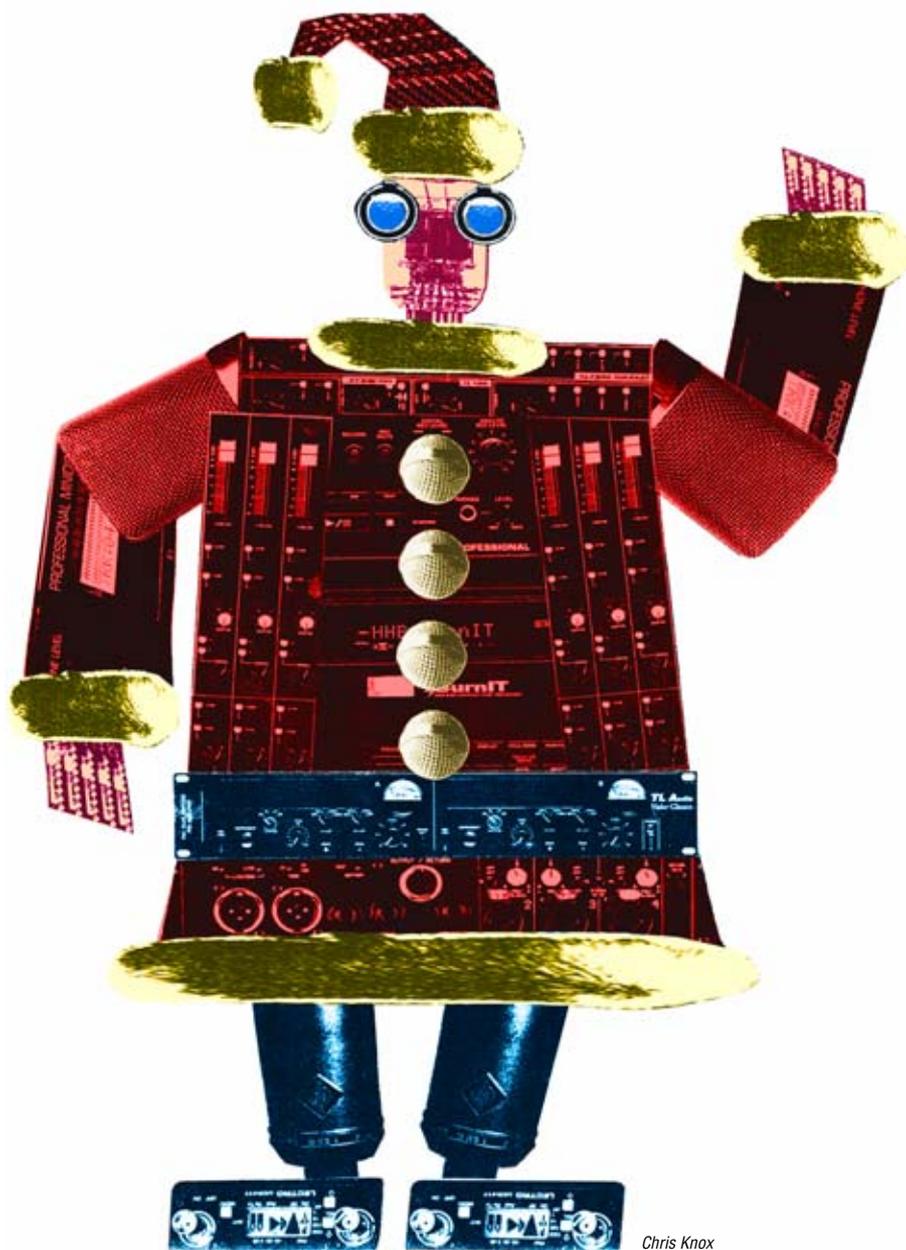


in the

# digital domain

volume 7 issue 5 dec 2003



Chris Knox

## Changing location...

From 14th January 2004 we will move to:  
**136B Newton Rd, Auckland 1001.**

Entry is from St Benedicts St, off Newton Rd.  
Yes, we've outgrown the little shop of sound on New North Rd and are moving to bigger premises.

We're looking forward to a better location, larger showroom, more room for rentals with space to talk to clients, and with great food and coffee nearby at Benediction café. We have one car park directly outside and there is always parking on St Benedicts St.

### From 14th January 2004:

New Phone: **(09) 366 1750**

New Fax: **(09) 366 1749**

email: [digital@soundtq.co.nz](mailto:digital@soundtq.co.nz)

Postal address remains:

PO Box 68 594, Newton, Auckland

*Please update your address book NOW!*

We will be celebrating with Sound Techniques **Big Day Off Sale** on January 16th, with opening specials and an opening party in February – stay tuned for details...

***Soundtech-laus and Sound Techniques wish you a happy Christmas and a prosperous and peaceful New Year***

**Spot the products –  
see page 4 for competition details...**

## **Big Day Off Sale** **January 16th 2004**

We have one sale each year: **The Big Day Off Sale.**

The date: **Friday, January 16th, 2004**

SEE PAGE 5 FOR SAMPLE SPECIALS.

## **In the can**

I sense the Film Industry's focus is changing when I hear that experienced sound mixers are hanging out for work while Helen Clark is dressed by Weta and Simpson Grierson is using the industry to promote its legal services.

There are now Government sponsored initiatives which will guide the industry's future and as I write the *Screen Council* is being formed with responsibility to oversee the industry's development.

Crucial to industry expansion is the need for infrastructure, readily available resources upon which a growing industry can rely. We should look beyond our individual needs and act collectively to ensure that we all enjoy the benefits that any expansion might bring.

Training will become increasingly important, not just for those in tertiary education. We should think about ways we can up skill and establish benchmarks to prove our skill level.

Sound Techniques takes an active role in developing the industry and protecting the interests of its stakeholders whether clients, suppliers, staff or partners. We also have plans to lift the level of knowledge in New Zealand but the details will have to wait until the New Year.

Happy Christmas and a prosperous New Year to you all,

*Stephen Buckland, General Manager*

# Ultrasono – only the best for your ears

*Paul Field and Isaac Lim – Part 1.*

German headphone maker, Ultrasono, makes much of the special, innovative features of its products. We decided to put them to the test with an in-depth Sound Techniques' Listening Session...

Ultrasono headphones produce a 3-D soundscape with a patented 'S-Logic Natural Surround Sound' technology, which utilises the natural shape of the ear to provide spatial information with which our brains can organise a dimensional soundscape. Ultrasono achieves this by decentralising and offsetting the headphone driver so that sound is not focussed directly on the eardrum (which traditionally occurs with drivers set parallel to the eardrum), but reflected off the ridges of the pinna (earlobe). This replicates the way in which our ears normally operate.

Dimensional imaging is largely the same throughout the Ultrasono range, the major exception being the HFI-2000G where the open-back principle creates a markedly wide stereo image. Nonetheless, the other models (which operate on a close-back principle) produce a stereo image as wide as a Hummer – albeit slightly sweeter sounding.

Although Ultrasono's point of difference is its patented S-Logic imaging system, its headphones are also designed with the listener's health and safety in mind. Ultrasono prides itself on the ability of its headphones to produce lower levels of EMF radiation (the same radiation produced by your computer screen or cellphone) than its competitors' products – significant peace of mind when your headphones are sitting an inch from your brain all day. Ultrasono headphones generate a perceived loudness comparable to other models of headphone with 3dB less SPL, a by-product of the S-Logic dimensional imaging system and a godsend if you spend most of your day wearing a set of headphones.

We evaluated Ultrasono's headphones by:

- low, mid and high frequency response
- spatial imaging
- comfort
- construction and durability
- uses
- isolation

In doing so, we tested the headphones against their own counterpart models and against a pair of industry standard Sennheiser HD25's. The appraisal was carried out using a number of types of music, including: Blur's *The Universal* (chosen for its multi-instrumentality

and the spatiality of its mix); Sarah Brightman's *Classics* album (because nothing pushes the mid-high frequencies like a Soprano); and some thumping Techno from Gatecrasher (because the use of constant heavy bass and ever-changing envelope filters allows a good insight into the tonal character of any headphones – as well as the chance to recreate London clubland in the shop).

## **HFI-15G** (\$145 + GST)

A lightweight headphone designed for PC-gaming, mobile applications or as a hearing aid for people in front of their TV.



*PF – The HFI-15G's produce a fairly flat frequency response, although the mid-range frequencies are made more prominent at the slight expense of the bass, which is softer and less pronounced. They are not as isolated as other Ultrasono models, due to the fact that they sit on, rather than around the ear. Nonetheless, the HFI-15G's present a very good quality headphone for a reasonable price and seem particularly suited to on-set monitoring.*

*IL – The headphones are physically comfortable and do not 'pinch'. Bass is felt from around 65Hz and they seem to have a slight peak around the 4kHz range.*

## **HFI-550 Beatmaster**

(\$235 + GST)

Designed especially for percussionists and bass guitarists.



*PF – Nice and comfortable, with a lot of airy space for the ears to feel at home.*

*Interesting to hear the nuances of guitar tone, string intros and brass lines that I hadn't heard before. Spatiality is good, although not massive. Vocals are not as prominent as with HFI-15G's, but then the HFI-15G's tend to squash everything together, thereby pushing the vocals forward, whereas the HFI-550's broaden everything out more. Good isolation from outside noise. Bass response is 'looser' than the HFI-650's; however there is more mid response for instruments like guitars and keyboards. The HFI-550 Beatmasters seem particularly suited to tracking and monitoring studio recordings.*

*IL – Ultrasono claim that these headphones are suited for use with bass players or drummers. I would presume that this meant they had a strong and tight bass response, so their claim seems justified. Personally, I found it a joy to listen to Sarah Brightman's voice on these headphones. In any mix there must be strong mid-range frequencies to push out the vocal and make it clear and distinct from the other instruments and the HFI-550's achieve this. However, towards the top end, the strings tended to sound strained or sizzly. Nonetheless, I found this pair of headphones strangely addictive to listen to compared to the more expensive models.*

## **HFI-650 Trackmaster**

(\$325 + GST)

For use in music production, in recording studios or at the microphone, in television and broadcasting studios.



*PF – I found these headphones to have a slightly 'tighter' low end and less 'pushy' mids than the HFI-550's, but with a much grander stereo image that suggested an application to dedicated monitoring rather than tracking or live use, which the HFI-550's seemed to be more suited to. Very comfortable and very well isolated from external noise. My pick of the bunch.*

*IL – For the price, I must stress that the Trackmaster thoroughly impressed me with its spatial imaging. They were very comfortable and seem ideal for home recordings and monitoring. Mids are consistent and the bass is adequate. More 'accurate' than 'exciting', however I really appreciated the stereo spatiality of these headphones.*

Tune in next issue when we sum up our findings and wax lyrical on the other headphones in the Ultrasono range: HFI-550 DJ1 "the best in the whole DJ-market", HFI-650 DVD edition "for the demanding home cineaste as well as music enthusiasts" and HFI-2000G "for mixing and mastering or listening to acoustical music like classics and Jazz".

Meanwhile, if you are interested in checking out a pair of Ultrasono headphones, [contact us](mailto:contact@ultrasono.de) to arrange a demonstration.

For more info see: [www.ultrasono.de](http://www.ultrasono.de)

# Take a look inside the TL Ivory 5052 stereo valve processor

Rowan Spicer, Maintenance Engineer,  
SAE Technology College investigates

TL Audio continues to expand its Ivory II line of outboard processors with the 5052 stereo valve processor. The 5052 combines 2 x mic preamps, compressors, equalizers and limiters with the two channels linkable in stereo. It is the 2-channel, big brother of the 5051. It employs three dual triode Sovtek ECC83/12AX7A valves. This sturdy 3U unit offers comprehensive control suitable for almost any application, from direct to DAW tracking all the way to analog processing of a final master.

## Inputs

- XLR mic inputs with switchable 48V phantom power for condenser microphones and a -30 pad to tame the hottest microphones.
- Line level signal can either be balanced XLR or unbalanced jack. Instruments can also be connected directly to jacks on the front panel without the need to use a DI box.
- The mic preamp offers 44dB of gain (from +16 to +60) while the line input allows a gain range from -20 to +20dB to accommodate a variety of line level devices.
- A 12dB per octave, high pass filter turning over at 90Hz is available to reduce any unwanted low frequency noise entering the valve input stage.
- The phase of the signal may be reversed.

## Outputs

- Balanced XLR (+4dBu) and unbalanced jack (-10dBu). Co-ax SP-DIF I/O and wordclock



- available as an option for digital recording.
- Output gain can range from minus infinity to +15dB.

## Metering

- Signal metering is provided by two VU meters, which can display input and output levels as well as gain reduction of the compressor or limiter.

## How does it work?

### Compression

- The first valve stage is where warmth may be added. Each channel has an independent valve based compressor which may be bypassed or stereo linked.
- The threshold of compression has a range from -20 to +10dB and compression ratios from a gentle 1:1.5 all the way to a slamming 1:30.
  - Attack and release times can be set.
  - Any gain lost during the compression process can be salvaged with a gain make up control.
  - The knee of the compressor is switchable between hard and soft settings. The compressor's side-chain can be accessed via standard jack insert points on the rear panel to allow special

dynamic effects such as ducking and de-essing.

## EQ

- A 4-band valve EQ with 15dB of cut and boost on all bands normally sits after the compressor but may be placed pre compressor if desired.
- The low band can be set to either peak or shelf shapes and has a very generous range starting at an almost subsonic 30Hz going all the way up to 1 kHz.
- The low/mid band and upper mid band are fully parametric with a frequency range from 50Hz to 1.5kHz and 1kHz up to 12kHz respectively.
- Q of the two mid bands can be adjusted from a broad Q of 7 to a very narrow 0.7 for surgical corrections.
- The high band can be either peak or shelf type.
- Turnover frequency is variable from 3kHz right up to 20kHz.
- Because of the great overlap between all bands, precise adjustment can be made to the spectrum of the signal being processed.
- On-board EQ may also be inserted into the side-chain circuit.

## Limiting

This processor has a limiter available to catch any stray transients from escaping to the outside world. The threshold of the limiter can be set between 0dBu to +15dBu.

The 5052 represents great value and could supplant the need for a mixer.

Next issue I'll report on how it all works in practice.

# Remote Audio delivers the Speak Easy portable speaker

Mike Westgate, Technical Manager reviews

Remote Audio is a relatively new supplier of location audio accessories, but it continues to introduce innovative products.

The Speak Easy is the solution when you need a compact self-powered active speaker.

Typical uses are on-set playback of material on a video shoot, playback of low level music in a tight space such as a vehicle, or communication from a director to actors, say in a vehicle. It can be installed inside a prop, such as a radio, to make the prop practical. The time needed to rig the Speak Easy is minimal since you don't have to find power – with less risk of a hum-inducing earth loop.

The speaker can be fed by a cable or even attached to a radio receiver for wireless playback.

The Speak Easy is small. It weighs in at only 1.36 kilos and is 163mm x 112mm x 101mm.



The case is rigid aluminium and its front grill is also a rigid metal so there's no risk of damage unless it's run over by the grip truck!

A small mid/low frequency unit and a tweeter are visible through the grill and the rest of the operational parts are placed on its rigid aluminium rear panel.

Inputs are an XLR socket for +4dB balanced feeds and with a recessed, single phono socket for unbalanced -10dB sources.

The volume control on the rear is fitted with a solid aluminium knob.

Place a 9V alkaline battery in a tray to power the speaker, or it will accept 10-15V DC via a BP90 style socket which disconnects the battery if used. There is also an on/off switch.

How does it sound? Well, like a small speaker. It's not a boom box but what matters is that it provides clear detailed sound at a good level.

In error I left it switched on overnight, to find that it was still perfectly usable 12 hours later (it uses only 5mA with no signal input).

Remote Audio confirms it will operate typically for a day on one 9V alkaline battery.

If you want to provide playback in a small form, demonstrate your results on location and keep the director happy, the Speak Easy is a great product.

[Contact](#) us for a closer look.

For more: [www.remoteaudio.com](http://www.remoteaudio.com)

## Add to the experience with Sennheiser Guide Port

Syntec International recently held a seminar on the Sennheiser Guide Port, personal Tour-Guide System designed for museums and galleries, exhibitions, guided tours of factories, amusement and theme parks etc.

A visitor activates the radio based system when he/she comes within range of an

'identifier' next to an exhibit, signalling the start of the pre recorded information.

For a detailed look at what Guide Port offers go to the website:

[www.guideport.com/mat\\_dev/open.shtml](http://www.guideport.com/mat_dev/open.shtml)

If you are developing an installation where Guide Port would be useful please [contact us](#).

## LaCie DVD Rewritable drive makes for simple DVD-RAM recording.

Here's one computer accessory which will be essential in the near future because it records and plays DVD-RAM discs as well as DVD-R and RW. The DVD rewritable drive connects via Firewire to a Mac or PC.

Record on the Fostex PD6 or backup to DVD-RAM on the HHB Portadrive and deliver the results via firewire to your computer. Already proven on *Boogie Man*

post-production.

Comes with PC Software: MyDVD (authoring), Showbiz (video editing), EasyCD Creator (burning), WinDVD (playback); Mac Software: Toast 5.2 lite (OS9/ OS X).

More info see:

[www.lacie.com/au/products/product.htm?id=10062](http://www.lacie.com/au/products/product.htm?id=10062)

Sound Techniques can demonstrate it to you.

## Compare it to a Neumann

Sound Techniques is very happy to be appointed Auckland's outlet for Neumann microphones to coincide with the opening of our new store. Neumann is the brand the other studio microphones are compared with. The best the others can claim is how close to a Neumann they sound.

Seventy-five years ago, Georg Neumann hand built the first Neumann microphone. Neumann microphones are still hand assembled today.

The Neumann website has a very useful microphone selector:

[www.neumann.com/infopool/mics/welcome.php](http://www.neumann.com/infopool/mics/welcome.php)

## Short ends

### TLA 5000 to be reviewed

Look to a future issue of New Zealand Musician where the TL Audio Ivory 5000 tube microphone and preamp is reviewed. With help from Don McGlashan and Tom Miskin, we stacked it up against microphones that sell for a lot more without a preamp and were very pleased with its performance. [Contact us](#) for a listen.

### Santa brings first HHB Portadrive

The first HHB Portadrives should be landing here around the time you receive this. Check the Big Day Off specials for an introductory offer.

### PSC DVPRMIX3 mixer in store

The first stocks of the PSC DV Promix3 audio mixer, for use with DV recorders, should be in store in time for Christmas.

More info: [www.dv.audio.net/DV/Promix/03.htm](http://www.dv.audio.net/DV/Promix/03.htm)

### Warranty Plus adds life to your warranty

Extend the manufacturer's warranty by 2 years and put aside the "I bought it sometime last year" blues. Sound Techniques now offers Warranty Plus for around 10% of the cost of equipment. For extended warranty cover, ask about Warranty Plus when you make a purchase.

## in the digestible domain

### (I feel like makin') Scones

**Jo McRae** of MGB Business Focus supplied this simple recipe to feed hungry unexpected guests.

#### Ingredients:

3 cups of flour

3 teaspoons baking powder

3 cups of cheese

1½ cups of milk

Add flour, baking power, cheese to bowl, then add milk. Stir the mixture until it leaves the sides of the bowl. Roll out the scone mixture onto a chopping board and cut into 6 scones. Place on oven tray and cook in oven at 180 deg C.

They are also great served with jam and cream.

### Enter the 'Soundtech-lauss' competition

Did you notice that 'Santa' is a collage of some of our products? Have a closer look.

Identify at least seven products correctly (manufacturer and product name) and send your answer by email to [soundtechlaus@soundtq.co.nz](mailto:soundtechlaus@soundtq.co.nz) before 5.00pm NZDST 31/1/04 and you'll go into the draw for a pair of Ultrason HFI-15 headphones.

Conditions of entry:

1. One entry per person.
2. Prize includes free delivery within New Zealand.

## Change of address

From 14th January 2004:

**136B Newton Rd, Auckland 1001.**

**New Phone: (09) 366 1750**

**New Fax: (09) 366 1749**

## We're closed over Christmas

Sound Techniques closes at **mid day Christmas Eve** at 822 New North Rd and re-opens **Wednesday January 14th** from our new premises.

Let us know in advance of any prospective requirements over the holiday period. We will be checking the answerphone regularly, so leave a message if you need something urgently. A \$50.00 opening fee is applicable for after hours service.

**SOUND**  
Techniques

136B Newton Rd, cnr St Benedicts St (from 14th Jan)

PO Box 68-594, Newton, Auckland

Ph (64 9) 366-1750 Fax (64 9) 3661749 (from 14th Jan)

E-mail [digital@soundtq.co.nz](mailto:digital@soundtq.co.nz) [www.soundtq.co.nz](http://www.soundtq.co.nz)

we listen and give sound advice

#### Thanks to:

**Paul Field, Isaac Lim, Wing, John Devereux, Chris Knox, Phil Donovan, Richard Flynn, Gibson Group, Myk Farmer, Paul James, James Anderson, Ben McAlister –**  
for recently providing either business, humour or services.

# big day **one day ONLY** Off sale

**Friday 16 January 2004**

**A sample of specials**

## **TL Audio**

20% off all Ivory II range processors including the new Ivory 5000 microphone and preamp



## **HHB – At least 10% off selected items:**

HHB Circle 3A speakers, HHB CDR 830 BurnIt CD recorder, HHB Portadisc pro portable MiniDisc recorder



## **Beachtek Adaptors**

At least 10% off entire range of XLR adaptors for DV cameras



## **K6 special**

Sennheiser K6/ME66 with Rycote Softie and Pistolgrip/Suspension: 20% off list price



## **ALPINE MUSICSAFE: ear protection**

20% discount on presentation of your Big Day Out ticket

## **Evolution special**

Sennheiser evolution 100 radio microphones at a not to be repeated price

## **Sanken CS-1 special**

\$200 off a Sanken CS-1 hypercardioid mic with Rycote pistolgrip/suspension, windshield and windjammer



## **HHB Media**

20% off single item price for carton quantities (excludes 95 and 125 min DAT tapes)

## **Headphones**

15% off Ultrasonics HFI-15G and HFI-650 Trackmaster headphones



## **Personal Microphones**

Minimum 5% off all Countryman, Sanken, PSC, and TRAM personal microphones

## **Fostex PD6 DVD-RAM Recorder – \$15,945 + GST (one only)**

FREE Portabrace case and 10 DVD-RAM discs – with \$1,200 + GST



## **HHB PDR2000 Portable Hard Disc Recorder – \$19,500 + GST**

DVD-RAM drive and spare 40GB hard drive in caddy included FREE for pre-orders before 28/2/04

## **Radio microphones**

10% off all Lectrosonics radio mics

**Watch the website  
for updates**