage' they should be taken almost literally - if the PA was turned off mid show, then all you'd hear would be the cymbals, the (acoustic) vocals and, if you were near the front, some of the acoustic strumming of guitar. I mean, that's quiet. To achieve that level of silence you really need to embrace technology, and, sure enough, Tom Abraham has kept his finger on the pulse. When Andy first caught up with Tom we learnt of the electronic drumkit, the use of the Line6 Pods etc, while more recently he'd also taken on the Muse Receptor to house all the plugs and virtual synths etc. Which I thought was quiet interesting. I suspect the Receptor's designers would have had the studio in mind when they released it but perhaps its future lies in technically avant garde live rock 'n' roll? – CH.



dbx's influence figures highly here. Special mention to the reader who listed PARIS as his most trusty live processor... with the muchneeded words 'sounds crazy but it works' in parentheses.







01X PRICE PLUNGE

When we reviewed the O1X in Issue 34 we were impressed. A controller, a digital mixer, a Firewire interface, all bundled with some tasty Yamaha plugs. Sure, it looked a little like it was designed by the same bloke who whipped up the DX7, but it was a nifty bit of kit. And at \$3999 R̂RP it seemed like it was priced just about right once you haggled with your local music merchant. , Pricing has a handy knack of dropping after release, that's the natural order of things, but by two grand within a year (see the Issue 39 ad)? Then by Issue 43 the pricing had hit fire sale status with the OIX going for a pittance – \$1299. I mean, blimey, even if the whole controller side of things ends up being unsupported it's still a whole lot of mixer/interface for around a grand. Worth looking into if you ask me. – CH.

RIP FIRST WORD

Issue 43 signalled the end of Greg Simmons' First Word column. That's 43 consecutive articles, which is an impressive feat. Why the demise of First Word? Was it because of a falling out between Greg and AT? Surely there must be some juicy skulduggery and intrigue? Not especially. It had simply run its course. Saying that, Simmo's last hurrah includes a very public retort to a reference made by Andy to his article in the previous issue. Mmm, always nice to go down fighting. But the nub of the last First Word stems from a long-held Simmo view: that without video content, 5.1 as a format was a non-starter. Which may not be a popular view, but, let's face it, there's

nd been some crackers – cue the flashback, soft focus, montage scene – whether it's s's last Issue I's bold intro to a new magazine, rt to a or the even bolder condemnation of Australian music production (and the subsequent full and humbling retraction), or Simmo's perfect one-pager on pulling a great live sound (should be a copy on 5.1 as a the fridge of every gigging muso in the nay not country)... the list goes on. And, as I a, there's alluded to earlier, for a chap who loves

no current evidence to prove him wrong.

corpse of First Word, I'd rather celebrate

its long and illustrious life, or, to mangle

Shakespeare - I come not to bury First

Word, but to praise it. And there have

But rather than focus on the twitching

to be loved, many of Greg's First Words were remarkably ballsy – he didn't mind courting controversy, and didn't mind backing himself. Without those 43 First Words AT would be much the poorer and I'm pleased to report that we'll be hearing a lot more of Greg (in between visits to Nepal) in the future. – CH.

Simmo with Punam (his fiancé) in her family's tiny Nepalese village. The Nagra V has been getting quite the workout in the last year or two.



"Currently I'm on the brand new Paragas Series D Signature editions"

AT follows the changing moods of Tom Abraham's (FOH Engineer for Garbage et al) Cuban cigar smoking.



STEVE 'CHEER UP IT MIGHT NEVER HAPPEN' ALBINI

Issue 43 featured our interview with 'the Godfather of Grunge', Steve Albini. Steve's a legend, he has his own mud brick studio, and his mic cabinets are full of more old Germans than a Berlin retirement village, but apparently all the esoteric gear in the world can't guarantee you happiness. Perhaps he's still smarting from his decision to refuse a royalty from his work on Nirvana's *In Utero*. Not sure. Fortunately the article wasn't intended as a guide to transcendental happiness, it was all about how Albini manages to pull some of the toughest sounds around.



READERS SPEAK LIVE PROCESSORS & EFFECTS

CAN YOU B'NEVE IT?

Tom Misner had bought his favourite console company, injecting some much needed cash... and things were on the move. This ad for the new 1073 modules spiced things up with some supermodeltype holding her hands to her head, as if to be doing her level best to comprehend the enormity of the 1073 re-issue. Or perhaps the Neve sunnies were giving her a headache.



dbx DriveRack 260: "Idiots come (and plug stuff in) and idiots go (pull it out again). In my live (and mainly amateur) environment, DriveRack protects my FOH system against most muso mistakes and lets me sleep nights when others are running the desk." **Rob Allan**

Rane drag & drop DSP: "Extremely easy to set up, great selection of components, good software engineering and the analogue interfaces are highly immune to hum and noise."

Peter Patrick

BSS DPR 901: "Great for live vocals, EQ control via compression." **Tim Peterson**

Behringer FBQ6200: "Probably one piece of cheap gear I would buy again when it dies rather than move to a better-known and more expensive brand."

Alan Jackson

There was nothing

conventional about AT 44. Most obviously it was an unconventional return to the gear-only cover - in this case a wagon-wheel of new microphony. Then there's the Eels, led by the genius/ fruit loop, E. Predictably this wasn't a conventional article. For example, when (self-confessed Eels tragic) Mark O'Connor asked FOH engineer, Josh Paul, about the particulars of his 'drum' setup the reply went something like this: "the kick drum isn't a kick drum. It's a suitcase - a real actual suitcase." Apparently a Shure Beta 91 placed inside the portmanteau works a treat. "The snare is a real snare, albeit one that's resting in a trash can." (A Sennheiser 504 is apparently the way to go for readers after a classic trashy snare sound.)

Mitchell Froom is a producer who is attracted to eccentricities as well. Certainly his long-time partnership with mix engineer, Tchad Blake, changed both their lives. He recalled the Los Lobos session back in 1992 in which he and Tchad

discovered the perspectivealtering Sansamp. "İchad had the pedal so we tried putting all the percussion through it to see what it would sound like, and for me, at that moment it was like the sea parted or something." The Sansamp might have 'parted' the 'sea' for Mitchell, but it raised the dead (and every other miracle you can think of) for Tchad. Legend has it he had a Sansamp retrofitted into all 96 channels of his SSL. Don't quote me on that.

Finally, there was nothing conventional about the Wolf Creek soundtrack by Franc Tetaz. Torture, distress, nails and hammers... Franc's studio was the musical equivalent of Mick the Psycho's shed in the film. One small confession. My story was ambiguous about my movie attendance. Truth is, I couldn't sit all the way through it. I'm a horror movie lightweight and as soon as it started getting ugly I high-tailed it out of there I came clean with Franc. He looked a bit disappointed but seemed to understand. We decided a romantic comedy would

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be a nice change of pace for the next film, maybe something with Paul Hogan... not sure. But that looks unlikely, unless Hoges signs on as an extra to be eaten alive by a giant croc. – CH.

BRAD'S ONE-CENT MICROPHONE

Brad was so astounded by the price of Behringer's C-2 sub-\$100 pair of pencil mics he figured 'this, surely, is as cheap as it gets'. Hitting the web he nearly fell out of his beanbag to discover a 'one-cent mic' (plus \$27.99 shipping). He couldn't help himself, he needed to know what a one-cent mic looked and sounded like. After banging in some Visa numbers, the mics arrived quicker than one of Wile E Coyote's Acme booby traps, ready to go head-to-head with Behringer's comparatively ex-y stereo pair. Here's the verdict: "Trust me, the 'one-cent mic' is a total lemon. They sound shrill and harsh. Would I use the one-cent mic? Not in a pink fit - they're shonkily made

and sound like utter garbage". After reminding Brad about the one-cent mic I was a little confounded to learn he still had them. Also – probably in response to Brad's free publicity – the price of the one-cent mic subsequently went berserk... \$8.99!



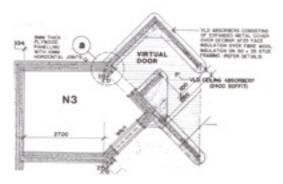
YOU'VE GOTTA LOVE YAMAHA'S MR K

I like it when companies tell the story behind a new development and being able to put a face to an R&D name. So Yamaha should be commended for K's Lab logo. We now feel like we know Mr K (Kunimoto) – the brains behind Yamaha's modelling technology initiatives, which started with the VL1 synth and has now found its way onto its digital mixers via the Virtual Circuit Modelling add-on effects. Mr K's unruly mo', his steely gaze, and his jug ears are now familiar to millions. More of this please.

(Left) Brad's pair of Takstar pencil mics with full documentation and certificate of authenticity. Don't settle for pale imitations, no other one-cent mic cuts it like Takstar.



WOT? A VIRTUAL ACOUSTIC DOOR



Peter Brown is an acoustic architect. He's designed more broadcast studios than most of us have had Chinese takeaway.

Peter Brown: A 'virtual door' is always acoustically closed but always physically open... it helps to be Irish to understand that. Not everyone has a need for a 'virtual door' or a 'virtual noise lock', just like not everyone has a need for a 'pacemaker.' But if you need one and haven't got one, it makes a hell of a difference – 30dB difference in fact... about the same attenuation as a standard acoustic door. Because, just like a 'virtual lock', a 'virtual door' keeps noise out of a space but does so without the swinging wooden item on hinges.

How's it work? Quite simple really: in a small amount of space you provide a very highly absorptive environment that actually soaks up the sound before

it can leave the room.

I designed the ABC news booths at Southbank, which all feature virtual doors. It's virtue is that it allows people with 'news flashes' to enter the booth and hand the presenter a script – and leave, while the microphone is open – but without producing the normal door opening and closing noises.

Studio operators could probably see a whole range of potential use for this – indeed, the ABC saved the cost of 25 noise locks by grouping their broadcast studios off 'virtual locks' (same principle).

Another hot application is for venues where you want a rioting dance club rocking its brains out at one end of a room – and a quiet chat bar or restaurant dining happening at the same time at the other end of the same room – but without the impediment of actual doors between them.





It's 2006 and almost exactly eight years since the release of Issue 1 of AT. About time to give the look of AT bit of a facelift. Behind closed doors, our graphic designer Heath McCurdy was experimenting with fonts. page sizes, different layouts... it's a big job and gave me more of an appreciation of the work done by Greg and Philip for Issue 1. The idea for the redesign was to have something a little more contemporary without it dating to quickly. We were aware that many people liked the look of AT and might resent change. Sure enough you can't please everyone, but we've been delighted with the response

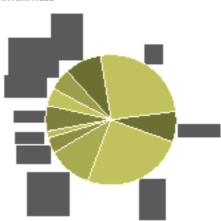
to the new look. One of the big changes was the introduction of a pros and cons box for the reviews. Historically we considered the pros/cons to be a bit lazy. After all, a review takes many hours of testing and writing to complete and hopefully offers the readers real insight, while the brevity of the pros and cons seems a little artificial and halfarsed. It's like reviewing Tolstoy's War & Peace with: Pros – Lots of action; Cons – Goes on a bit. Anyway, after quite a few issues living with the new format, we're very pleased with the Pros and Cons. It forces the reviewers to come to real-world conclusions about a product. The box is certainly no substitute for reading the full review, but is a useful adjunct.

While lots changed with Issue 45 many things stayed the same, including Rick's capacity to spin a cracking yarn – his tale of Tony Turkey has to be one of his best yet. Stav puts his money where his mouth is and records a live gig. For a bloke who's recorded a galaxy of stars over the years, it's hard to see what he gains from recording a band down at the local pub... Fortunately, Stav enjoys the process too much to be a prima donna and was happy to give The Crush (and, indeed we the readers) the benefit of his expertise. Anyway, musn't get ahead of myself, the actual recording happens in Issue 46! - CH.



No surprises here: Digidesign rules the interface roost (24.96% for the 002 rack and mixer, 10.44% for the Mboxs, and 7.61% for the 001, or a formidable total of 43.05% of Digesign respondents... not counting the HD and TDM hardware nominators in the 'other' category). M Audio and Tascam figured highly in the 'other' segment.

INTERFACES





WHY PAY MORE... THAN ONE CENT?

If this ad is anything to go by, Rode remained blissfully unaware of Brad's discovery of the 'one-cent' microphone (see the Issue 44 wrap on the previous page). In answer to Rode's rhetorical "Is the 91.99 microphone coming?", the answer is a resounding "yessiree Bob". But as mentioned earlier, the onecent mic has since gone up 890% to a clearly ridiculous \$8.99.

THE NEVER-ENDING STORY

In 2005 Andy effectively had two jobs. By day he was mild-mannered editor of AudioTechnology magazine, while by night he was recording engineer for The Whitlams. Andy's always recording or mixing something for someone, but this was different - it was an album that seemingly knew no end - a project that was slated to last weeks lasted months and months. After yet another recall or new session Andy would note, "Well at least I'll have plenty of material for an AT article". And, just like the highly successful double album, Andy delivered with a great feature. It seemed like 25 percent of the article was a leadup to an (admittedly hilarious) anecdote

where The Whitlams' Tim Freedman placed a leech on a cheese platter in a Byron Bay restaurant, but it all went to show how being a producer or engineer isn't like being a mechanic. By which I mean, you're not some hired hand, the relationship between you and the artist is far more intimate, and if trust and honesty don't exist during those tracking sessions then the results are, at best, a little disingenuous, and at worst a complete sham. One thing Andy never mentioned was where the inspiration came for his 'vocal tent'. I prefer to call it 'The Whitlams Wigwam', either way it's a beauty. - CH.



"180 metres uphill back to the wine and food tents... I reckon it was about a three iron from FOH"

AT writer Graeme Hague figures a caddy might be handier than a Smaart system for this snooty Dame Kiri concert.



Earlier in the year we spoke to Ben about collaborating with Bjork's engineer in Iceland, crazy soundscapes and the joys of Ableton Live. More recently, Ben wrote us this perspective. Ben Frost: Indispensability: it's an interesting idea to consider, in a realm of artistic expression, such as sound, where technology demands that things are infinitely dispensable... at an alarming rate. So, I guess, if there is a tool that is indispensable it must certainly be a keen knack for ignoring 99%

of what's going on around me technologically and working within parameters and placing limits on myself as a consumer of that technology. Do I really need that new 'Multi-Giga-Sampler-Deluxe-Plus-V10.3.7.8.9-Ultra Definition-800Bit-Platinum-Auto-Thing' or can I work another way? I would say that limitations are indispensable.



I SHOULD BE SO LUCKY...

In much the same way that I promised to 'be good' when dealing with the Gyuto Monks story, I was forced to 'look but not touch' Simmo's story on David'father of world music' Lewiston. For example, I swore that there would be no chance of me heading the caption for this shot with something as flagrantly glib as "I should be so lucky... lucky lucky lucky". It took enormous self-control, but I'm proud that I remained true to my solemn oath. – CH.



READERS SPEAK DIGIDESIGN DIGI 002

"If you really know what you're doing, you can achieve results on a 002 very comparable to what people were putting out in million-dollar studios 15 years ago."

Joe Ferguson

"I would be lost without it. We're engaged to be married early next year." Ben Churchill

"This portable equipment now enables me to multitrack live performances and track song development and production for our local

church albums." Alasdair Langridge

"It comes to gigs. We often use it to check how our live sound is going, with a view to one day producing that elusive live album." Steve Webber

"Without this piece of gear my small project studio just wouldn't function at the sound quality my clients expect." Marz Merlini Issue 46's cover divided opinion: many thought it was the creepiest, most disturbing image they'd ever seen; while others disagreed and reckoned, if pressed, they could probably recall seeing something just as gross a some point... But The Darkness was our lead story and it's hard to find a picture of lead singer Justine Hawkins when he's not in some hideous Rocky-Horror-Frankenfurter cum aerobics instructor get-up. I have to admit that I was one of the conscientious objectors. I wasn't sure if I could live with those guys staring back at me every time I pulled out Issue 46, and actually voted for a Commonwealth Games cover, or more precisely, a black cover with the flying tram on it. Philip pointed out that we were a magazine for engineers and musicians... and not tram conductors... so l demurred. Regardless, the actual article was a cracking tale of '70s-style recording excess: 36 mics to record drums; 40 to 50 guitars in the control room; 160 guitar

vocal overdub... For just about any producer it would be enough to send them straight to the funny farm, but this was Roy Thomas Baker, and when you have *Bohemian Rhapsody* on your recording CV, this was just another day at the office.

If you thought The Darkness recording sessions were involved, then the Commonwealth Games Opening Ceremony was an entirely different league of complication. Probably the biggest challenge was the MCG itself - an enormously hostile acoustic environment. But these events are well worth investigating because they really do push the technical envelope and any equipment that's used is unquestionably rock-solid and/or extremely innovative. In short, the audio team can't afford to carry any passengers. So if a Yamaha PM1D is mixing FOH then it's there for good reason, it's not there because they scored a good deal or someone was pally with someone else, ditto the Dolby Lake processors, the Opticore



a seedon Textification



optical multicore, the Shure wireless or the L-Acoustics Kudo on-field PA – all state-of-the-art, all highly dependable. – *CH*.

WHO'D HAVE THOUGHT?

Who would have thought that we'd still have 'powered brick' mixers in 2006? But sure enough, Yamaha swears that there's still a thriving market for these relics of the '70s. Actually, that's a little unfair, the 'Next Gen' bricks are pretty darn sophisticated with SPX effects, graphics etc etc. While I'm on the 'who'd have thought' train of thought, if I'm not very much mistaken, I think Korg still makes a tape-based four-track recorder. If you know anyone who has recently purchased a four-track tape machine I think they should be named and shamed – call in on the usual numbers.



APOLOGIES

parts on a typical song; 160

After plodding around the MCG about 10 times and taking a couple of Gig worth of digital photos, when we went to lay-up the Commonwealth Games story it came as a surprise to us all that we didn't have a picture of Audio Director Scott Willsallen. We were forced to pull out a shot from our Rugby World Cup story, where Swa was doing his best Neo 'storm the Nebuchadnezzar' impression. Which wasn't very fair to FOH engineer, lan Shapcott, who on the same page didn't have time to grab his full-length Morpheus leather coat, opting instead for this little dayglo OH&S number.



INDISPENSABLE BRAD WATTS



Brad is one of the main writing pillars AT's been built on since Issue I. After years living in inner Sydney warehouses (often with Simmo as a boarder) he's now jumped ship to Brisbane, from where he files this indispensable Brad Watts: The one piece of kit I really would rather not do without is this weird monitoring device I've seen them used in broadcast situations mostly. It's called a GA-114 Audio Monitor Bridge and they're made by an Australian company in Sydney called Practel. I really missed my VU meters when I abandoned my way-too-big console. This has nice big VU meters and a pair of three-inch speakers that sound alright, powered by little 7W RMS amplifiers. I'm

report

soon over listening to my larger monitors all day because it just wears my ears out. I wouldn't say they sound better than my Auratones but it's a similar thing, especially for listening to music all day. Usually it receives a OdBFS feed from my mix bus via a software spectrum analyser – which is how l use it when I'm mixing and listening via my big monitors. When I'm sitting around writing reviews for AudioTechnology, playing whatever music I've rummaged out of the iTunes library, I listen to

this thing. Then, when I'm doing some serious mixing l love that pair of VU meters. And there's a phase meter between the two VUs that's is spot on – really handy for showing up totally outof-phase stereo material. As soon as the phase goes sideways a red LED comes on. It takes balanced inputs or RCA inputs, and you can change the reference input levels from –10 to +16dBu. It's really neat, I've just got to get some lights sorted out for the meters.

"If the eyes are the windows to the soul, the sung voice is surely the front door."

Paul McKercher kicks off his vocal recording tutorial in style.





Occasionally AT is accused of being a little high brow and high-handed. (Which is a claim I totally and utterly bloody refute and if anyone wants to say it to my face they know where to bloody find me... that's meant as an ironic joke, for those wondering.) I'd agree at times that the equipment we review is often out of the reach of most mere mortals. Issue 47 is a pretty good example of this. Let's take a look at what's on the smorgasboard: Rupert Neve's Portico gear (around \$2.5k - \$3k), the latest Eventide Harmonizer (\$6.5k), a preview of the soon-to-be-released EAW digital mixer (circa \$95k), the Neve summing mixer (\$5k), the latest top-ofthe-line Shure wireless (around \$4k to get started), the Midas XL8 digital monster (\$500k-plus), and Chandler's Germanium (about \$2k). All up, that's about \$620,000-worth of new kit. Which is a lot of moola, and probably a pricier smorgasbord than any comparable magazine on the Australian news stands would be offering - except perhaps for 'Rich

Bastard' magazine with its fat cigars, ridiculous 'Greg Norman' boats, and 'Brad Pitt' wrist watches. But that's only half the story. AT reviews gear it finds interesting, and the assumption is you, the reader, will find it interesting too. And being interested doesn't necessarily mean you have the financial wherewithal to make a purchase. For example, only a couple of hundred people worldwide could afford that stupidly expensive new Bugatti Veyron, but millions of people wanted to read about it. Furthermore, on the other side of the coin, Issue 47 also sees reviews of eight products under a grand. And there was certainly lots to talk about The Novation ReMote SL was automatically loading up templates for its control surface, Sony's Acid Pro has been under Ableton Live's kosh but come out fighting with some great new features in v6, while Behringer and Edirol were competing in the tough 'interface for under \$500' market. – CH.



READERS SPEAK DIGIDESIGN MBOX/MBOX2

"Mbox finally allowed engineers to work outside of their studios. Great records are now being mixed on airplanes! And they look cute, too."

Ashley Mortimer

"Servicable pre's and rock-solid reliability." David Rogers

"It lets bands/artists pre-produce. More time can be spent on vibe and tone rather than: do you think this chord sounds good?" Simon Ashby

"At a price anyone can afford (c'mon just give up a couple of big nights)." Nik Buchanan

"It sounds great. It doesn't break down. It runs my Midi gear. It's the go." **Vern Connor**

"If it were gone – I'd be screwed... and bored." Paul Wood

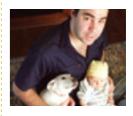
MATHS, SONY STYLE

I know Sony is one of the most powerful corporations on the planet but I think it's just a little high-handed to re-write the rules of basic arithmetic to suit its marketing purposes.



RICK PROCREATES

Readers of Issue 47 were given their first glimpse of Dylan, Rick's first born. Apparently Andy was under the illusion that some 10-year-old pact was still in place... no baby photos in the magazine. But Rick's paternal pride got the better of him... could happen to anyone really.



HOW TO GET FREE GEAR

Thought that would get your attention, but the acquisition of free gear is never easy and this tip will come at a price... to your reputation that is. It occurred to me, as I was looking at a Shure advertisement in Issue 47, that what better way of scoring a Shure endorsement than to have the word 'Shure' in your stage name. Shure enough, MC Shureshock, was given the nod – you could say it was a Shure thing – free mics all 'round. It then got me thinking about what up-and-coming bands and artists should be calling themselves in order to get on the endorsee gravy train. Want loads of microphones? Then you could do worse than call yourself Joey Sennheiser & The Evolutionaries' or how about 'bAKGround Noise'? But it's not all about stage gear or even hardware, software endorsements are all the rage as well. For example, just think of the money Tool could have saved if they'd called themselves 'Tools? But, ultimately, I don't think it gets any better than a Yamaha endorsement. Yamaha makes everything from mixers, amps and speakers to surf skis and diesel generators, and that's some action I think we could all benefit from. A pipedream? I think not. I can assure you, all the outboard motors are well within reach and here's how. If you're a country singer then the obvious move is to call yourself Yammy Wynette, while aspiring lounge lizards should instantly change their names to Yammy Davis Jnr. As for Scandinavian popsters, Aha? Well, they could have been bigger than Abba if only they had the forethought to call themselves Yam-Aha. You may chuckle... but mark my words, it's only a matter of time. – CH.

"Lurking underneath are mammoth gobs of cutting-edge grunt."

Brad has his wicked way with words, in this case describing the latest Ultra Harmonizer. Don't expect this quote to be on the Eventide homepage, though.

FOR SALE: GOLDEN EARS, \$2500 ono

Some few years back I was trawling through a copy of the Trading Post looking for bargains. (For those cyber kids who've never heard of the Trading Post, go ask your parents.) Anyway I'd failed to find anything of interest in the 'Musical Instruments' and 'Band Equipment' listings and found myself glancing idly through a section rather ambitiously entitled: 'Bargains Bizarre', which really was a euphemism for 'miscellaneous shite that

doesn't fit anywhere'. Amidst the \$15 dentures and 'as new' chewing gum, I saw the following ad: 'set of Golden Ears for sale, from estate of respected sound engineer, good condition \$2500 ono'. Now I'd heard about these 'golden ears' from people who'd mastered records in The States, and I thought that maybe I'd snap 'em up and see whether I could become instantly better at my job - in the process, ruling the local mastering scene from a lofty golden tower. So I headed off to

Sefton (wherever that is) purchased the ears and eagerly returned home to test 'em out. Cripes they were powerful! When I went to play my DX-7 all I could hear was the aliasing on the output converters. I turned on my old TEAC 3340 tape machine and not only was the hiss beyond imagining, the rumble I'd never even suspected of being there was obscenely entangling itself with the wow and flutter... Then I put on a record, not just any record, a DMM copy of a Yes album. Once I'd been staggered by the surface noise, physically

assaulted by the ballistic pops, and had my eardrums vigorously sandpapered by the crackle; I began to notice a strange, almost inescapable metallic resonance, that pervaded the entire sound, a kind of tribute to the special pain that only the devil's own frequency of 4kHz can deliver. It wasn't just a resonance, it was more like a Four Corners report on all that was wrong with the world of 4kHz and it was drawing me in, ineluctably. I was losing any sense that other frequencies even existed any more... I ripped off the golden ears and

flung them down like the false prophets they were!

Suddenly the world turned to sonic porridge again. Muffled birds began to sing at the window and I picked out a melody. The now-distant Yes album sounded like music again, and I found myself smiling. Perhaps I didn't need to hear everything. Perhaps in that search for perfection I'd missed out on the simple joy of music, of rising above the imperfections - be they sampling rates, a dud snare sound, or an amp hum. I didn't need that new set of ears to do a good job,

I needed to trust the old set that I'd had since birth - that was the sound I knew the best, the one l understood, the one that 'put it all together' for me. So I put the Golden Ears on the shelf and that's where they sit. I still polish them occasionally, and bring them out for reviewing gear in AT, but they didn't make me happy. My favourite bit of gear is still right where it's always been, attached to the sides of my head! - William Bowden.



LOSS OF FLAVOR

When I get an engineer's discography it never occurs to me that some of it may, in fact, be a total fabrication. I'm guessing mix engineer, David Pensado, may have had someone, at some time, question his credentials, because it looks like he's got a happy snap of himself with every artist he's ever worked with. We included a few in our feature article in Issue 38 but there were a number of others that was just too gruesome to print at the time. Take, for example, this gem of D Pensado with a very worn-out Flavor Flav. I recall a story regarding Flav, where some bozo asked him why he wore a clock around his neck. His reply? 'So I know what time it is.' If this photo is anything to go by you wonder if his retort might now be the same, only this time without the antiestablishment irony.



READERS SPEAK INTERFACES

MOTU 828 mkII: "It's the hub of my studio and has allowed me the flexibility to gradually add to my gear rack. Without it I'd just have lots of boxes that couldn't talk to each other." **Tim O'Brien**

RME Fireface 800: Sounds great, is extremely flexible, and it's rock solid!" Andre Young

RME Multiface: "For me it's the most flexible audio converter to carry around, and has a really nice sound to it." **Oliver Koenig**

RME ADI-8 Pro: "Brilliant low jitter wordclock (the guts of any studio with digital I/O), great I/O options (including secondary Adat sends), and pristine A/D D/A." Carl Dedic It's amazing how good things can arise out complete desperation. It was about 24 hours until deadline and the office was simmering... we were running well behind schedule and no one had the first idea about what the hell we could put on the cover. There weren't any obvious 'cover' pics so we collectively decided to take five deep breaths and 'do a de Bono'... think laterally. From that hairtearing moment emerged butterfly-like one of the best-looking covers AT has ever released. Aesthetics aside, the VU theme was important and it gave due prominence to Stav's paean to an endangered studio species. Stav will happily admit that he's not the No.1 ticket holder to the PPM fanclub and he provocatively (and quite intentionally) sank the slipper into peak metering at the expense of 'juicy' VUs. It certainly mobilised the readership into three distinct camps: the 'Go Stav, bring back the VU' camp; the 'Get nicked, PPM has got all I need' camp; and the not so switched on 'Huh?

Some bloke comes every six months to check my meter' camp. Some of those letters were printed in Issue 49's Stav's Word, while further responses have been published this issue in Your Word. One thing's for sure, Stav has put the VU back on the map, which is a wonderful thing.

Issue 48 welcomed Mr Rupert Neve back into the pages of AT, some 45 issues on. Now in his '80s Rupert has retained his passion for hands-on audio design. Few individuals in the audio industry can speak from personal experience about audio design in all decades from the '40s until the present. His experience and knowledge is quite extraordinary, and it was a pleasure to see his insights once again published in AT - CH

ISSUE 48

Nu Six Provi neuleosos



COVER - ALL GOOD

We were bombarded with positive comments about the look of the Issue 48 cover, except from the Audio-Technica importers, TAG, who were a trifle miffed that their 'It's All Good' metering didn't make the cover.



WHERE'S M'SPECS?

Simmo's editorial made some great points about specifications, and how they are at best ambiguous and at worst meaningless... at least not without certain qualifiers that explain the conditions the measurements were taken under. Unfortunately, the quoting of meaningful specifications has been hi-jacked the marketeers - if your product doesn't spec out as well as your competition then find a way to match them by altering the testing criteria. The rot really started when digital was eating into analogue's heartland. Does everyone remember the term 'CD Quality' that would be plastered across brochures? I mean, the 'quality' of which CD? I've

heard some terrible CDs in my time, I'd hate for it to sound like those. Oh, I see, you mean 16-bit/44.1kHz? Gotcha. Anyway, terms like 'CD quality' concealed a multitude of evils, as two 16/44.1 interfaces/recorders could, for example, have vastly different dynamic range specs. This is not golden-eared finessing that we're talking about, it would be obvious to even the cloth-eared that a \$10k 'CD Quality' converter sounded far better than the \$100 'CD Quality' converters you might find in a cheap portable studio. Anyway, it's clearly evident that the great unregulated circus of specs could do with standardising, such that consumers could actually make some meaningful comparisons between products. But who's going to do that? The AES? Those I've spoken to believe that the AES simply wouldn't have the political will to go through that process, there would be too many powerful external pressures coercing the AES into not bothering. Which is a pity. – CH.

INDISPENSABLE RUPERT NEVE



Dear AT, congratulations on reaching your 50th.

Perusing the pages it seems that the magazine set out on an ambitious journey that is far from easy! The world – not only the

world of audio – is set on a lemming-like race, rushing towards... well, what? 'More' and 'cheaper' if you read the ads, watch TV or even browse the shop windows. But where are the values of quality, permanence, and integrity? Yes, these things might cost more but they're the cornerstones without which the consumer is left to search still. for that elusive but satisfying experience that he probably can't define and ends up frustrated, even angry! You know the work that has been done showing that extremely low level artifacts, below normal hearing threshold and beyond accepted human frequency response, can actually cause the brain to transmit measurable electric waves of the type associated with frustration. Instead of our prototype listener coming home to relax with his music, he ends up quarrelling with his wife. (Well, maybe that's not the only reason!).

Values are too readily despised and dismissed, I think mainly because there's no point of reference. So how do you recognise quality without going to concerts, listening to live music or even a good Church choir and (pipe) organ (I mean non-amplified or electrically processed – why do I have to define the 'real thing' anyway?).

But even then most of us need some guidance. We need to listen to and read

the opinions of others to really start understanding the difference. And this is where you come in. You have recruited a team of contributors who can be relied upon. We, the readers, may not always agree with them but based upon their experience with exposure to gear that enables them to make comparisons, we are measurably better off. Keep the values high and the flag flying! God bless you. Rupert.





And here we are at the end of our journey of retrospection - from Issue 1 through to 49. It's been quite a journey, which invites some insights - 'compare and contrast' as I recall my Year 12 English exam saying. Well, for starters, I can't imagine Issue 1 entertaining the idea of a cartoon! Issue 49's A&R Guy is a beauty and we hope it'll become a semi-regular resident in the magazine. What else has changed? Obviously the look of AT is very different. We hope it remains clean, thoughtfully designed and easy to read - occasionally certain spreads lack some legibility and we store those in the 'don't do again' memory bank. Naturally, there's more confidence in the tone and writing of the magazine - when you're the new kid you don't always know if anyone will like you, but after a while you relax and grow into the job. I'm proud of the fact that we don't take ourselves too seriously. We like to get things right and we spend a lot of time on the (dare I say it) one-percenters, but at the same time Andy and

I often find ourselves in hysterics over a caption or a quip. Of course, things are always funnier in the middle of the night, but I believe humour is one element that sets us apart from much of our international competition... especially the Yanks (bless their cottons). That and the fact we don't mind looking at the occasional left-of-field audio project. Years ago, it was drummed into me as an editorial assistant that if the stories are interesting enough it doesn't matter if it's a recording article, broadcast, post production, live sound, archiving, multimedia, audiophile, or whatever, people will read it and enjoy it. That's our aim. (A case in point is the Surfing Safari story in Issue 49. It's just a darn good audio yarn.) If we stray from that ideal, then you have permission to give Andy or myself a serve. - CH.



READERS HAVE SPOKEN & A WINNER

Just to put a line under these responses, I feel it necessary to mention Les Molnar, Ross Waldron, Geoff Allen, Aaron Marshall, Karl Schaal, David Luscombe, and Darren McLennan, who all quite rightly pointed out that without their ears none of this gear would be much chop, while Sean O'Reilly was the only suck who nominated AudioTechnology magazine - we're humbled Sean, thanks.

The poll only closed a few days prior to finishing the magazine. This has made it difficult for Andy, myself and the other senior members of the AT brains trust to come to any sort of conclusions about our own vote for indispensability. So, you'll have to excuse us as we postpone our own awards/nominations.

But I can announce the winner of the SSL Duende. Credit must go to Michael Carpenter and James Dean for making an eloquent case for ProTools LE, also a special mention to Daniel Arena for making us chuckle and to Pete Clay for his heartfelt enthusiasm. But, for mine, the winner is David Sims for his poetic description of his mic stands... indispensable.



THEN & NOW -THE APPLE MAC

Current Mac 1st Quarter 1998: Power Mac G3 Mini -Tower

Price: \$3995 Processor: 1 x Motorola Power PC 750 G3 Processor Speeds: Up to 300MHz Cache: 64kB L1, 512kB or 1MB backside cache L2 System Bus: 66MHz Hard Drive: up to 9GB Media Options: 24 x CDROM, DVD ROM, 1.44MB Floppy Drive, Zip Maximum RAM: 768MB RAM Speed: 66MHz

Current Mac for August 2006: Mac Pro

Price: \$3999 (base model) Processor: 2 x Intel Processor Speeds: (all dual) 2.0, 2.6 or 3.0GHz Cache: 4MB shared L2 cache per processor System Bus: dual 1.33GHz Hard Drive: Up to 500GB Media Options: 16x Superdrive for DVD+R DL/DVD±RW/CD-RW Maximum RAM: 16GB RAM Speed: 667MHz

DIGITAL FUTURE

It was way back in Issue 4 that Scott Christie tackled the thorny issue of 'Preparing Audio for the Internet'. In his opening paragraph he mentions that 'audio has not been really integrated into web design in a meaningful way ... " but adds this: "as bandwidth increases, the relevance of audio in web design will increase to open up a thriving area of audio production." Looking back, it felt that the Internet was going to be another big area for audio people to find work. It was another area we all needed to know about because soon web designers would be coming to us to prepare the sound that would be such an integral part of our

"It's supposed to be a 'drinking, get amongst it' beer"

Eskimo Joe engineer, Matt Lovell, plays the grand marketeer for his own commercial brew

on-line experience. As it turned out, the web was pivotal to audio people, only not in the way Scott Christie or I necessarily anticipated. In those early days we were explaining key concepts like data reduction (compression), masking and perceptual encoding. It somewhat reminds me of when a Vic 20 computer arrived at my school and we were all taught some rudimentary programming in Basic. Yes, it's handy to know programming, but for our purposes it's more about getting the most out of the applications. Now head back to 2006 and Gomez's article on getting the most out of your MySpace site. Yes, there's some

advice about the best way to encode your tunes but ultimately it's a primer on how to market yourself on the Internet. And that's what the web's turned into, a great big advertisement, and the struggle is to be heard among the background hubbub of millions of voices. -CH.



The KUDO Kangaroo ad is an instant

classic. I mean, you really would think

twice going into the ring with this guy

INSTANT CLASSIC

INDISPENSABLE GREG SIMMONS

If we define indispensable as being crucial, vital or essential, then the most indispensable items in my kit would probably be three pairs of headphones. First are the ultra-comfortable Sennheiser HD650s, which I can wear all day long without any complaints. Their outrageously flat frequency response and low distortion make them perfect for delivering an accurate representation of the sound being recorded, but they have a practical limitation – their open design makes them useless when working in the same space as the musicians, or whenever there's a lot of background noise in the monitoring space.

For situations where reasonable isolation is required, I use the Beyer DT250s. They're the only closed headphones that I actually like; they don't sound boxy or honky, they're quite comfortable when worn for extended periods, and they offer 18dB of isolation. They're also very rugged – mine live in my day bag and travel with me everywhere I go, including three recording treks through Nepal and

Tibet! They're slightly bass shy compared to the HD650s, but I prefer that to the boxy and honky sound commonly found in other closed designs. Sometimes the DT250's 18dB of isolation isn't enough. For those situations I have a pair of Direct Sound's Extreme

Isolation headphones that offer 28dB of isolation. They're not the most comfortable or best sounding headphones in my kit, but I can forgive their shortcomings because they're far more useful and informative than either the HD650s or the DT250s

when I'm in a situation that requires extreme isolation. As an added bonus, their extra isolation means I don't have to monitor so loud in order to hear the recorded sound over the spill. That's good for hearing preservation.

One more thing I'd like to add to my indispensable list is a liquid called Audiclean. I regularly use it to keep my ear canals clean and healthy. After all, my ears are really the *most* indispensable items in my kit..

