

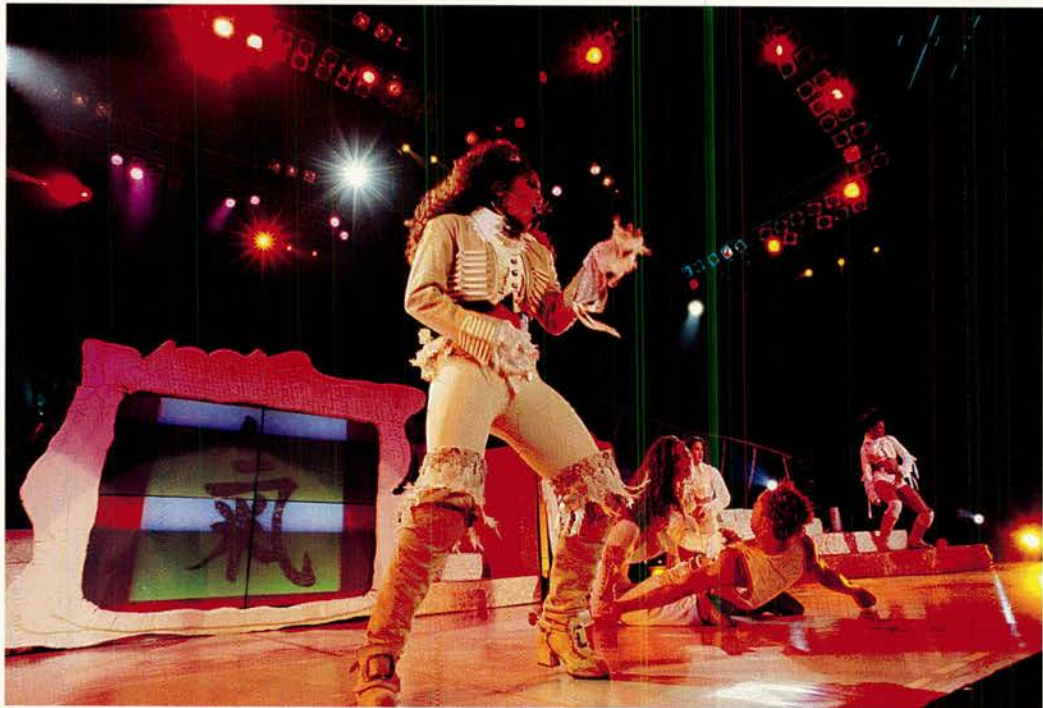
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Australia's **Entertainment Technology** Magazine

21! **MARCH 1995**

Connections

SOUND • LIGHTING • STUDIO • AV • MUSIC TECHNOLOGY • THEATRE • TOURING • SHOWBUSINESS



Pic by Bob King

JANET JACKSON

**Manager. The Roger Davies interview.
Extremely BRIGHT video. (All About).**

KISS

**The ultimate
rock business
machine**

BEAST COMETH

**Disney show goes
to the hanger for
preproduction**

GEAR

Annual **Moving Light** review
WIRELESS MIC'S- all about
New **Akai 8 track** reviewed
•Full of **GEAR** as always!

CULTURE. Big Day Out. (What it all means.) **CLUBS.** Australia by dark. **STUDIOS.** Gotham profiled.
RADIO. How Auntie networks itself. **TICKETS.** Agency wars. **TOURS.** National dates inside!

SPIRIT



Spirit stunned musicians and engineers with the launch of Folio, the world's most versatile and affordable high quality personal mixer. Now there's Folio Lite, making the concept of low-cost quality mixing even more affordable.

HOW AND WHERE YOU COULD USE FOLIO LITE

- Home Studio mixer
- Submixing in a Studio
- Live Submixing of Drums or Keyboards
- Location mixing direct to DAT
- Audio Visual mixer
- Multi-Media mixer
- Tape Monitor mixer

11 GOOD REASONS FOR OWNING SPIRIT LITE

GRAHAM BLYTH'S HANDS-ON GUIDE

But low cost doesn't mean we've skimmed on the little details that can make the difference when you're working on tracks, playing at a gig or mixing to video.

That's because Folio Lite has been designed by Graham Blyth, a perfectionist who believes that even the smallest flaws can seriously compromise your mix.

So here are 11 things that Graham slaved over to meet the challenge of designing Lite. There's no hype, just the real reasons why Lite stands out against the competition - taken straight from Graham's notebook.

WHO IS SPIRIT'S DESIGN GURU?

At Spirit, we're all passionate about our mixers.

But no-one is more passionate than the innovator behind every Spirit console, co-founder of Soundcraft Graham Blyth. Graham's been designing the world's best mixers for about 25 years and relentlessly seeks perfection (Graham will never say "I'm completely satisfied").

But he might say "Mmm, that's a step in the right direction".

Every new Spirit mixer he designs makes professional audio quality and features more affordable.

Audophiles love him, other mixer designers envy him. Graham cannot abide poor design, whether it be electronic or ergonomic, and he becomes very emotional about some of the things that the competition gets away with. His philosophy is that every customer has the right to expect quality, because elegant solutions don't have to mean extra expense.

1 Quiet Inputs, with Huge Signal Handling Capacity

At -129dBu EIN, Lite's mic preamps are actually quieter than many large "pro" consoles. Our new mic preamps give you even more signal handling than before; now you get sensitivity ranging from -4 to -60dB, rather than the usual -10 to -50dB; that's **five times more** handling capacity than other consoles. This means that you can connect almost anything from low output ribbon mics to active DI boxes with headroom to spare.

4 Consistent Rotary Controls

Off-the-shelf controls are seldom good enough for the consistent response you need when fine-tuning a mix. Spirit consoles have custom-designed potentiometer laws that guarantee predictable response to any movement.

5 Balanced Inputs and Ground-Compensated Outputs

The combination of both of these godsend on one console is exclusive to Spirit at this price. They protect most input and output signals from interference and noise, even when ground loops, hum fields and lighting rigs try to corrupt your signals.

6 Mono Channel & Mix Inserts

You can connect signal processors like compressors and graphic equalisers to give you more creative control over your mix.

7 British EQ

For an authentic "British" sound, we've given you carefully selected, musically useful points at 80Hz for kick drum thud and 12kHz for top end sizzle or to cut through the mix instead of the typical 100Hz and 10kHz. Compare the sound with others and you will accept nothing less.

8 Dedicated Tape Return

This saves you 2 valuable inputs when playing pre-show music, and is essential for DAT mastering. By routing to mix you have a staggering total of 16 inputs at mixdown.

9 Aux 1 Pre/Post switching

You'd expect just one monitor and one effects send, but Lite's Aux 1 can be switched Pre for foldback monitors or Post to use an extra effect send at mixdown.

2 PFL Solo System

Among small mixers, only Lite lets you monitor individual input channels. You can even monitor the stereo inputs in stereo so that you don't have to rely on a potentially misleading mono sum solo.

3 Fader Zero dB where it should be

On Spirit consoles, the "0dB" point is further round the fader's travel than the standard half-way mark. That way you get more fader resolution where you really need it for smooth, precise control instead of the annoying leaps in level that happen with even small movements. That's because other faders just don't have enough resolution in the right place.



10 Long Travel Switches

You can see instantly whether any switch is "on" or "off".

11 Very Compact

Lite measures just 300mm wide by 266mm deep, and is only 38mm high.

12 Designed & Built in Britain

Ok, so Graham found 12 reasons for owning a Folio Lite. Accept no substitutes.

Spirit by Soundcraft
Harman International Industries Ltd.,
Cranborne Industrial Estate, Cranborne Road,
Potters Bar, Herts EN6 3JN, England.
Tel: +44 (0)707 665000
Fax: +44 (0)707 669482

For free brochures and a booklet written by pro-audio journalist Paul White on how to get the best from your mixer in a variety of situations simply complete and return the coupon to the address below.

I am interested in: Folio Lite colour brochure

Information on other Spirit consoles: Live Recording Full Range

Name _____

Address _____

Post Code _____

What application will you use your mixer for? _____

What instrument(s) do you play? _____

What magazines do you read? _____

Please tick here if you do not want to be kept on Spirit's mailing list



Jands Electronics Pty Ltd.
578 Princes Highway,
St. Peters, N.S.W. 2044, Australia
Phone: (02) 516 3622, Fax: (02) 517 1045

Write in Reader Service number: 119



ALWAYS full of NEWS

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ABOUT this ISSUE

We have changed layout, the sections have been broken down, except for Lighting. This is because new products were turning up everywhere, and technology is converging anyway.

We've introduced some new things and would like to hear from you **very quickly** as to what you think. The BUYERS GUIDE returns, you asked for it, here it is!

Send us your comments, or call. **Phone** 02 876-3530, **fax** 876-5715, **write:** PO Box 439, Epping 2121 NSW Australia, or **email:** julius@next.com.au

3rd Proud Year of Independent Publication.

There are 497,564 other magazines out there. **But only one like this!**

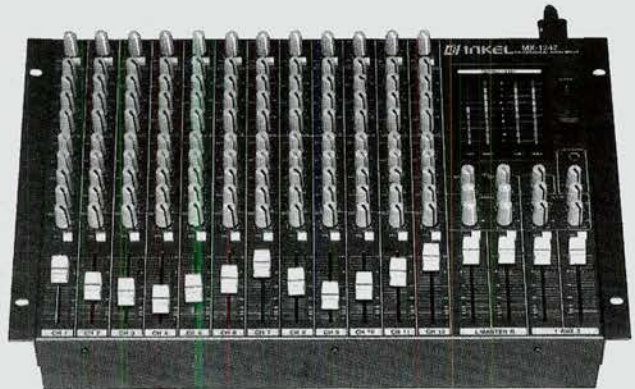
INKEL PA

Koreas No. 1 Pro Audio Manufacturer for more than a decade.

MIX-1242
The PROFESSIONAL AUDIO MIXER

Features include:

- 12 channel inputs
- 4 channel outputs
- 4 band tone controls
- PFL on each input
- Effect send / return
- Output monitoring
- Gain control and peak indicator
- Phantom Power (DC - +48)



MAGNA SYSTEMS distribute a wide range of INKEL Contracting and PA Audio Products.



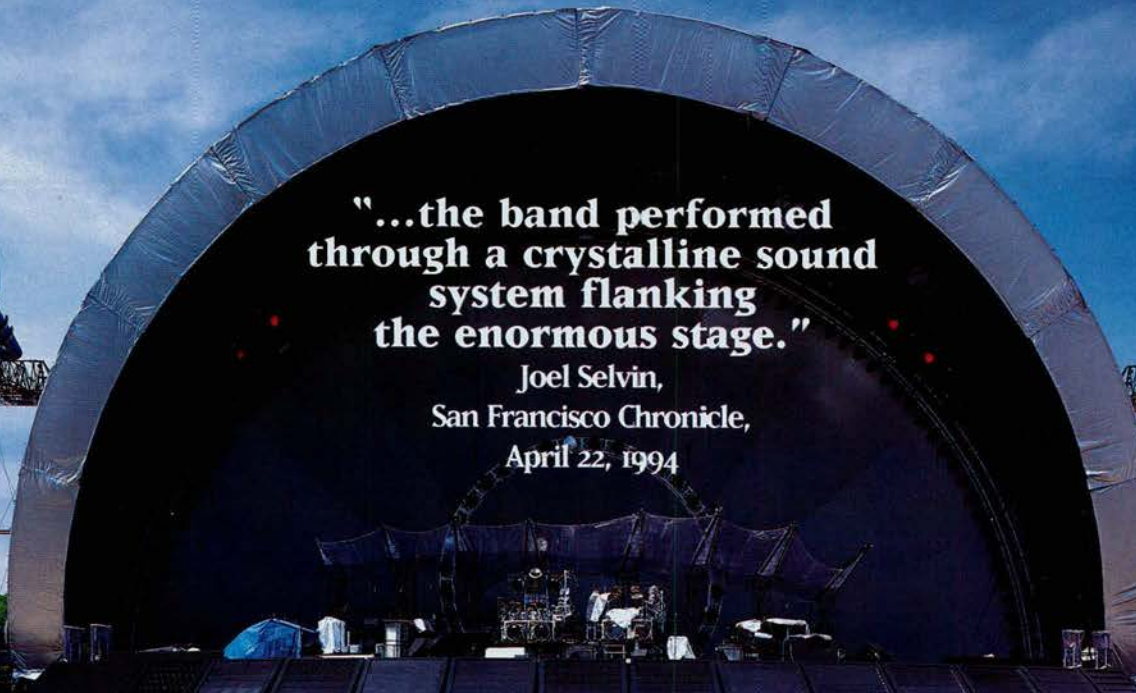
For more information on the INKEL range of products, contact your nearest INKEL dealer or phone:

MAGNA
SYSTEMS AND
ENGINEERING

Australia:
Magna Systems & Engineering
A trading division of Silklore P/L. ACN 004 004 997
7 Gibbes Street, Chatswood, NSW 2067.
Phone: (02) 417 1111 Fax: (02) 417 2394

New Zealand:
Magna Techtronics (NZ) Ltd.
Level 4, 210 Khyber Pass,
Newmarket, Auckland.
Phone: (09) 307 3901 Fax: (09) 307 3832

Write in Reader Service number: 143



"...the band performed through a crystalline sound system flanking the enormous stage."

Joel Selvin,
San Francisco Chronicle,
April 22, 1994



**The Pink Floyd
1994 World Tour**

"...and the monstrous speaker system produced the delicate sound of Pink Floyd's thunderous music nearly to perfection."

Gerald Defilth,
Pittsburgh Tribune Review,
June 1, 1994

"...a quadraphonic sound system that was near perfection."

Craig Marine,
San Francisco Examiner,
April 22, 1994

"...a quadraphonic sound system that rendered the 27-year-old band's music with fidelity previously unheard in stadiums.."

Sam Wood,
Philadelphia Enquirer,
June 3, 1994

Photos: On May 8, 1994, Pink Floyd played to a sold-out audience of nearly 50,000 at Vanderbilt Stadium, Nashville, TN. With Britannia Row & Turbosound, there wasn't a bad seat in the house.

Exclusively Turbosound.

"...pristine high-fidelity sound..."

Jim DeRogatis, Chicago Sun-Times,
July 14, 1994

Turbosound
Once Heard, Never Forgotten.

Turbosound Ltd., is represented exclusively in Australia by:

ATT Audio Controls Pty Ltd 439 Gaffney Street, Pascoe Vale Vic. 3044. Phone: (03) 379 1511 Fax: (03) 379 9081

Turbosound wishes to express its sincere thanks to Pink Floyd, Robbie Williams & Steve O'Rourke. Floodlight is manufactured under licence from Funktion One FUNKTION ONE

"Production ruled the performance, and the sound quality was nothing short of amazing. When Tim Renwick strummed his acoustic guitar to start 'Wish You Were Here', the strings snapped crisply and clearly, as if he was sitting in his living room in front of the fire."

Joel Selvin,
San Francisco Chronicle,
April 22, 1994

"...The sound may have been the true star of the show, however... No rock band can match Pink Floyd when it comes to making a stadium show come off sounding as if it's being held in your living room."

Michael Norman,
Cleveland Plain Dealer,
May 27, 1994

The quadraphonic reinforcement system for Pink Floyd's worldwide 'The Division Bell' tour consists exclusively of Turbosound Flashlight and Floodlight enclosure, loudspeaker management systems, ESS-Turbosound amplifier racks, rigging and cabling.

Connections

MARCH 1995. Number 21

Trash Culture

BOB STAYS HOME

The only drawback of the Ministry Tour was the very notable absence of the most infamous roadie in the cosmos - BOB. Also missing were Bob's toys, especially lacking was Al Jorgensen's Bob-crafted mic stand comprised entirely of mammal skulls. Due to quarantine hassles and the absence of Bob as maintenance controller the demon stand was left back at the compound.

Bob is apparently off the tour due to a family illness, but should be back for the Japanese leg of the tour. But, you know, a tour's never the same without Bob. The guy's so cool that even the Red Hot Chili Peppers find time out from their rigorous tour schedule to bring him gifts.

Last American tour the Pepper's tour van seemed to run over a deer. Not wanting to litter the roadsides of America, Flea and the boys whacked the corpse into a body bag and drove down to Bob's place, swiftly disposing of it in his backyard. So he could 'knock himself out'.

Reason being that Bob specialises in hunting down, skinning and placing the bones of various critters in his private boiling vat, using the product as raw material for various projects - including Al's brand new fence around the compound (Jorg's home, studio and general centre of chaos) in Texas, made entirely of animal bones. Someone get the boy an Ed Gein bio please! -Natalie Apostolou

• *Big Day Out. More culture: P14*

TOUR DATES
New listing - Page 31

BEAST PREPS

Disney stage show set for Princess in July

BY CATRIONA FORCER

Disney's 'Beauty & The Beast' is the sensation of the US stage, breaking Broadway's all time box office record against giants like Phantom of the Opera and Miss Saigon.

Producers Kevin Jacobsen and Michael Edgley have secured the rights to present Disney's "Beauty & The Beast" in Australia - the first production outside of North

America opens in Melbourne at the Princess Theatre on July 8th.

The show comes to Australia complete with spectacular production numbers, a Vari*Lite rig, elaborate Tony Award-winning costumes (the hundreds of costumes and prosthetics cost more than the stage sets), the original

Academy Award-winning music and amazing effects that have never been seen in live theatre before. These include the Enchantress's fireball, the human candelabra and many others which have been designed by the incomparable illusionist who has created many of the amazing effects for magicians like David Copperfield.

THEATRE

Production manager for the show is Garry McQuinn who states that most of the production will be done out of Melbourne. In fact it seems that the locals are showing Disney a trick or two...

Jands Production Services are front runners for lights & sound.

• Full story: page 38

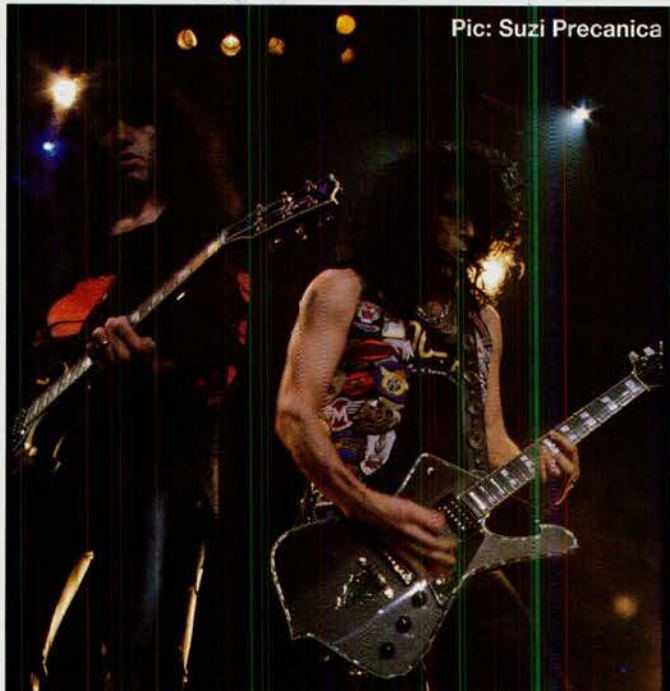
Shock Hit #1

Finding a niche that turns a part time business into an empire is every entrepreneur's dream. Shock Records, now rated as the 7th largest record company in Australia, have just carved a couple more notches into the pole, with Offspring's SMASH hitting #1 on album charts in late February.

Shock were also the first Australian company to exhibit in their own right at MIDEM, where their booth featured pictures of the staff with the notation "If we're not here, we're in the aisles". The firm achieved prominence there, away from the EMA/Austrade sponsored record company 'group' exhibit.

The company also plan to exhibit at MIDEM ASIA this year, have recently launched a dance music label, and also distribute material the majors pass on. What does 'indy' mean anyway? -JG

KISS: the MEAN business machine



Pic: Suzi Precanica

SMART BUSINESS

By Julius Grafton

Been a long time since I saw a show this big with such a small international crew, and it possibly strengthens the argument that large visiting crews can be cut.

Kiss are the band who Spinal Tap parodied, so when the giant Sphinx with Intellabeams for eyes is revealed you just know the band will come out of the mouth, along with a pile of laser beams. Dry ice smoke dribbles out of the nose.

The stage set has been seen everywhere else in the world, but not here, so the band raided the depths of the warehouse and put it on a slow boat to Australia. A different set went to Japan by Sea. Kiss last

>> Go to page 44

Quake nearly kills Kiss set: P 20

MOVED

AMBER QLD

New address: 10/220 Boundary street, Spring Hill 4000. Call 07 831-8444, fax: 07 831-8455.

BYTECRAFT QLD

New address: 30 Jeays street, Bowen Hills 4005. Ph 07 252-5988, fax 07 252-2411.

TCP (Sydney) move

Total Concept Productions, better known as TCP are now at: 34-36 Adderley st east, Silverwater 2141. Call (02) 648-3444, fax (02) 648-3900.

SOUNDWORKS W.A.

Gino Lombardi and team are now at 300 Newcastle street, Northbridge 6003. Call (09) 227-1399, fax (09) 271-5611.

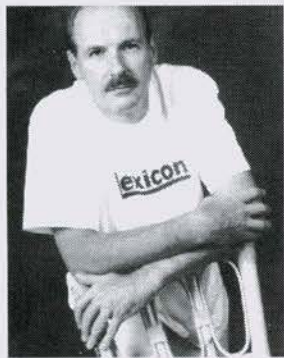
Digital Sound Sys.

The Auckland co have moved to 2/20 Gillies ave, Newmarket, call (09) 520-0399.

PEOPLE

• **Peter Strohkorb** joins Sony Australia (Sydney) as technical support engineer - pro audio. He has sold his audio business, and assists Sony customers.

• **Don Dowling** (below) has joined audio equipment distributors, Studio Connections Australia, establishing a Sydney office. MD David Sloss said the Melbourne firm has a solid customer base in NSW, with the Lexicon Opus installed at George Petterson advertising, Stellar Sound, and additional Euphonix consoles delivered to Channel 7. Dowling brings experience from retail through broadcast and studios. *Contact (02) 873-3994, (03) 723-4300.*



MUSHROOM ON THE I'NET

Distribution Experiment ... or new frontier?

The Internet is growing at a staggering speed, so it's an obvious medium on which to promote your wares. From April, Mushroom will introduce a new music sampling service on NEXT ONLINE, the new Internet service provided by the publisher of Rolling Stone Australia.

NEXT is a dial in service, but it is also accessible from anywhere within the internet. This means a user in Finland, tipped off as to NEXT (and there are a huge number of 'Hot Site' guides and directories) will zoom on down for a look. We know this is true, because Connections has a home page and files at NEXT ONLINE, and before we launched with this very issue, we had over 500 ac-



cesses from the net. People use it.

The Mushroom service will provide excerpts from an artists releases, along with graphics and data on the act. The music comes as either a mono (AU) or Stereo (MPEG) file, a 0.37 second mono file took us 3.00 minutes to download via our 14.4baud modem. It will get faster.

Warner also have a location inside NEXT ONLINE, they have Kulcha there now. To go to these, access the 'Music' area from NEXT ONLINE, next.com.au. Seeking Net services? NEXT (02) 310-1425.

Do You Sell To Aussie Youth?

Your turnover is under threat

The virtual reality war means the entertainment dollar, commonly held to be the engine room of economic growth, is hotly coveted. Music store proprietors across the land may be looking across empty counters and promoters at smaller houses this winter as Australia's youth forsake things musical for things interactive - at a series of huge indoor theme parks set to suck in the leisure dollar.

Channel Nine and Village Roadshow start the attack any minute now with a 35,000 square foot facility in Sydney's Hurstville. Game giants Sega have a consortium going called Sega Ozisoft, they had a team scouting Entech last October for concepts, they too have plans for a chain of indoor theme parks valued at \$250m.

Secrecy surrounds these projects, with the two camps looking to establish solid support fast and first, with a chain of national sites. Contractors working on the projects have vowed silence as to content and technologies.

•By Julius Grafton

CHARGES DISMISSED

A saga that started with the theft of 53,000 CD's from Warner Music's warehouse in 1992, has ground to a halt with charges of receiving stolen property against Shock Records director Frank Falvo thrown out.

Falvo faced a committal hearing on February 22, where Victorian Police alleged his firm had dealt in stolen Prince CD's. Shock had purchased stock from a credible source, and had assisted police with enquiries in 1993. Then in 1994 charges were laid.

According to counsel for Falvo, the magistrate ordered the Victorian Police to pay costs, estimated at \$30,000.

Other charges are outstanding with unrelated parties, none deal with the breakin. It is unknown if Warner launched an internal investigation after the breakin.



BANDTALK

NATALIE, OUR BAND EXPERT SAYS: *The Tristan Chord* have been seducing Sydney's inner city enclaves over the past few years with their deliciously hypnotic sound scapes and intense stage presence. Since releasing their ep *Freefall* through MDS late last year they have amassed a slavishly devoted following and increasing interest from record companies. As their profile increases so does the momentum of their natural evolution to guitar-pop wet dream fodder super stardom.

THE EDITOR SAYS: These guys look like they could use a good feed and a haircut.

MEMBERS/INSTRUMENTS-- Peter- Guitar (Fenders + Rickenbackers) both guitar players use vox AC30 amps.

Chris; drums (Pearl kit w/ Zildjian cymbals)

Kimberly- Bass (Music man Stingray + Yorkville Rig)

FAV MUSIC STORE-Jackson's rare guitars.

FAV AUDIO CO-Cannon Sound



Timber is a theme at Gotham Audio

THEATRE BITS

• The STC's overseas success continues with the opening of the phenomenally successful *Two Weeks With the Queen* in Johannesburg on April 20, with a subsequent season in Pretoria starting on May 26.

Meanwhile, *Two Weeks* is still playing in the National Theatre's production which toured Britain for five months before opening at London's Southbank.

• Sir Andrew Lloyd Webber has persuaded business groups and local authorities in two European cities to spend £40 million on two new theatres that are purpose-built for his own productions.

The 1,600-seat theatres, in Frankfurt and Basle, will be built to take his productions of *Sunset Boulevard* and *The Phantom Of The Opera*.

Former Sydney-sider James Thane, head of theatre at the Really Useful Group, said the two ventures broke new ground in the export of theatre.

• John Frost is staging a production of *Grease* at the new 1550 seat Kad Theatre in Chiang Mai, northern Thailand. A Thai businessman met Frost when he staged *South Pacific* in Hong Kong, and invited him to stage a show at the new theatre. A company of 30 Australians have left, the show opens there on April 6th.

GOTHAM CARVES NICHE

■ *Need serenity and SSL? Eilliards rule the bush!*

If you have the desire to track or mix in Utopia, then I'm sure I've just visited the place.

Set in the foothills, approximately forty minutes due north of Melbourne I found Gotham Audio. Six acres of tranquil bushland, harmonious architecture, state-of-the-art recording facilities and unobtrusive staff, have made Gotham

Audio one of the most prestigious project studios in Australia.

But Gotham Audio is not just a studio; it is a way of life, for as long as you require the facilities to produce your final product. Artists, producers and engineers can work (twenty-four hours a day if they like) and live together in privacy and an environment of their own design, changing or enhancing the character of the studio.

A short stroll up a bush track

brings you to the residential complex which contains a five bedroom homestead with two bathrooms, formal and casual dining areas, games room with the classic billiard table, open fire places, central heating and air conditioning and a large well appointed

kitchen. You may or may not choose to use the kitchen because any meals

you require can be delivered from any of the Australian and International restaurants nearby. And just think for that extra bit of exercise or de-stressing you can go for a swim in the private courtyarded pool. Oh! I didn't mention that the feel of this house is unreal because it is built totally of recycled materials. From the convict stamped bricks to the leadlight doors, the inspiration oozing from

(cont. page 13)



By CAROLINE GRAFTON

Barratt Fights Cancer

Leading LD struck down - but not out

Rumours of his demise are premature, Lighting Designer Roger Barratt is fighting leukaemia and expects to win. The usually very healthy forty-something Roger fell ill in Noosa mid January and was immediately hospitalised.

Chemotherapy has taken his hair but not his spirit, "I'm stubborn as a bull, and I will win this"

he told me from his bed in the cancer ward at Sydney's St. Vincents Hospital. According to Roger, the indicators are favourable and he has a fighting chance.

"Hospital is a bit like doing a show", Roger explained "I'm on a schedule here and I just do as they tell me". Get well soon, Roger; we need you. -Julius Grafton.

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Phones: (02) 876-3530

Faxes: (02) 876-5715

International:

call +61-2-876-3530

fax +61-2-876-5715

E-Mail: Julius@Next.com.au

Compuserve: 100242,3662

Editor: Julius Grafton

Lighting Editor: Catriona Forcer

Studio Editor: Caroline Grafton

Culture, Clubs, Self Doubt:

Natalie Apostolou

From Detroit: Buck Freeman

Photographer: Suzi Precanica

Contributing writers:

Duncan Fry, Howard Jones,

'The Idiot', Michael Orland, Peter

Kemp, John Robinson

and YOU, dear reader!

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PC or Mac word processing disk file.

Photograph prints, B&W or colour, &

transparencies (preferred) also wel-

comed. Stamped self addressed en-

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When Greg Mackie made his first CR-1604 over 5 years ago he was designing his mixers primarily for the average musician recording and rehearsing in the spare room or the garage. He wanted to produce ultra high quality mixers that could interface with the new digital technology and not cost the earth.

But because Greg was so meticulous and innovative, his mixers are now being used on radio and TV stations, film score productions, Top 10 selling albums, everywhere that digital sound quality is demanded.

Australians have certainly taken to Mackie mixers. Tim Farriss from INXS, Joe Camilleri, mega-keyboardist/composer David Hirschfelder, Chong Lim, producer Charles Fisher, Simon Leadley, Richard Pleasance, the soundtrack for 'Priscilla, Queen of the Desert', are just a few examples.

Mackie mixers are a serious tool for professionals. A tool that's getting used day-in day-out for major projects.

More than ever before, Mackie's commitment to high value-for-money stands alone. Drum roll. The legend continues.



MACKIE MIXER PRICES REDUCED

(strong australian \$ + nice mackie people = mackie prices reduced)



reduced from \$1049 rrp
MS1202 \$949 RRP



Don't think of the 12-channel MicroSeries 1202 as an under-\$1000 mixer.

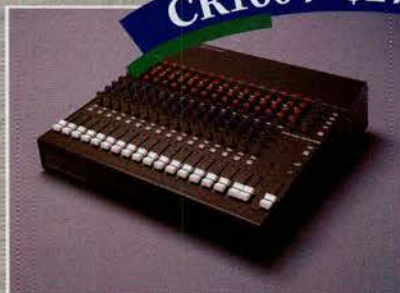
Think of it as a little chunk of our popular 8-Bus Series Studio/PA consoles. The MS1202 uses the same discrete, low noise/high headroom mic preamp design and forgiving UnityPlus gain structure, the same sealed potentiometers, and impact-eating horizontal fibreglass circuit board configura-

tion, and it has the same better-than-CD dynamic range, incredibly low noise and sheer musicality that have won our larger mixers a place in major recording and broadcast facilities worldwide.

At \$949, every audio professional should have a MS1202 in their bag of tricks. For submixing, for extra high quality mic preamps, for impedance and level shifting.

In less than four years, the CR-1604 has become an industry standard for compact 16-channel mixers. It is hands down the mixer of choice for major touring groups and studio musicians. And it has garnered over forty glowing reviews from around the world. For the broadcast, sound contracting and recording studio

reduced from \$2995 rrp
CR1604 \$2795 RRP



user, the CR-1604 offers features,

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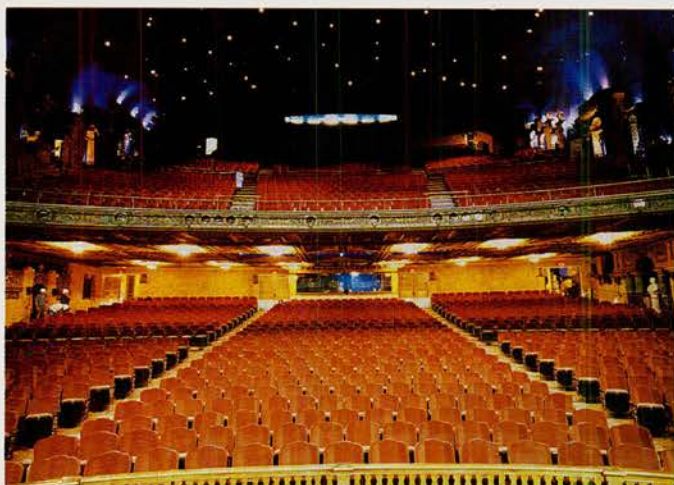
So if you currently have

more inputs than channels to put them in, pop into your local Mackie retailer and get your hands on the mixer that packs the most inputs and features into the least space ever. Or call us directly for 'obsessively-detailed' colour brochures on the Mackie range of mixers.

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OPEN FOR BUSINESS



Sydney's Capitol theatre, once a derelict, water-logged ruin in the dead quarter of town, has re-emerged in all its original splendour. Meticulous research has resurrected in a theatre which looks almost as it did when it first opened in 1928. Additions include lavish foyers and a vastly increased stage, 17m deep, will enable even the most spectacular productions to be staged.

The auditorium has the same twinkling 'stars' on the vaulted

ceiling and the 'paving stone' carpet, copied from scraps of the original. Other improvements include an expanded orchestra pit, which with the removal of the front rows of seats can accommodate up to 110 musicians, a vastly improved backstage area including dressing rooms, a wardrobe room, green room and a full size rehearsal room.

A full technical review of the Capitol will appear in a future issue.

•Cat Forcer

THEATRE

SMPTE & AES TOGETHER?

The prospect of a combined audio film and video convention after this year has strengthened, with speculation that the Australian chapters of AES (Audio Engineering Society) and SMPTE (Society of Motion Picture and Television Engineers) are talking.

It appears the two organisations see strength in unity, having until now operated separate conven-

tions and trade shows.

While trade visitors and convention goers always give both organisations the thumbs up, exhibitors of equipment for the broadcast and film industries have called for rationalisation, with both organisations staging their events separately this year in Sydney.

A combined event would be better for visitors and exhibitors. -JG

600 STATIONS, 1 SWITCH

ABC Radio run 6 networks to the nation - from one room. We detail the world's largest network

You probably know the ABC has the largest radio network in the free world, but I bet you didn't know how it works. The ABC Centre in Ultimo, Sydney, generates program for six separate national networks which transmit via satellite through around 600 transmitters spread across the land.

The new Southbank facility in Melbourne contributes too - and it backs up the Sydney control room- which is called Radio Master Control.

Radio Master Control is deep in the heart of the Ultimo building, and it routes this diverse array of radio material to the nation, via the most direct route- which is direct to the roof of the building. Up there a 100w transmitter uplinks the material to the Optus B1 satellite, via a 7m dish. B1 then squirts the signal back, its national footprint provides four time zone signals.

Ever wondered how a national radio station transmits to multiple time zones? Quite simple if the station is based in the earliest time zone, which is of course on the east end of the country. The D-Card system at the ABC is a giant networked hard disk recording/retrieval system which we should detail in a future issue. It is also the means of delaying the program feeds for the later time zones.

What goes live to air in Sydney is also transmitted to -for example- Perth, but three hours later.

'Localisation' is the backbone of the ABC, an important way of providing local content to national programs, so news and select grabs can be slotted into the delayed feed at the destination.



RADIO

BY JULIUS GRAFTON

We thought the technology interesting, so Peter Kepreotes, possibly the most polite person on earth,

talked us through it. He is the ABC's broadcast communications development manager, and comes from a satellite background.

This is the realm the ABC work in, the B1 satellite has fifteen distinct channels permanently allocated to ABC radio. B1 has multiple transponders, ABC Radio uses part of one transponder. They don't wholly rely on the thing either, they have either ISDN Microlinks between sites, or in the case of the major capital cities, a fibre optic data link running up to 2Mbps. Peter explained stereo audio of acceptable quality can be run down an ISDN link due to Musicam compression techniques resident in the RE Codec units used by ABC.

Codecs are digital encoders/decoders needed to transfer audio down a digital line. They convert analogue audio to digital, then compress the signal at a ratio of about 12:1, apply digital 'masking' to remove some of the redundant audio information, and then interface with the ISDN line. You have another Codec at the other

(continued page 12)



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Crown introduces digital system control that's affordable for even small installations.

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bringing digital control

to churches and boardrooms. With its intuitive operation, no other system is as easy to use as the IQ System.

A different approach to digitally controlled sound.

The IQ System is unlike existing digital systems which are expensive, difficult to learn and susceptible to total system failure. Designed around highly sophisticated yet relatively inexpensive components, the IQ System is easy to use and highly



Entry-level IQ System: MS/PC-DOS-compatible computer, Crown Com-Tech 200, MPX-6, loud-speaker and microphones. Approximate retail price of this system is \$3,700. Prices may vary depending on specific components and configuration.

reliable. IQ components are designed to keep the system operating even if a host computer should fail.

Because of its outstanding flexibility, the IQ System may be tailored exactly to installation needs, while leaving further expansion possibilities wide open.

As additional components are introduced in the near future, you'll discover there's no more flexible or cost-efficient system than Crown IQ.

MPX-6. Expanding signal routing and control capabilities.

The MPX-6 is one of two IQ System multiplexers which make sophisticated control and routing of signals easy and affordable. Digitally controlled by a host computer or IQ COM-Q tape controller, an MPX-6 can route and switch six mic/line inputs, two summed outputs and two independent bussing outputs. Any level of any input can be routed to any output with a controllable range of 120 dB in 1/2 dB increments. This ability to route both incoming and outgoing signals provides unsurpassed

system flexibility. But that's not all.

Multiple MPX-6 units can be combined to create 6x4, 12x2, 24x8, etc., mixing capabilities. In fact, you can control up to 24,000 inputs with just one IQ System!

The MPX-6 may also be used remotely in distributed intelligent control systems to reduce long microphone line runs.

With the addition of the MPX-6, the ability to route signals in complex routines is not only possible, but easy.

SMX-6. Sensing multiplexer.

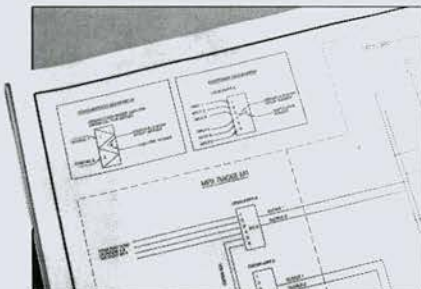
The SMX-6 builds upon the MPX-6 with additional sensing and configuration capabilities. It contains six mic/line inputs and four outputs like the MPX-6, but adds the capability of monitoring the pre-attenuated levels coming into the inputs.

Unlike other devices such as automatic mic mixers, control and con-



The Crown MPX-6 multiplexer and SMX-6 sensing multiplexer provide unsurpassed mixing and routing/switching capabilities.

figuration of the SMX-6 are achieved with downloadable software. These downloadable instructions, called Algo™ Packs, allow the contractor to program specific capabilities into the processor of the "intelligent" SMX-6. Automatic mic mixing, video-follow-audio switching and impedance and equipment checking are just a few of the many possibilities. It may also be combined with the MPX-6 for in-

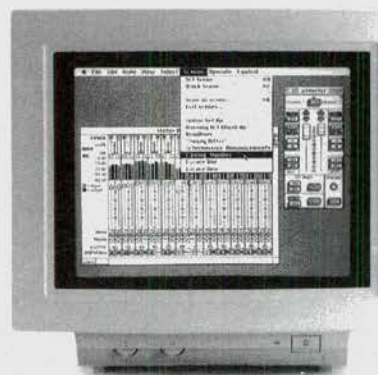


The IQ System gives you the flexibility to design systems that match the exact needs of an installation—no matter how large or small.

system so versatile, it can the smallest church budget.



IQ System software is available for both MS/PC-DOS-compatible and Apple Macintosh systems. Designed to be user-friendly and intuitive, the



system eliminates the need for the extensive training required by other systems. The basic IQ software is available without charge with any IQ component.

creased mixing and routing capabilities at a reasonable cost.

PA-422 compatible.

Both IQ System multiplexers provide an option for being driven directly by any computer with RS422 or RS232 communication. An additional multiplexer option provides compatibility with the PA-422 standard and allows multiple PA-422 devices to be independently driven from each multiplexer. This permits control of compatible digital delay units, parametrics, third-octave equalizers and more.

No-Fee IQ System software.

Unlike other systems, the basic IQ System software is provided without charge with any IQ component. Software is available for both MS/PC-DOS-compatible and Apple Macintosh computers. Because of the many possible applications for these components, command codes and protocols are included so specific routines may be programmed by the contractor or system user.

IQ COM-Q. Complex system control made simple.

The IQ COM-Q component makes system configuration as simple as playing a cassette tape. Designed to digitally record the commands from an IQ host computer onto almost any tape medium (cassette, open reel, DAT), the COM-Q permits the system to be configured by simply playing back the appropriately recorded tape for a desired system change. This not only



The IQ COM-Q makes sound system configuration as simple as playing back a cassette tape.

allows for quick and simple changes, it permits those without extensive training to control the system. Contractors can pre-program configurations in-house for an installation which then requires only an IQ COM-Q and interface-capable component to run the system. With multitrack recording, the COM-Q can initiate complex audio and system commands

useful in applications such as theater productions and crowd movement at theme parks.

Installation ideas.

The design flexibility and sophistication of the IQ System may make you rethink how you design installations. Here are just a few of the many possible applications.

Small Conference Center

The IQ System multiplexers can decentralize audio system installations, reducing wire and associated costs, without decentralizing control. For example, one multiplexer and one Com-Tech® can be used to control the signal routing for two banquet rooms.

Surveillance/Security

The IQ System can be used to create a surveillance system in high-security areas. With strategically placed microphones and Crown multiplexers, audio or video-follow-audio monitoring is easily achieved.

For more information on the IQ System and system components,

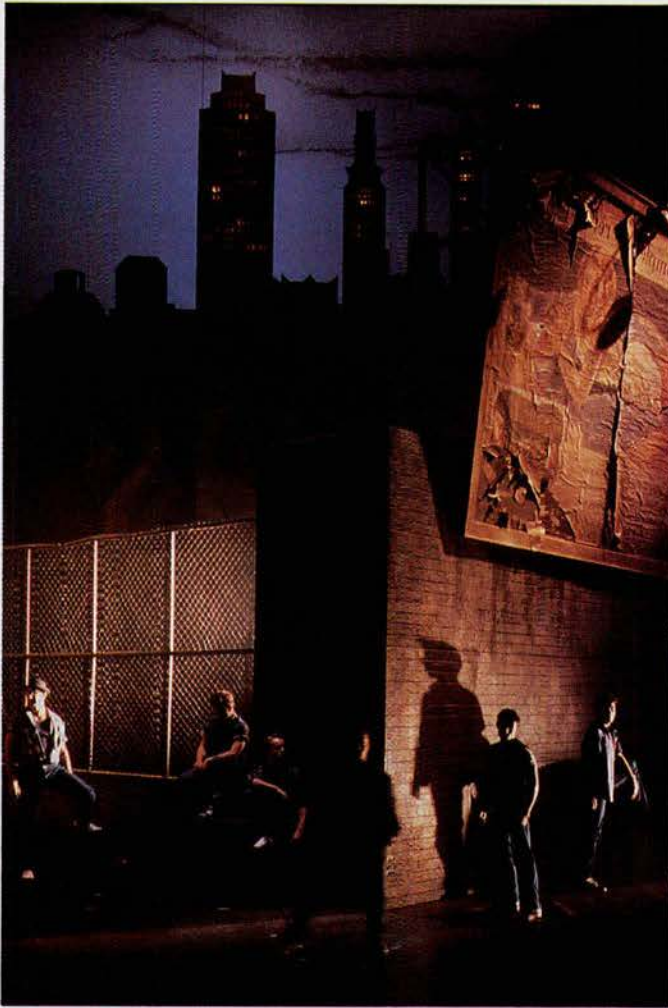


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Westside goes to Sydney

Streetscape set and flown highway feature in new design of classic show

When West Side Story, produced by the Victoria State Opera and International Management Group, ran in Melbourne last year the reviews were unanimously enthusiastic. Sydney audiences now have the opportunity to enjoy the show which opened at the Capitol Theatre on February 25th.

The set, which looks at a streetscape view of New York, was designed by UK designer John Gunter. The main features of the set are the two large 32ft moving towers which are four storey high tenement buildings complete with windows, ladders, balconies and so forth. A skyline of New York is used as a backdrop. Placed on top of these elements are the various rooms and other scenes in which the musical takes place.

"So from one tower the bridal shop appears and from another Maria's bedroom appears," explained Sue Hunt, Technical Director. "Through the New York

city skyline Doc's Drugstore appears. These things are moved mechanically throughout the night to make different scenes. The towers pivot to different positions on the stage."

The big fight scene in the show happens under a full, three dimensional

THEATRE

highway which fly's in and is operated

manually. A computer controls the other automation during the show. Other scenic elements are manually placed during the show such as trucks and billboards.

"It's a wonderful picture and a very different design from what has been done with West Side Story before," said Sue.

Set up for the show takes seven days but at least six of those days are 24 hours. Lighting design is by Nigel Levings, Costume Design by Roger Kirk and Sound Design by John Scandrett of System Sound.

•Catriona Forcer

Gotham *from page 7*

every crevice of the homestead is tangible. Various activities including golf, horse riding, shopping centres and cinemas are available close at hand.

Anyway, if I've sold you on the house you should see the studio. The control room is the centre-piece with various 'smart' acoustic treatments including a giant Schroeder diffuser on the back wall. The control room is surrounded, in a fan shape by three recording rooms. The main studio is constructed of mud brick with Murray pine floors and the bushland views through the floor-to-ceiling windows are magnificent and allow a vast amount of natural light which in an otherwise generally nocturnal type of industry is a pleasant change. On either side of the main room are two smaller rooms with good visual contact to the control room. Dead, controlled and live acoustic environments are all available.

Gothams dates back fifteen years when it was constructed by builder John Megson, his brother, and John French. It was then known as 'Fast Forward'. Gotham

then passed into other hands, it was finally purchased by John Farnham and Ross Fraser in 1990. Because of the fine workmanship originally undertaken in the recording areas, John and Ross didn't need to address the structure itself but some very heavy control room overhauling was required. So when all was completed the studio reopened under the management of Metropolis Audio for the next two years. Then in 1993, Tom Kehoe was invited to take over Gotham's management and there you have the status.

With an 87% occupancy rate, facility diversification and utilisation, Gotham Audio and Gotham Records are enjoying their piece of the Australian and International recording industry pie.

Primary Equipment: SSL E-Series console with G Series Computer, Sony PCM 3348 Digital Recorder; Otari MTR90 II 24 Track Analogue; Studer 1/2" Stereo.

Gotham Audio is situated at 219 Wonga Road Warranwood, Victoria Australia 3134. Call +61 - 3 - 879 9400 Facsimile: 876 4253.

ABC Radio works the numbers

(from page 9)

end of the chain, in this case at the transmitter site.

ABC Radio's signal is converted to digital audio early in the chain, in fact at Southbank it is digital from the word go, via a new system called D-Radio which we will profile at another time. From Ultimo, where Triple J originates, the signal from the studio is sent to Master Control where it is split into feeds for the four time zones. At Master Control a controller type person monitors all the program feeds and also the signal as it is sent upstairs to the satellite. If dead air is detected, a hooter and a flashing light indicate which feed has gone 'quiet'.

This hub of the whole system also works backwards, with feeds coming into Ultimo from the regions and cities. A row of 'tardis' voice booths stretches away from the control room, a remote interview can be set up here with the control room controller switching the link through. It's very labour effective.

In the case of JJJ, the four zones

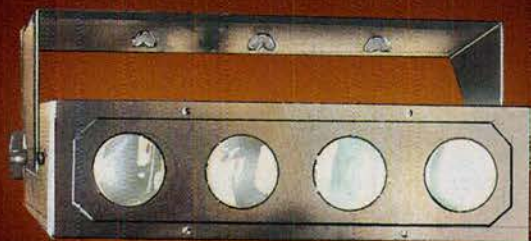
broadcast simultaneously up to the satellite. It receives and retransmits the signal at a couple of watts in the ultra high frequency Ku band - between 12.25 and 12.75GHz. That's around the frequency spectrum of light.

Down in the regions, (and the ABC added seventeen regions to JJJ recently) the local transmitter sits on a hill and receives the satellite feed. It can, by remote control, tune into a different zone feed too, if necessary. These regional transmitters vary in output from as little as 400w (in Alice Springs) to much as 125,000w (125kW) at Bendigo.

ABC is a technology exporter, D-Card has already found homes overseas, and D-Radio will feature at the NAB exhibition next month in the USA. Clearly the unique demands of broadcasting nationally to a land mass like ours, while maintaining 'localisation' has produced solutions that couldn't be purchased off the shelf.

Good on you Auntie! •

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JANET TOURS LOCAL VIDEO VENDOR

• *Resolution impresses, Big Picture Co take system on Asian leg of tour.*

BY JULIUS GRAFTON.

The star of Janet Jackson's show are three sets of four Pioneer video cubes, which sit in front of her band riser, which show what can be done with creative minds. A troupe of obligatory rubber-limbed dancers may impress with moves that are the culmination of a career, but somehow the silhouette dancers behind them on video during one song left a stronger impression.

The video system for Janet Jackson's tour made up four of a likely sixty tonnes of production, and was hired locally from Big Picture Productions. A year back we detailed their work on Farnham's national tour, now they've overcome perception hurdles to crack the international tour business too.

"It grows" said Joe Bonanno, frantically pumping memories on his mobile phone at 5.45pm before a show. The previous night the video crew took the standby camera outside to the carpark for some footage of the manic audience reaction as the star departs, and the results so impressed the client that tonight three cameras are requested. Joe is looking for an extra camera operator at no notice, his partner Dennis Murphy is on his way to see artist manager Roger Davies with the quote. A kit of red-heads to light the car park, and sun-guns for the cameras is also needed. And some time to prepare. And some extra tape stock. And to eat dinner.....

Aside from the very featured video cubes, the Big Picture system had 12' x 16' screens hung each side of stage for artist enlargement. Audiences appreciate this in large venues, where binoculars are offered for hire! The Picture Pair decided to get more brightness up there by using two Sony 1271 video projectors 'twinning' onto each screen. The result impressed Ms. Jackson's

management, who also were agog at the difference between the Pioneer cubes and the Electrosonic ones used previously in the USA.

With great colour saturation and brightness, and indeed they are regularly blasted with stage lighting, the groups of four Pioneer cubes sit together with the barest edge frame getting in the way. They were dressed with a scalloped trim to sit on stage as a feature.

Material run on the cubes came from several video laser disk players. These were fired by a software program called See Through. This in turn takes SMPTE time code from the stage, so that the song sequences and the video

are linked.

The video screens mostly ran artist shots from the two pit camera's, operated by Joe and Dennis, and one camera at the mix position with a thumping big 66:1 lens. A tour rigger operated this camera. Some camera grabs were routed through the cubes, the Video Director is a Jackson veteran, George Elizondo. He is assisted by another two touring video crew, Joe and Dennis had Ray O'Sullivan on tour as their third man.

Aside from the live show video aspects, the performance is archived to tape, and this produces variables too, because this same day a promotions person from the USA is sitting at the edit suite position, located in the back hall, editing down snippets for promo use elsewhere in the world. Tape security is paramount, stress the Big Picture team, to the extent they run their own cables even when house video cables could be used.

The Big Picture team will be in Asia as you read this, the tour has five dates scheduled through Manilla, Singapore and Bangkok.

• *The Big Picture (02) 972-2222.*



Ticket Agency War Hots Up

By Julius Grafton & Natalie Apostolou

The Pearl Jam ticket scalper fracas proved to be little more than a media beatup, when promoter Michael Chugg proved to a JJJ reporter -using sales reports- that large one-off ticket sales to scalpers generally didn't occur.

However, it did focus attention on ticket agency operation, and the NSW agency Ticketek were extremely sensitive. So sensitive in fact, that we were told by a spokesperson in no uncertain terms who the ultimate proprietor is (Kerry Packer) and what would happen to us if we wrote anything at all about them.

FirstCall are a challenge to Ticketek in NSW, who until now have enjoyed a monopoly. FirstCall offer an exclusive on Cam-Mac shows like Miss Saigon and Phantom. FirstCall numbers Cameron Mackintosh and Greater Union amongst shareholders, and cinema box offices at Greater Union sites also sell for FirstCall. They use BOCS software, and say they sold 2,500 tickets in the first hour Miss

Saigon was on sale.

Small niche operators abound in all states, NSW has Hip Tix tucked away in Newtown, Caro Llewellyn says they exclusively handle the Byron Bay festival and many smaller venues.

Adelaide's CIB Network Ticketing agency compete with BASS in South Australia, and claim they had pleasure in selling 45% of the Big Day Out tickets sold there.

In Melbourne BASS state they offload up to 5 million tickets a year, and their sales record was established with Madonna tickets.

Ticketworld operate in Brisbane, with services available from Myer stores and outlets.

Compiling this story it was impossible to determine the actual ticket charge levied on each sale, nor was it possible to glean the fee charged to promoters. Additionally, the policies re. rates of interest on funds held in trust for promoters by agencies was not something we could establish. •



Producer Richard Lush

(top, right) with Sydney

PIX

Recording engineer Melissa

Van-Twest (below, left) with

Studio owner Peter Dawkins

Digidesign guru David Corazza.



THE BIG DAY OUT

SYDNEY 26TH JANUARY. REVIEWED BY NATALIE APOSTOLOU

Recollections get hazy and the memories tend to merge into one momentous wave where the reality of it all was maybe lost in the undertow. But you get that. Anyway- the masses collectively bought the ticket and took the ride- experiencing what is known as The Big Day Out.

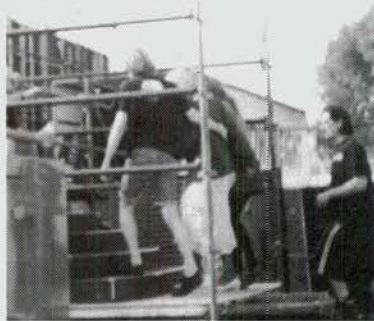
I sauntered into the Showground still reeling from the events only hours before which culminated in an early morning post Cult, gods of rock schmooze. Predictably, I was hung over and stuck somewhere between denial and shock (did I really tell Billy Duffy he was a 'cock rocker extraordinaire'?)

The crowds were swarming around Stage 1&2, revelling in the post-euphoric rush of witnessing Tim Rogers and the boys blitz magically through their set with their last-of-the-great guitar heroes chutzpah that even works in the light of day. Meanwhile backstage, the Cult trailer itself was something out of a Burroughs in Tangier travelogue, adorned in Persian carpet with matching lounge, Che Guevara staring down from the wall, and filled with the aromas of the orient and some incense for ambience- the perfect make shift abode for the swaggering love gods of rock. The very

CULTURE

Zen Monsieur Astbury stormed in and out with an aura of focused intensity. (*I get like that! -Ed*)

Behind stage 2, a port-a-loo suddenly exploded open and promptly



Courtney Love assisted onto stage

shut, then exploded again followed by a stiletto and its accompanying dishevelled owner which goes by the name of Courtney Love.

I had been hounding their tour manager Colin Lee, for a clue to her antics, in order to unravel the mystery. Is it a consummate performance by an attention seeking drama queen? Colin could only offer that she is indeed out there and what you see is what you get.

The soiree behind the scenes was building up. The strapping young things from Silverchair

were signing autographs and looking bored even when talking, to industry honchos while their mothers (who looked like a Noelene Donaher look-a-like convention) were getting more of a buzz. Kim Salmon walked around like a modest legend, Simon Day was trying hard to prove he still existed, the Marquis de Rothschild was in his lecherous element, while Bobby Gillespie kept wafting around looking dreadfully gone.....

Back in the real world, the swelling masses were mounting their energies for Offspring, who I was prepared to pass off as some corporate rock dream in indie clothing. But these kids are the real thing.

Watching from the backstage mosh exit point area, I saw the looks of sheer youthful ecstasy from the faces of the next generation. But hey- it was just a show.

Dusk was hovering as Primal Scream took to the stage and for a few numbers really seemed like a progressive squelch more than anything to get your rocks off to. The non-talking, semi-catatonic Bobby Gillespie, finally got his Exile On Mainstreet parody thing happening and the show was brill, offering a funky alternative to the other main acts. The band aes-

thetically seemed like an Aaron Spelling sitcom house band.

The glorious summer day had dissipated into an Indian summer night and who better to usher in the dark but rocks most treasured wolfchild- Ian Astbury. The Cult, were welcomed like cherished Messiahs and converted any of the strayed flock immediately- it was all in the projection. Astbury, Duffy and co strutted onto the stage with an almost regal presence, effectively erasing any of their rock pig past and inviting praise for being not only a rarity in endurance alone, but maintaining cred. Their set was the highlight of the BDO. Or maybe they tied with the most sublimely evil mothers from hell- Ministry.

This set cannot really be evocatively expressed in words it was an experience akin to hovering on the edge of a great abyss, but being held back from falling just when your adrenalin is seering. Al Jorgensen is that edge, he is grand central in his self-made station of maddened and vengeful chaos.

But, I digress, during the Ministry set I turned to see the space in front of a vacant stage 2, littered with revellers dancing alone in their own pockets of bliss, soaking it all in- maybe that was the highlight. See you next time!

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Lost looking for Multimedia

Music is one thing, Multi-Media is quite another, as Julius Grafton discovered at MusiTech '95 tradeshow in Melbourne.

The term MultiMedia can only be a packaging term that refers to computers loaded with CD-ROM drives, and CD-ROM software. I'm sure of this after pondering for over a year.

Melbourne Town Hall is a dreary old place, the MusiTech experiment saw a group of music retailers take space across the end days of the Melbourne Music Festival. Primary reason? To sell equipment, which is why anyone buys space at a trade show. Multimedia -as advertised-there was not, vendors of Multimedia supply cards, drives and CD-ROMS and being part of the 'computer' retail industry work on shrinking margins against a sea of competition. They didn't buy space there.

MusiTech was born from the Guitar Show, held in previous years in the same place at the same time. Looking to develop on a MIDI show theme trialed by some retailers, MusiTech failed in broad terms, although it did attract an audience who did buy some product.

Music retail is a tough business, although a little less turbulent than selling computers. Selling a guitar to a kid influenced by the runaway overnight fame of SilverChair is an

easy proposition, selling a MIDI product is about ten times more labour intensive, and it demands the attention of a specialist.

"I'm sick of the mentality of the boss" one such MIDI salesman told me at MusiTech, "my style is to find out what people need and sell it to them only when they are ready. I am under pressure to shift boxes, but I still outsell anyone else in the store".

Distributors look to the evolving music technology markets with anxiety, as relatively few retailers have the willingness to properly sell keyboard and MIDI products by way of employing specialists and training them in product support, "It's kind of like, at the start, here you go, and if I don't like what you do I'll let you know", said a salesperson of his employer.

MusiTech drew about eight committed Melbourne retailers, who all demonstrated they are across MIDI and digital music products. They were well supported, if not outnumbered by staff sent by distributors such as Roland, Yamaha, Electric Factory, Music Link and others. The show proved reaching a broad music equipment buying market is a big challenge.

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ARTKIND 006

Events

AES NEXT MONTH

Audio types everywhere are expected in Sydney for the regional AES trade show and convention. White Papers, Workshops, Product Shootouts, Social Events, The AES Awards Dinner and more many internationals will attend.

Keynote guest is non other than Rupert Neve, and the tradeshow side will feature virtually every major audio distributor in Australia, numbering almost 60 at presstime. Always a good meet!

Details- call (03) 525-6755.

VMA '95 for MAY

The Venue Management Association numbers as members virtually every major venue in the country and a bunch of Asian venues as well. They hold a trade show and convention each year, this year it is scheduled for Sydney, May 14 through 16th.

Exhibitors in the past have been primarily suppliers of services such as catering, but the opportunity is there for the technical supply industry to get involved. *Call Belinda Loveridge, (03) 976-3245.*

• **Musik Messe**, Frankfurt Mar 8 - 12 HUGE Euro music show

• **China Lighting Fair**, Guangzhou, Mar 16-19

• **USITT Stage Expo**, Las Vegas, Mar 21-23

• **SIB**, Rimini, March 26 - 29 The Worlds Greatest Disco Show

• **REPLitech International**, Vienna, April 4 - 6.

• **NAB International**, Las Vegas April 9-13

• **AES 5th Australian**, Sydney Apr 26 - 28 (Local Audio Industry on show)

• **Broadcast Technology Indonesia**, Jakarta, April 26 - 28th.

• **NSCA**, Indianapolis USA, April 30 - May 2 Contracting audio and systems.

• **VMA '95**. Venue Managers Association, conference & trade show, Sydney May 14 - 16.

• **IMM Music Industry Convention** Singapore May 17-20

• **MIDEM Asia**, Hong Kong, May 23 - 25. Recording Industry.

• **Software, Multimedia expo**, Melb. June 2-4

• **REPLitech International**, Santa

Clara USA. June 13 - 15.

• **Audio Technology '95**, London June 21-23. Formerly the APRS recording technology tradeshow

• **SMPTE 1995**, Sydney July 3 - 6. TV and Broadcast technology

• **Pro Audio & Light Asia**, Singapore. July 12-14 Asia's Regional show.

• **NAMM Summer Session**, Nashville July 15-16

• **Pro Audio, Light & Music China 95**, Beijing May 9-12 Fledgling Chinese show

• **PLASA**, London, Sept 10 -13 UK/Euro Lighting & Pro Audio

• **AIMS '95**, Sydney September 30 - Oct 3. Aussie music industry main show, held with ARIA.

• **AES 99th**, New York, October 5th - 8th. Audio Industry, large.

• **REPLitech Asia**, Singapore, Oct 24th -26th.

• **LDI Miami USA** Nov 18 - 20 1995. World's biggest lighting show.

1996
ENTECH 1996: April 24-26, 1996. Aussie Entertainment Technology show, Sydney.

NSCA Indianapolis, April 30, - May 2, 1996.

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Write in Reader Service number: 104

MGM GRAND CRASH TO EARTH

Just weeks after re-launching the US charter airline, MGM Grand Air pulled the plug. The three DC-8 luxury craft (*right*) have been sold to drag racer, Conrad Kalitta.

These were refitted at a reputed megabuck each late last year, and feature just 70 seats. A bedroom and bar set the tone, and the craft were the vessel of choice for major rock artists touring the planet. MGM Grand DC-8's have been seen here with the likes of Madonna and Guns & Roses paying astronomical charter rates for some schedule flexibility and privacy.

The DC-8 is a stage one aircraft, so noise restrictions can be limiting, and range is restricted to about 9 hours. Locally, Kerry

Packer has a USA registered DC-8 parked on-call at Mascot.

At this time the ex-MGM DC-8's may be chartered from Kalitta.



**NEW
PRODUCTS:
Start Pg 33**

**LIGHTING:
Starts Pg 74**

**LETTERS:
Page 50**



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EXCELLENCE IN AUDIO ENGINEERING

Write in Reader Service number: 160

ROGER DAVIES, ARTIST MANAGER

Interviewed by Connections editor, Julius Grafton.

Who is the most successful Australian in the global music business? It may come as a surprise to some, but a 42 year old Australian working out of L.A. and London is personal manager to Janet Jackson, Tina Turner, Joe Cocker, Tony Joe White and Sade.

I had a chance meeting with the charismatic manager backstage at a Janet Jackson show. I'd been hauled before him to clarify my purpose in being there, a journalist free zone. As a trade magazine writer doing a story on the video I was viewed as a benign threat, but still, the rules were, no insight on Janet, no questions about the Jackson family, no speculation. In a room full of Janet's people, Roger Davies exuded quiet authority. "I'd like to interview you" I said, "people are curious". He looks up deadpan, "I don't do interviews".

Two days later he calls out of the blue, "I'm being pursued by all kinds of media wanting stories. I've checked you out, and I'll talk to you". A hasty trip into the city, the valet sniffs at the unwashed Nissan as I throw him a buck to park it. Janet Jackson fans sit in the deep chairs in the foyer, trying to look incognito with their Janet caps on. School girls walk hesitatingly to reception to lodge bunches of flowers for Janet.

On the 17th level Roger is at home in a suite where the phone rings non-stop and messages are shoved under the door. He calls a halt to the phone, and we sit facing each other in the afternoon light. His manner is charming and his physical presence relaxed. It's clear before we even start that personal style is a big factor in his success.

"With Sherbet I was like the sixth member of the band. I loved the image thing, everything was stylised". Before managing this landmark Australian band, Roger was a frustrated bass player, road manager, then office boy for Chuggie and Gudinski at Consolidated Rock. This is around 1972.

Sherbet broke all the conventions and pioneered much that is great today. They were first to use stage lighting, toured places rock and pop had never been before, started their own record company, and dominated the music industry through the 1970's. Then they went overseas.

"We went overseas in '76, and were lucky to have a hit with 'Howzat' - but it never quite happened. We'd have to keep coming back home to make money, it got to New Years Eve '79 and we sat down and decided to have a break. I thought I'd have a shot at going overseas, I had no idea what I would do, I packed everything, and took my secretary to Los Angeles. I figured I had enough money to last a

year, I was 26, I didn't want to wait".

Talking about it now, there is a notion that perhaps Roger was afraid he would fail in the eyes of some in Australia. "When I left I never thought I'd come back. When I first went overseas and would come back I'd feel some animosity, maybe some managers thought I was going to rip off their acts and take them overseas.... steal them!"

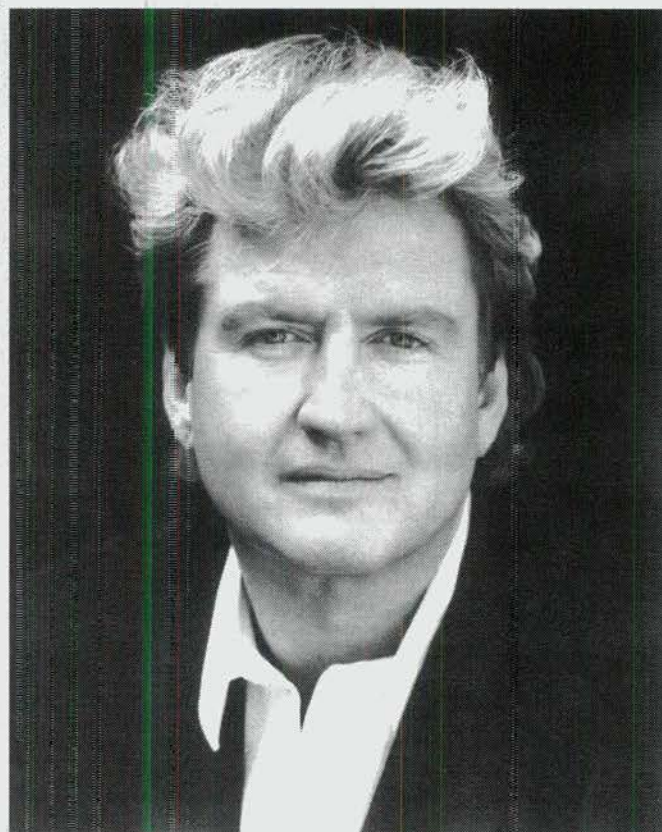
Far from it, because after a slow start managing Stave Kipner and still trying to break Sherbet in the USA -now named 'Highway'- Roger got a call from Lee Cramer, who managed Olivia Newton-John. He was also her boyfriend at the time, "he said they'd like me to come and work for them. I was working out of the front room of my

flat with my girlfriend making clothes to support us! I didn't have a green card but Lee said I could have an office and a secretary and I could keep trying to get my projects going too. He said they couldn't pay me any money! But they would pet on for my green card."

"I'd been there a month and Olivia and Lee split on a personal level, which meant he was still the manager but I became the meat in the sandwich - he'd tell me to tell her things, the messenger boy. I hardly knew her and a month later I'm sitting on a plane next to her going to Europe to record Xanadu with Jeff Lynn in Germany."

"During the first year with Olivia and Lee we were doing this TV show called Hollywood Nights, and Tina Turner made a cameo appearance. Lee was going out with one of Tina's dancers at the time, and she said 'you should meet Tina, she's looking for a manager' - she came in and Lee said OK, we will manage her."

These were awkward days, Lee and Olivia were not talking. One gets the impression Roger became a support system for Olivia. "I was almost controlling her life, it was so one-on-one Olivia would ring up and say 'what will I wear?'"



But the tension between Olivia and Lee came to head one day and she fired Lee. "She asked me to manage her, which I'd virtually been doing". Roger took over Tina Turner too, paying

Roger was a frustrated bass player, road manager, then office boy for Chuggie and Gudinski at Consolidated Rock.

Lee an override for a couple of years. Did Lee threaten to break Roger's legs? "Not quite" he answers, the impression being RD manages situations as well as artists.

"At that stage Steve Kipner had written a song called 'Physical' which I wanted Tina to record but she didn't like it. I said to Olivia 'you should record this' and she said 'really?'"

"She cut her hair, it was a very daring and experimental time for her. We went to England and she was really freaked out on the plane. I felt convinced it was a great record, she said to me that if it didn't work and she got a lot of bad publicity she would never go back to America. It was the biggest record she ever had."

"We had a really good run for seven years." The business relationship came to an end. "Olivia got married and pregnant, and Tina's career took off - we did Private Dancer which

(continued on page 41)

They Came, They Conventioned. (They Rented Our Women!)



Bob King offered us this photo, we are really disgusted that a rock band should exploit women with a blatant rent-a-babe flesh-fest!

Kiss almost had their tour of Japan cancelled due to the Kobe earthquake, saved by a slight delay in berthing the container ship carrying their set. "If it had of landed, the set would have been destroyed- you saw the dock area on TV, containers were flung everywhere" said Tour and Production Manager Tim Rozner.

Sitting bedside in a Chicago Hospital where a niece was seriously ill, Rozner saw the quake on CNN and spent several days on the pay phone in the hall trying to determine the tours fate. The container ship diverted to Taiwan, and the set unloaded there. Rozner then hastily arranged to airlift everything down to Tokyo, a \$30,000 impost.

Japan was thus toured by Kiss, who then airlifted six tonnes of stage gear to Perth, itself the single most expensive air freight sector they've encountered. Australia was the trial ground for the Kiss convention concept, where the band staged a display in Hilton Hotel Ballrooms on their day off between shows. The result saw 1,000 fans pay \$105 each in Sydney to see the displays, buy

the merchandise and meet the band, who did a two hour 'unplugged' concert.

Already touring the smallest ratio of crew to production we've seen in many a year, Kiss ran the conventions themselves, the band do not have a manager. Rozner states the organisation happens, and the convention relied on a sub-contracted AV and staging company across the land. "The Hilton put us onto them, I wasn't happy. They sub-contracted the PA in each place, and we caught one of their crew trying to video bootleg the concert".

*See KISS live production review this issue.



Kiss tour manager Tim Rozner, local production manager Wane 'Swampy' Jarvis (rear), and a security guy puts the squeeze on Frontier tour manager Nick Pitts.

Tripp Directory hits 360 pages

Without doubt the most comprehensive guide to the people within the music business is AMID - the Australasian Music Industry Directory. The January edition hits the desk bigger than ever before, loaded with listings of everyone from record companies to venues, promoters to retailers, producers to publicists, and beyond. It's a great resource tool for anyone trying to make an impact on the music

industry in the region, and a handy phone book for people who think they already know their way around.

In our view the thing is indispensable, and worth the \$15 it costs. You can get it at music industry association offices across Australia, or call Immedia in Sydney who can ship it to you for \$20. Call them with your credit card details, (02) 212-6677.

EMAIL ADDRESSES

We will be publishing EMAIL addresses in the first Connections YEARBOOK, scheduled for release later this year. Meantime, we have assembled some interesting general access sites for you.

First, if you are an audio professional, you should pay to join **Compuserve** as well as the Internet. Why? The Forums. These are well organised and administered sites where you can do some serious research and talk to like minded people. Like us!

Once in Compuserve go to: MIDI B vendors forum and find Live Sound, it's great! Also, MIDI A has vendors like Turtle Beach, JL Cooper, Opcode and others. There is MIDI C, MIDI D and MIDI/MUSIC Plus, where you can find the HUGE Recording and Audio forum.

Call Fujitsu Computer in your state, they handle Compuserve. You need a Mac or PC, and a modem.

Connections ON LINE

Officially online on March 1, our new site at NEXT ONLINE has had 560 visits at presstime! If you would like to read selected articles from within (and ones that didn't make it) we have at least 25 text articles on-line, PLUS our Classifieds, Buyers Guide and much more.

You can access our site for free from anywhere in the Net, just open location: <http://www.next.com.au> and go to magazines. There you will see Connections, go inside!

Naturally since we operate on the NEXT ONLINE server we recommend them if you need to buy Internet access for your Mac or PC. Just get a modem, and call NEXT. They will charge you \$30 for a startup disk of software, and then you pay either \$25/month or \$50/month depending on access time required. With this you get an EMAIL address, and support. Call NEXT, (02) 310-1425.

♦♦♦♦

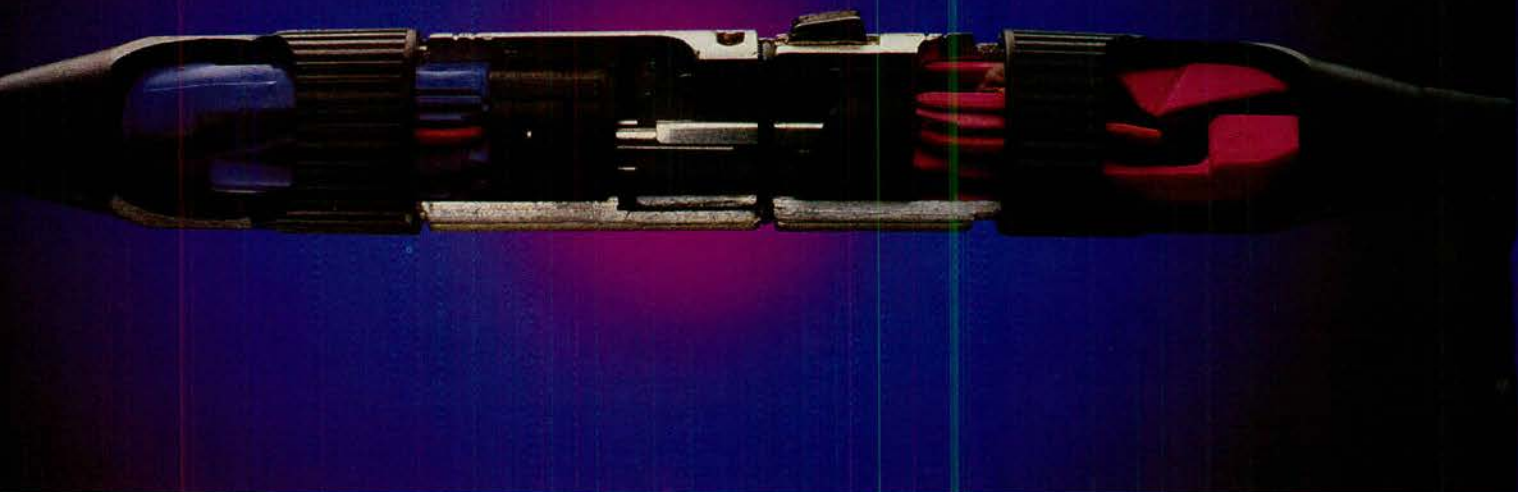
Meanwhile, culture writer Natalie has assembled some Internet sites for your purusal:

• **ADDICTED TO NOISE**
<http://www.addict.com/ATN/>

• Welcome to the tres lonely losers paradisial, if-you-aint-got-it-and never-will, flaut-zone. Drift through the **VIRTUAL MEET MARKET** (<http://www.com:1111>) and savour those that the world forgot.

• **AXCESS MAG**
<http://www.internex.net/axcess>

• **Mushroom records**; from April 1st-
<http://www.next.com.au/mr/> Enjoy!



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LBC&M ALC 0096

Write in Reader Service number: 101

MAJOR HOTEL EXPLOSION

Contractors and consultants signing deals now

Over the rest of the 1990's, construction in the major resort and hotel sector is set to grow rapidly, according to industry publication, Major Building Projects.

"Developers are back in the market, engaging consultants" says Allison McIvor, editor of the publication. "This quiet revolution is not yet evident in official statistics, but will be by next year when construction on some of these new projects gets under way".

Some projects under way are those prepared in the '80's but abandoned during the recession. They include Park Hills Sunshine Resort in FNQ, and Port Geographe Marina Resort at Busselton in Western Australia. The rest are new projects, which include two planned by Hudson Conway, the Crown Towers and the Imperial Resort Hotel.

In Cairns work on the 300 room Treetops Resort commenced in January and is to be completed by mid-1996. A consortium lead by Concrete Constructions plan a 300 room, five star hotel next to the Cairns Convention Centre. The Reef Casino Hotel, to be completed this year, will add 130 rooms to the market.

Western Australia is benefiting from its prox-

imity to Southeast Asia. Singaporean developers are behind the proposed 300 room Amuret Hotel in Perth, and the extensions underway at the Joondalup Country Club, the Perth Townhouse Travelodge, and the Perth Park Royal. Major resorts are planned south of Perth, in growing tourist areas such as Busselton and Margaret River.

Other states will benefit too, from the awakening of interest in the tourist sector. In Sydney, for example, the confidence being generated by the Olympic Games already appears to be reflected in plans for several new hotels. These include a 260 room hotel planned by Multiplex Constructions in Kings Cross, and a 250 room hotel to be built on the World Square site by Malaysian investors.

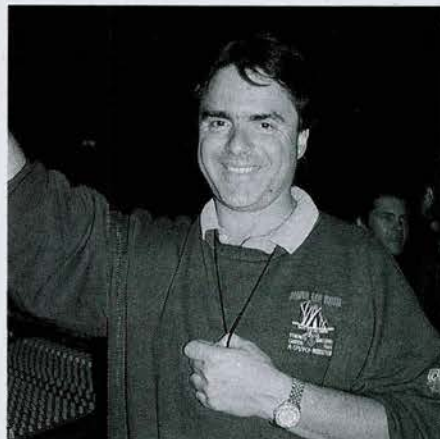
International visitors numbered 1.5 million in 1986, 2.2 million in 1990, and are estimated at 3.4 million last year. This figure is projected to reach 6 million by the year 2000.

•Thanks to Major building Projects magazine for the data in this article. Contact them, (03) 819-9463.

Contracting becomes a monthly inclusion in Connections, send us your submissions!

CONTRACTING

Making a bad situation work



Greg Price tells....

Cult sound engineer Greg Price is the man who put the *front* in front of house. 1995 is Greg's eighteenth year in the music business and last year Mix magazine nominated him as engineer of the year in the Live Sound Reinforcement category. It's no wonder that the Cult reviews in Australia raved about the good sound quality.

"Last year I worked with Poison, The Dooby Brothers, Foreigner and others I can't remember!" said Greg. "My first tour with The Cult was their Sonic Temple tour followed by the Ceremony tour. The Cult are a pretty straight forward band to mix for although Ian's vocals can be difficult at times because of the type of vocal texture that he's got.

"Jands have provided the audio equipment for the Big Day Out as well as the club shows. I have my own little package of equipment that I bring - my own effects rack, gates and limiters. I'm using Aphex products including a new Aphex rack with eleven pieces, I'm using their gate and I'm using some expressers, a compeller and a couple of dominators. I'm also using Behringer compressors. In the effects rack I have two TC2290's, two Harmoniser 3500's, a Lexicon 300 and a Lexicon PCM70. I use a Meyer CP10 Parametric equaliser for left and right equalisation. There are some other little tricks in there. I use a DBX boom box and some oral exciting on certain things.

"I'm using Yamaha products to mix with. I'll really mix on anything. There are some desks that are better than others, but at this stage in my career I find it a challenge to take a desk that maybe nobody wants and make it sound brilliant. It's an extra incentive that keeps me on my toes. It's real easy to get a top of the line desk, whack it up and may be it sounds good. Products these days are really phenomenal and you don't have to settle for second best when you come to Australia."

I asked Greg about the brilliant reviews his
(continued over)

Take me to your rack



No, it's not a UFO. It's just the best rack accessory ever! It's the Furman **PL-PLUS Power Conditioner & Light Module**.

Take it to the top of your rack and let its ten switched outlets provide clean power to your equipment while its twin slide-out, swiveling lamps discreetly illuminate their controls on stages, in studios and in dark places everywhere. The PL-PLUS protects your delicate electronic equipment from spikes, surges and RFI with well designed and highly effective clamping and filtering circuitry. Its lamps feature smooth-sliding Delrin bushings, easy to replace 7-watt bulbs, and a dimmer control. And in between, there's a handy LED line voltage meter that reads from 180 to 256 volts. The PL-PLUS is rated at 15 amps and comes with a heavy duty 10 foot cord.

For even better protection, take one of Furman's other power conditioners to your rack. Like the **AR-230** and **AR-PRO AC Line Voltage Regulators**, which correct high or low voltages and let you plug in to clean power, anywhere in the world. Also check out the new **PS-8 Power Sequencer**, a rack-mount conditioner that powers your equipment up and down in a 3-step delayed sequence, avoiding large inrush currents that can trip breakers and loud pops that can blow speakers.

FURMAN

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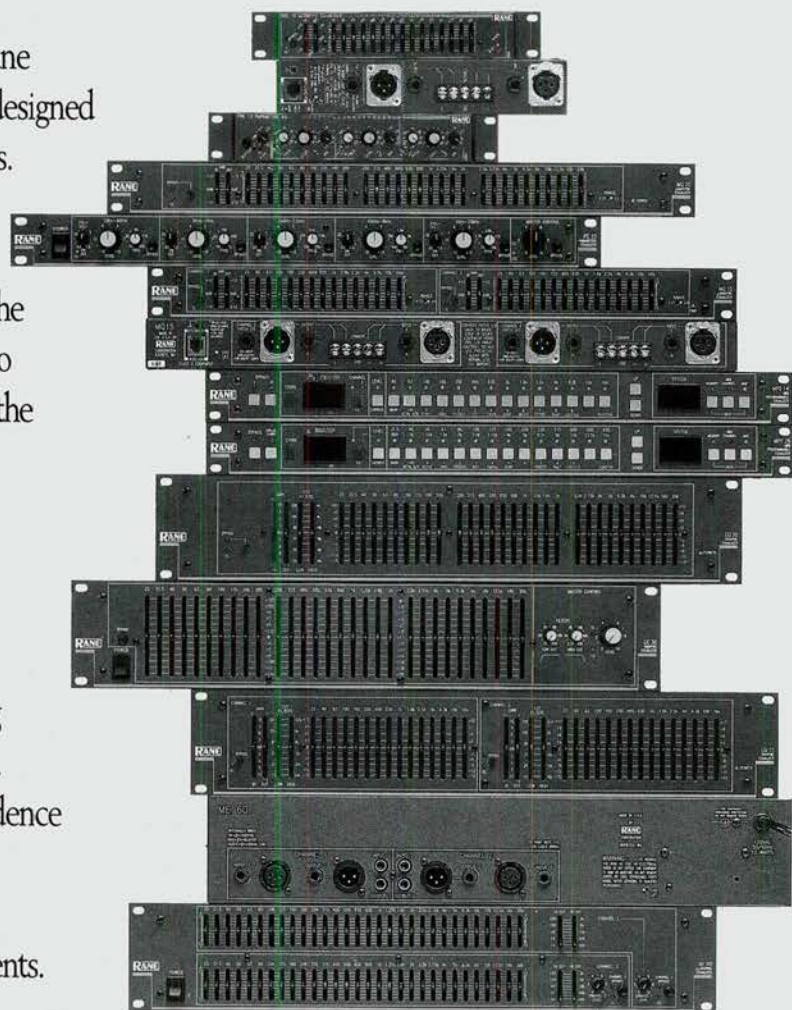
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Write in Reader Service number: 117

PURITY BY DESIGN
RANE

French Company Open Capitol

The Sydney Festival & Carnivale, in association with The Capitol Theatre, chose the French company Philippe Decouflé to be the opening act for the newly refurbished Capitol Theatre. Since its creation in 1983 by Philippe

Decouflé, the Compagnie Philippe Decouflé has always striven to concentrate its work in two specific fields: living spectacle and image. In Sydney, the company presented *Petites Pièces montées*.

The company were chosen to perform at the opening and closing ceremonies of the Winter Olympic Games in Albertville in February 1992 and since then their popularity has soared.

Philippe Decouflé is renowned for his use of 'the machinery of theatre' especially wires, pulleys and trapdoors.

"The strings of the theatre and machinery fascinate me," he is quoted as saying. "My main concern in making *Petites Pièces montées* was to bring back trapdoors. Dramatically, I find it interesting to have characters appearing or disappearing through trapdoors. I try to use all three dimensions - lateral, down into the floor and up towards the sky. I like the phantasmagorical, and dream."

Production co-ordinator for the company in Sydney was Pascal Baxter who fortunately speaks flu-

ent French. Pascal is known for his lighting design work with The Aboriginal Dance Theatre

"The Compagnie Philippe Decouflé are a very self contained

THEATRE

company bringing everything they could possibly need with

them," he told me. "They're touring with nine crew, plus Philippe and a general manager, and there are only eleven dancers. Seeing how high-tech the show is, although it uses old theatre stuff, you need that amount of crew. What's really good seeing them work, is that there's less demarcation than you see in Australia. The sound guy couldn't do FOH the first day so he helped put nuts and bolts in the set."

The program lists the company's designers of sets, costumes, lighting and sound ahead of the performers and it is easy to see why. The dancers are provided with a dazzling array of moving canvases. The set conceals many secrets which enable the dancers to dance upside down with the help of a harness; extend their flight and defy gravity with spring-loaded ropes; fall through or rise up through trapdoors in the stage.

Not wanting to be limited by the theatres they play in, the Company travel with their own stage set. The set designer Jean Rabasse has designed for several feature films including *Delicatessen*. The

Make a bad situation work

(Greg Price. from previous page) sound had attracted from the media and he modestly put it down to eighteen years of experience.

"I think if there's any attribute to me and my career, it's making a bad situation phenomenal," he said. "Where a lot of engineers fail, is they try to push in areas where either the equipment is unable to go or the room isn't able to go there. They don't suss the situation, take a quick listen of the room when the band are on stage and make a quick evaluation of the act. That's the whole key to it. You really can't do anything until the room is full of people, the band

are playing and you're in the heat of the battle. A lot of engineers make the mistake of, on the very first song, not really paying attention. So instead of me going wild on the first song, I sit back and see what the room is doing and what the PA is capable of and that's why you end up with a good show."

PA was Meyer MSL3s with 650 sub bass boxes which Greg describes as a good proven product although there are better.

"Again it's what we're provided with and it's my job, as an engineer, to make the band sound as good as possible and not blame the equipment," said Greg. • CF

Mark IV Audio News

NEW PRODUCTS

As of March 1 '95 **DDA Mixing Consoles** will join the product range distributed by Mark IV Audio (Aust) P/L. The full range of both sound reinforcement and recording/broadcast consoles are available.

Mounting Hardware for the **SX100/200's** is now available. There are 3 kits available:

- The **Mb100** eye bolt kit for general hanging duties
- **Mb200** wall mounting brackets and
- **Mb300** arraying kits.

NB: When using Mb300 array kit each SX box must be fitted with a Mb200 mounting bracket.

Midas has released the new **XL200 Mixing Console**, it joins the highly successful XL3 and the new XL4 consoles. Main features of the new XL200 are, 40 Channels, 2 Stereo FX returns, 8 x 8 Matrix, 8 VCA Sub Groups, 2 Stereo Audio Sub Groups, 6 Mono Audio Sub Groups and 6 Blank slots for additional Input Modules.

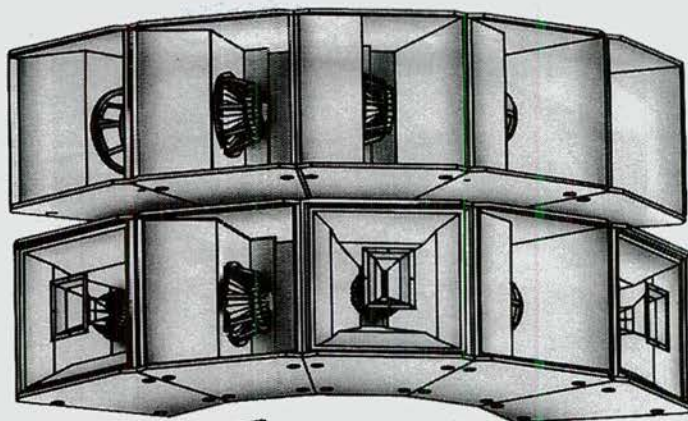
•The **XL200** will be on display at **AES** in April at stands **33 & 34**.

Dynacord has released the new **DSP224 Digital System Controller**.

Consisting of a Stereo 2-way, Mono 3/4 way X-over with Hi & Lo-pass filters, Low-pass Notch Filters, 8 Parametric EQ's, Hi-Shelving Filters, 4 Digital Limiters, Master Delay, Alignment Delays, Phase Switching, Trim Facility, MIDI and a User Assignable Lock out Code. All this plus 24 bit signal processing and 18 bit A/D and D/A conversion. The **DSP224** retails for **\$2550.00**.

For further information and the name of your nearest Mark IV Audio Dealer, please contact:
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Ph: (02) 648 3455 Fax (02) 648 5585.

THE PI MODULAR SERIES™

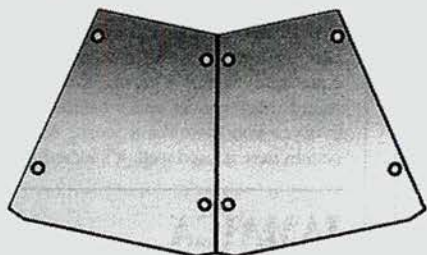


A Winning Combination

The new Electro-Voice PI Modular Series™ is the first group of permanent-installation loudspeaker systems to combine concert-sound performance and quality with the directional control of large-format constant-directivity horns - having it all has never been easier.

Perfect Modularity

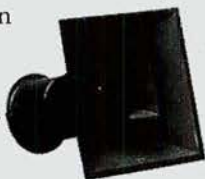
The PI mid-bass/high-frequency and low-frequency modules are designed to adapt readily to circular and spherical arrays. They share a common trapezoidal "footprint". And each module has the same square frontal dimensions - precisely half as tall as our full-range modules. MB and HF horns



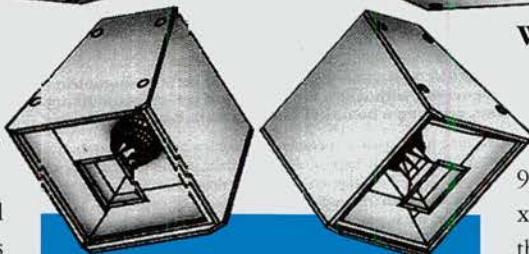
PI modules' common trapezoidal shapes make for perfect physical arrays.

are 90° rotatable, for coverage that is independent of enclosure orientation. Each module has an integral, four-point suspension system.¹ The result? Array design and installation are a snap.

1. Hardware mates with Ancra 42546-10 fitting.
2. Shown without grille.



MH660C MB/HF Component System
MH640C and MH940C also available.



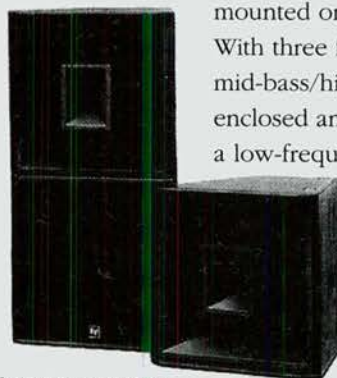
"WHO SAYS,
'YOU CAN'T
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ALL'?"

Superior Directional Control

Unlike any other high-output multiway system, the PI modular mid-bass horns are large enough to maintain directional control down to 500Hz - for high speech intelligibility and musical clarity under difficult acoustic conditions. Other horns are too small to do this job, so the audience suffers!



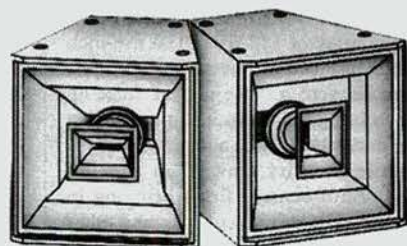
PI115L LF Module²



PI6615 Full-Range Module
PI6415 and PI9415 also available.

Widely Flexible Coverage

The full-range and mid-bass/high-frequency modules are available in three coverage patterns - traditional 90° x 40° and 60° x 40° plus a new 60° x 60° pattern that solves a lot of short-throw vertical coverage problems.



Mid-bass/high-frequency modules feature coaxial horns that can be rotated 90°.

Components Too!

For applications that do not require an enclosure, the MB/HF modules are available as components, perfect complements to arrays using our large Manifold Technology® MH stadium horns.

Unmatched Versatility

The PI Modular Series™ can be stacked, mounted or arrayed to fit your needs. With three full-range modules, three mid-bass/high-frequency modules (in enclosed and component versions) and a low-frequency module, the acoustic possibilities are endless.

You really can have it all.

PI640C MB/HF Module²
PI660C and PI940C also available.

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Unit 24, Block C, Slough Business Park, Slough Avenue, Silverwater NSW 2141. PO Box 427, Rydalmere NSW 2116.

Write in Reader Service number: 128

Decouflé

from previous page

stage set comprises of a base plate, four side gantries, one central gantry positioned on the front of the base plate, one footbridge installed at a height of 3m between the gantries and an acoustic transparent cyclorama 10m high and 14m wide. Also on stage are 3 video monitors.

Underneath the footbridge there is a track which holds the harness' and the two trapdoors are built into the floor. One of the trapdoors has a crash mat beneath it whilst the other has a lift mechanism so the dancers can slowly disappear or 'melt' into the floor.

"The set is very well built and easy to tour," said Pascal. "They wanted a free standing set that wouldn't have the restraints of not having the right rated bars in theatres and things like that. They just use the bars for legs, borders and the lights. It's about 7.5 tonnes of set with 1.2 ton per square metre pressure so we've reinforced under the stage. They have two Litachaine L 104N hoisting motors which they tour with and they are used solely to erect the set."

The company enjoy trying to perfect all the old theatre tricks. Instead of using human counterweights when the dancers are flying, they have weights specific to their individual weights.

An interesting aspect to the show is that Philippe Decouflé likes to incorporate the technicians into the show so it is not unusual to see the riggers in the performance. To him the light, sound and other mechanics of the show are as important as the dance.

The set up took longer than expected due to several problems. Firstly lighting manager Patrice Besombes was not very happy with the lighting equipment supplied to him and he thought it was a shame that such a beautiful theatre had been off loaded with what he described as terrible lighting gear. Another thing that held up the rigging was the cable wheelers for the lighting bars which Pascal said did not work properly. The re-loomng took quite a lot of time.

Patrice was trained as an actor and became a technician 'by default'. He is responsible for the set up of The House Of Dance, a theatre in Lyons, France, which is



Decouflé

uniquely for dance. Although he is not the original lighting designer for the show, Patrice is not short of an idea or two. The show has certain characteristics that he has to stay faithful to but, when he comes into a theatre, he tries to incorporate it into the framework of the set and the look of the show. In a more modern, concrete theatre the set tends to look baroque and a bit crazy but that effect is reversed in the Capitol. In the Capitol what you have on stage looks really modern compared to what you have in the auditorium.

Patrice had send ahead a plot and equipment list and 'although he got the lamps specified, he was disappointed that there was no spare equipment because, once at a venue, he likes to improvise. He described the experience similar to wearing a straight jacket. Patrice was also not impressed by the lighting control console - a Strand GSX.

"He thinks the faders are unreliable, small and sticky," explained Pascal. "The cursor is an old golf ball. He finds he has to do such a procedure to get to a certain circuit if you need to bump it up if you miss a particular cue or take something out. He says it's a good board for a show like Miss Saigon where you want everything in the box and it's just go, go, go but he personally finds it very restrictive. He'd rather have a Strand Gemini."

Patrice was adamant that it was possible to do 'wild, crazy shows' without much sophistication in

(continued over)

Fornicon?

The Sydney Dance Company have begun pre-production on a full length dance work entitled Fornicon. If the title conjures up dubious images in your mind then you're probably right about the content of the work! Apparently it's a celebration of the physical and the sensual and consequently the tickets will probably be in hot demand.

The Sydney Dance Company have commissioned a contemporary rock score from Martin

THEATRE

Arminger and the result will be a mixture of live and playback music. Set design is by Brian Thomson and the costumes by Jennifer Irwin - the same team responsible for the highly successful 1992 production of Synergy which toured internationally.

Lighting designer John Rayment and Director Graeme Murphy have 'embarked on a great

journey investigating the use of light' and, at the time of publication, they are still trying to decide which moving lights to use for the show. John has been talking to the Icon, Vari*lite and Cyberlight camps and he was pleased to hear the Connections Moving Lights guide was about to be published (see page 85)!

"Fornicon is going to have a lot to do with shadow and there'll be a lot of lighting play going on," John told me. "We don't have

a script of course, we create the work from a blank piece of paper. We've done the preliminary design work and now we're going into the creative mode."

The show will open on May 6th at the Opera House Theatre, Sydney before touring to Perth, Adelaide, Melbourne and Canberra. In late August, the show will tour internationally.

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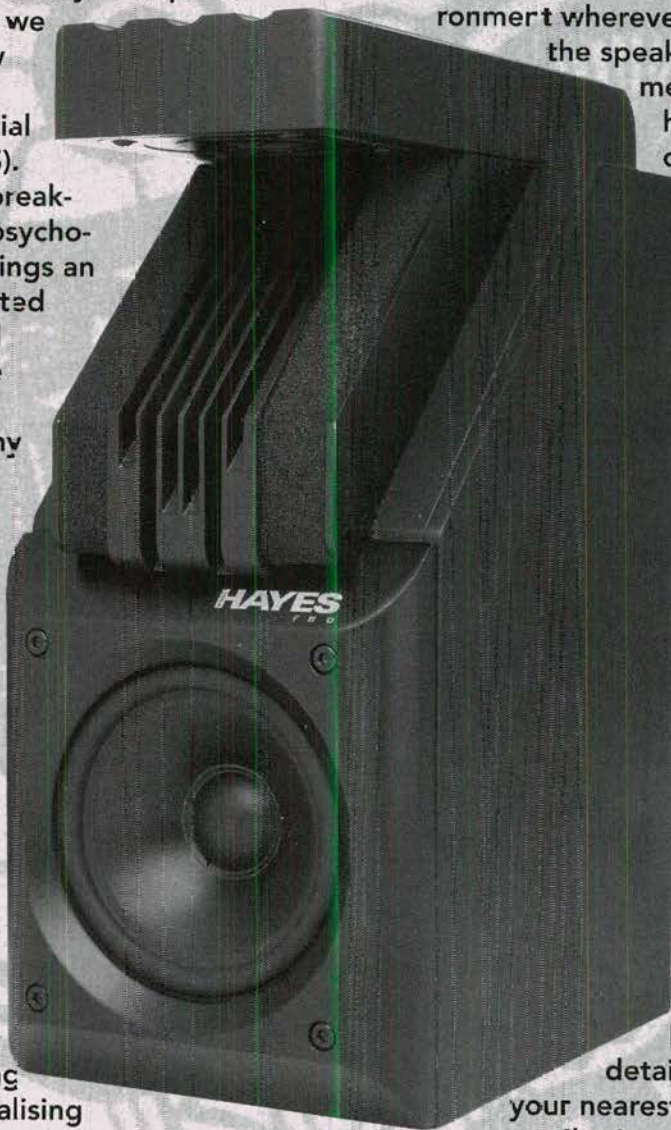
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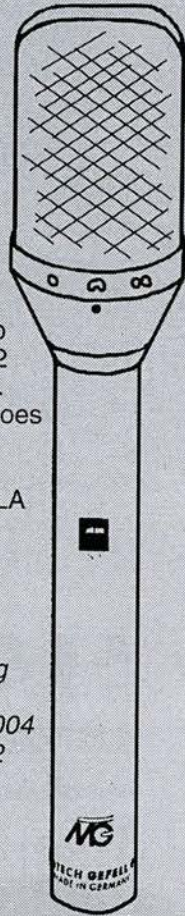


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Write in Reader Service number: 121

(from previous page)

the lighting and staging. Instead of using followspots, because he doesn't want the large olive shapes across the stage, Patrice prefers to use two 1.2K Profiles with an iris and a special rotator made by Robert Juliat. Placed directly above the stage they cast a neat circle. The Company also tour with an Optikinetics Solar 575 with a gobo rotator for projection.

Patrice favours the faithful par can but he is also fond of the 5K because of it's clarity of light. He uses Profiles to isolate the different zones where action is taking place. Profiles are used to light the dancers on the footbridge giving the impression that they are suspended up above stage level. The stage set is difficult to focus and Patrice strives to use his lighting to sculpt the set.

Leaving as little as possible to chance, the company travel with two roadcases full of nuts, bolts, screws, staples and their own special socket sets which are 17mm and 19mm sockets either side. They also bring all their own rope and rigging gear.

• Coda Audio supplied the sound systems for the first two productions in the Capitol Theatre. "We had to wait until the French company arrived here until we really knew what they wanted as their spec list was rather open to interpretation," Phil Murphy told me.

FOH had four Tannoy Superduals, which are high powered dual concentric boxes, and two bass bins. On stage there are a dozen Tannoy CPA15s and CPA12s providing effects and foldback plus there are extra Tannoy ambience speakers hidden in the sides of the theatre. The show is all run on two Revox B77 tape machines and a Denon Minidisc player which does the effects. Control desk was a Soundcraft Series 4, rented from Ian Richardson. Three radio microphones are used, two on lapels and one hand held. A feature of the show are the four boom mics, which are SM58s on fish poles, bought on by technicians and directed to the appropriate performer by one of the dancers.

"Their sound guy, Dominique Phelizon (who prefers to be called Spot), has been great and very patient considering the building side of the theatre is still very much under construction," said Phil. "During the bump in we've been competing with drills and jackhammers! The acoustics in here are very nice and no matter where you sit you can hear the voices really clearly. If anything you have to be very careful not to over amplify a space like this because it's very reverberant. Having Tannoy speakers with a nice tight pattern, they're a 60° horn, means you can focus the boxes pretty well in a given area. It's actually been very pleasant to work in. The tie lines are being put in at the moment by Stuart Maclean and he's done a terrific job on that. We've run our own multicores to most positions but up into the roof we've used the tie lines he's putting in."

The theatre has a couple of it's own in house speakers - JBLs - but Phil found them not suitable for shows which require high level playback or for a number of radio mics. •



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PRODUCTION & HIRE NEWS

OCEANIA DO CLIFF

A new PA system for the region, with Auckland based Oceania purchasing the Turbo Flashlight/Floodlight System - and promptly winning the Cliff Richard tour. This marks the first time a New Zealand company have provided audio for a major arena tour of

Australia, and it also represents the first new technology major loudspeaker system purchase by a production company in the region for around ten years.

We saw and heard the system at presstime, and will fully detail it next month. How did it sound....?

PAS INTRO EAW HOT CERWIN V

Still on the subject of major loudspeaker systems, Production Audio Services have secured the EAW agency for Australia. Eastern Acoustic Works have built horn loaded concert speaker systems since 1978, and have recently introduced more in their range of Virtual Array Technology products. They offer some High Q (tight dispersion) boxes which compete with Turbo Flashlight.

Ashton Admore, the Australian distributors of Cerwin Vega loudspeaker systems, had their warehouse burgled last month.

All their PROSTAX speaker cabinets went, so if you see, hear or know of any action on this front, please contact them urgently.

Call Stan White or John Culverhouse, (09) 478-3800.

LOCAL BIZ NEWS

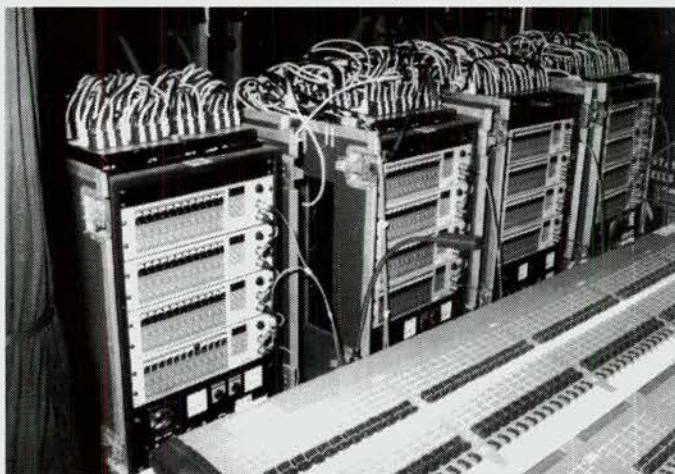
Skypak Brisbane, have been working on the Pink Floyd 'The Concept' tour, performing in Darwin and sell-out shows in Brisbane. Another highlight for Skypak was the "Blackout 5" Dance Party at the Roxy Niteclub in Brisbane, featuring Martin Roboscan 518s/805s, Golden/Tiger Scans and Superscan Zooms. Call Troy (07) 852 2757

Lots of Watts Sydney, have been

burning the midnight oil with the Yellow Pages Dinner - Melbourne and in Sydney the Kulture Dance Party, Ford Australia President Awards Banquet, The Pope, Kuring-gai Australia Day Concert, AMP Awards Dinner and CDB and Wonderfest at Australia's Wonderland. They even made it to the Tamworth Music Awards. Call Philby (02) 638 0302.

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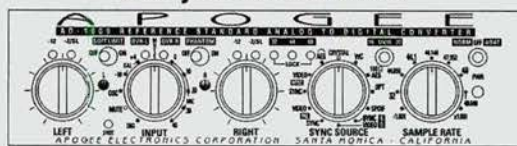
Neat new HP-12 dimmer racks for Jands, seen recently.



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LOCAL HIRE BIZ NEWS

Liverpool Sound Hire have only been operating for 6 months but have already had over 100 acts use their systems. Recent productions have varied from pub and club shows with bands, fashion parades, harbour cruises, a show inside Windsor Jail, corporate functions and even the Fat Cat show. Their main audio system uses the new E.V. SX200's for the mid/hi's, 18kgs and 500w of power each. LSH would like to say thanks to Anything Audio in Gladesville who put the system together, Bruce at Mark IV for his advice and Phil at Electric Sunshine for providing the lighting. Call (02) 822 4859.

• **Soundworks Productions** Perth celebrated the Chinese New Year with production for a Chinese New Year Dance Party. The theme, take a guess! Call Frank (09) 271 5611.

• **Buzz Music** Cairns helped Triple J launch itself nationally at the Subway Rock in Cairns. They debuted the new Pentruss System with success alongside, over and under lots of Martin lighting and PA gear. They also had the pleasure of working with a thousand kids, 13-18 years of age at the Cairns Showground Pavilion, at a Pyramid Theme Rave. Call Terry Gibson (070) 519 666.

• **Custom Audio** Newcastle have two new staff members. New Operations Manager - Peter Berghofer ex. Newcastle Enter-

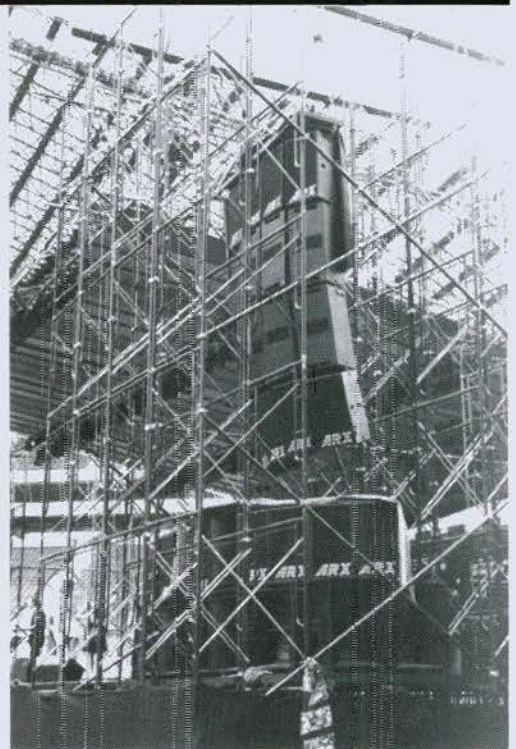
tainment Centre where he was Technical Supervisor and John Rothapfel is the new Hire Manager. Call (049) 194 996.

• **DMC Lighting & Sound** Sydney supplied production for the Sunrise Dance Party in Bowral. A massive scaffold rig housed 88 Moving Lights of the Clay Paky and Martin variety, a Meyer Audio System, Lasers, Foggers and the now famous 6ft. Mirrorballs. Call Jarred on (02) 319 7177.

• **Active Lighting** toured nationally with "Bjorn Again" with Tim Hall Operating/Rigging a 96 can rig on an Instinct 60 Control board and Dynalite Production Series Multipatch system. They also supplied the Victorian Arts Centre for their Summer Live Concerts with Par Cans, TriTruss and Goldenscans operated on Scancode. Call Andrew Topp on (03) 819 6912.

• **Premier Lighting** have had their busiest ever period supplying lighting to Mighty Morphins' Power Rangers in Sydney and the Gold Coast, over 250 5kW Dimmers, 200 2kW Dimmers, Control, 300 Parcans, 50 5kW Fresnels, Truss and more; Billy's Holiday - 26 2kW Profiles; Cosi - Parcans and Control. Singapore Sling series of telemovies - Spacelights, Softlights, HMI's and Distribution. Australia Day - lighting system for Sydney Tower. Big Day Out -

X e b e x Followspots, Lighting system for Primal Scream and Screaming Trees at the Metro; Sydney Theatre Company - Lighting system for Stomp and Tap Dogs at the Starfish Club; Turandot - 40 2kW Profiles and Fresnels; Xebex Followspots for Australia Day Concert at The Domain; Xebex Followspots for Opera In The Park and the Lighting system for the new Nightmare video board game. Call Vic. (03) 646 4522; NSW (02) 550 9233; QLD (07) 262 8366. • **By Caroline Grafton.**



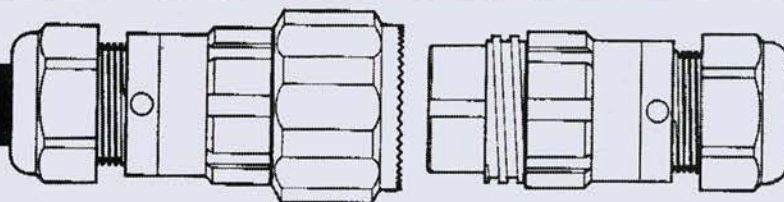
Largest ARX System in Asia, seen at the Shah Alam outdoor stadium near Kuala Lumpur. It is made up of 40 units of the ARX 2'2 mid/high pack, and 24 x 925 subs. ARX monitors are there too, and 50+ amps.

Blacksheep Productions requires the services of a young, enthusiastic Office Manager/Receptionist to assist in the day-to-day running of our busy audio-visual company. Must have good presentation, be well organised and able to work unsupervised. Experience preferred but not essential. Forward resume to Ms. Kirsty McCarthy, Production Manager, Box 5, 22-36 Mountain Street, Ultimo, NSW, 2007 or fax to (02) 212-7018. (This should have gone into the classifieds! CG)

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TOURING ITINERARIES

INTERNATIONALS

Bonnie Raitt

22-Wellington Town Hall, 23-Logan Cambell theatre Auckland, 25-Festival Hall Brisbane, 27-28-State Theatre, 30-Canberra, April 1-Palais Melbourne, 2-Festival Theatre Adelaide, 4-5-New Regal Theatre Perth

Bryan Ferry (25 Feb-9 March) March 3, 4-Palais, 7 Adel, 9 Perth. Paul Dainty

Cranberries (March 1-22nd) March 1+2nd, Perth Metropolis, 4th-Adelaide Thebarton theatre, March 6, 7+9 -Melbourne Palace, New Zealand 11th at Auckland Logan Campbell Centre, 13th Newcastle Workers club, 15, 16, 17, 19 & 20-Enmore theatre, 22nd-Festival Hall, Brisbane. Michael Coppel

Dinosaur Jr. - March 31-Rockinghorse Festival Brisbane, April 1-Selinas, 2-Metro Sydney (all ages), 4-Metropolis Perth, 6-Thebarton Adelaide, 7-The Palace Melbourne, 8-The Palace (all ages), 12-ANU Bar Canberra, 13-Waves Wollongong. Promoted by Golden Sounds.

Dion

16- Manly Pacific Park Royal **Edwyn Collins**-Harbourside Brasserie March 1&2, 3&4 Continental Cafe Melb.

ELO Part 2-(16-24) March 16-Brisbane Ent Centre, 17- Newcastle Ent Centre, 18/19-Sydney Entertainment Centre, 22-Melbourne Flinders Park, 23 Adelaide Ent centre, 24-Perth

Ent Centre. Promoted by John Whale Productions

Gil-Scott Heron- March 1&2 Metro, The Lounge 3rd, 4th & 5th + headlining Womadelaide

Jah Wobble

4-The Metro Sydney

James Taylor-Mar 29 Newcastle Ent, 30-Sydney Ent Centre, April 1- Tennis Centre Melb, promoted by Garry Van Egmond.

Jamiroquai+Skunkhour- March 21-The Roxy, Brisbane; 23 - Metro, Melbourne; 26/27/28- Metro, Sydney.

John Hammond

April 4-6-The Basement, 7-Fly By Night Musicians Club, 8- Adelaide, 9-11-Continental Cafe, Melb, 12- Brisbane.

Luka Bloom

6/7-The Metro Sydney

M People+The Grid-(26-April 8) March 26-Christchurch Town Hall, 27- Wellington Sports & Show Building, 28-Auckland Super Top, 30- Horden Pavillion, April 1-Brisbane Festival Hall, 3- Melbourne Metro, 6 Thebarton Theatre Adelaide, 8-Ferry Passengers Terminal Perth. Promoted by Michael Coppel.

Pearl Jam & The Meanies

March 6-Perth Entertainment Centre, 8-Adelaide Entertainment Centre, 10- Sydney Entertainment Centre, 11, Eastern Creek, 14-Exhibition Park Canberra (only show still selling), 16/17 -Flinders Park, 18 -Myer Music Bowl, 21/22 - Brisbane Ent centre. Promoted by

Frontier Touring

Phil Collins (March 30-April 15) 30-Superdome Perth, April 1- Entertainment Centre Adelaide, 2/3/5/6- National Tennis Centre. Flinders Park, 8/9 Entertainment Centre Brisbane, 11/12/14/15 Entertainment Centre Sydney.

Rolling Stones (tour March 27-April 12) March 27/28- MCG, S.C.G April 1&2. Mar 5 Adel, Mar 8 Perth, Mar 12 Bris. Paul Dainty

Sheryl Crow- April 20-Auckland-Logan Campbell Centre, 22-Festival Hall Brisbane, 24-State Theatre Sydney, 27-Palais Melbourne, 28-Thebarton Adelaide, 30-Concert Hall Perth. Michael Coppel

Slayer+Biohazard-Mar 19- Auckland Town Hall, 20- Wellington Town Hall, 22 - Adelaide Ent Centre, 23-Melb. Festival Hall, 25- New Ent Centre, 26 -Waves Wollongong, 28- Horden Pavillion, 30- Festival Hall Bris.

Michael Coppel Presents.

Throwing Muses

3/4- Central Club Melbourne, 5-Tivoli Adelaide, 8-Koolroom Perth, 9-Newcastle Uni, 10-Metro, 11-Van Goghs Brisbane Booked by Premier Artists

Violent Femmes

(21-13 April) 21-Auckland Town Hall, 22- Wellington Town Hall, 23- Canterbury Uni Christchurch, 25-Brisbane Festival Hall, 27- Enmore Theatre, 30 -Palais theatre, April 1-Hobart City Hall, 3-ANU Canberra, 4-Waves, 6-

Newcastle Workers, 13-Thebarton Adelaide. Michael Coppel.

Yanni- March 7/8- Sydney Entertainment centre, 11-Tennis Centre Melbourne.

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Falling Joys

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Touring Dates assembled by

Natalie Apostolou. Please

forward dates to her-

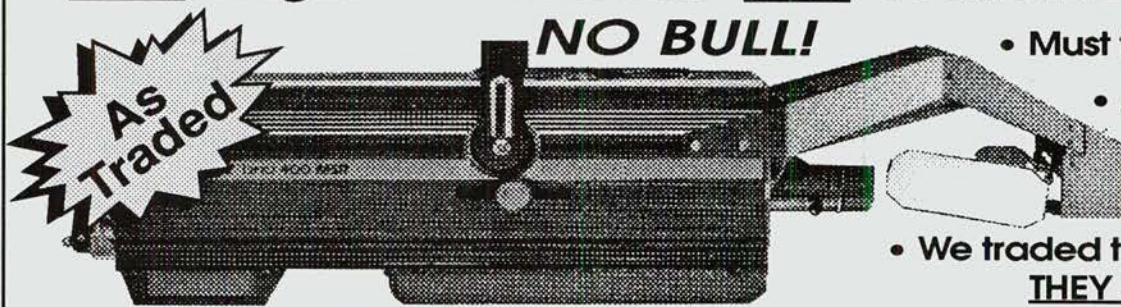
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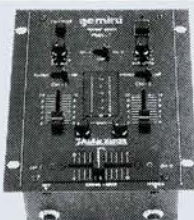
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Professional Dual Work Horse Double CD Player with Variable Pitch Control.



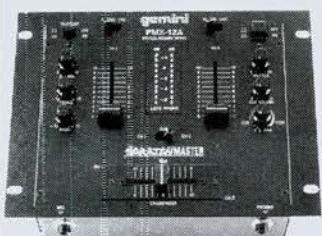
PMX®-7 \$185

6" rack mixer with 2 phono, 2 line and 1 mic input, gain controls for each channel, removable crossfader control, talkover switch, cueing, LED meters, 6 1/2"(W) x 8"(D) x 3 1/2"(H), 3lbs.



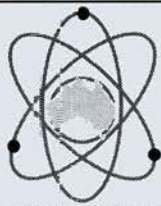
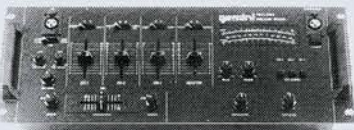
PMX®-12A \$239

10" rack mixer with 2 phono, 2 line and 1 mic input, removable crossfader control, master volume control, talkover switch, bass & treble controls for mic, cueing, LED meters, 10"(W) x 7 1/2"(D) x 3 1/2"(H), 6lbs.



PMX®-1000 \$449

19" rack mixer with 2 phono, 3 line, XLR and 1/4" mic inputs, bass & treble controls for mic, master bass & treble controls, auto mute, talkover, assignable and removable crossfader, DJ booth output, peak hold LED meters, XLR gooseneck lamp adapter, cueing, 19"(W) x 7"(D) x 4"(H), 9lbs.



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THEATRE LISTINGS for March

SHOW	THEATRE	COMPANY	STATUS
New South Wales			
Dead White Males	Concert Hall, OH S	Sydney Theatre Co	March 9 - May 6
Midsummer Night's Dream	Botanical Gardens S	-	Through March
The Magic Flute	Opera House S	Australian Opera	March 2, 4, 6, 8.
What is the Matter with Mary Jane?	Wharf 2, Sydney Theatre Company S	Sydney Theatre Co	March 3 (two week season)
Falling from Grace	Wharf 1, STC S	Sydney Theatre Co	Until April 8
Twelfth Night	Footbridge S	Bell Shakespeare	Feb 27 - March 25
West Side Story	Capitol S	Victoria Opera	Feb 25 - March 25
Phantom of the Opera	Theatre Royal S	Cam Mac	Indefinite run
An Inspector Calls	Her Majestys S	Nat. Theatre, UK	March 3, touring
The Chalk Garden	Marion Street S	-	Until April 2
Only Heaven Knows	Stables S	-	Until March 5th
The Last Yankee	Ensemble S	-	March 2 onwards
The African Queen	Glen St S	-	Until March 25
Outrageous Comedy Festival	Belvoir St S	-	Until March 5
Picasso at the Lapin Agile	Belvoir St S	-	March 16 - April 2
Terfia	Parramatta S	Riverside Lyric E.	March 23 - 25
Hot Shoe Shuffle	Newcastle Civic	-	March 2 - 19
The African Queen	Griffith Regional	Riverlands Th. Co.	March 7
Evening of Theatre Music	Joan Sutherland PAC	-	March 18
Queensland			
Same Time Next Year	Twelfth Night B	-	March 22
Hamlet	La Boite B	-	Feb 16 - March 18
Sanctuary	Cremorne, QPAC B	-	March 2 - April 8
Hello Dolly!	Lyric, QPAC B	-	March 7
It's My Party	Townsville Civic	-	March 16 - 18
Slave	Cairns Civic	-	March 6 - 11
Steel Magnolias	Burdekin, Ayr	Burdekin Th. Co.	March 22, 24, 25
Chigaco	Burdekin, Ayr	Forte Th. Co.	March 30, 31
Les Girls	Gladstone City	-	March 8 touring
Godspell	Mackay Ent. C	Mus/Com Players	March 22 - 25
Little Mermaid	Mount Isa Civic C.	2nd Avenue Ballet	March 18
Victoria			
Arcadia	Playhouse, VAC M	Mel. Theatre Co	Until March 25
Assassins	The Fairfax, VAC M	Mel. Theatre Co.	Through March
Romeo & Juliet	Botanical Gardens M	-	March
Shirley Valentine	Comedy Theatre M	-	March
Julius Caesar	State Theatre M	Opera	March
La Traviata	State Theatre M	Opera	March
The Pyjama Game	Her Majesty's M	Ballarat Uni.	March 10 - 18
Sweet Phoebe	The Playbox M	-	Until March 18
The Supper	The Malthouse M	-	Until March 18
Mildura Arts Festival	Mildura Arts Centre	Various shows	March 15 - 26
Empty Suitcases	Paramount AC, Echuca	Women on a Shoestring	March 27
South Australia			
VX 18504	Playhouse A	Meryl Tankard	March 2 - 11
Furioso	Playhouse A	Meryl Tankard	March 15 - 18
Medea	Amphitheatre A	State Theatre	Until March 3
Don't Lose the Place	Arts A	Adelaide Rep	Until March 4
Veronicas Room	Elizabeth Civic A	Elizabeth Rep	March 3, 4, 10, 11, 17, 18
Oklahoma!	Elizabeth Civic A	Northern Light	March 24, 25, 31
ACT			
Relations	Canberra Theatre	Kailash Dance	March 2 - 11
Inside Dry Water	Canberra Theatre	Skylight Puppets	March 16 - 18
Northern Territory			
Its My Party	Darwin PAC	-	March 11 - 13
Western Australia			
Well of the Saint	His Majesty's P	Irish Nat. Theatre	March 1 - 11
Circus Oz	His Majesty's P	Circus Oz	March 17 - 25
Worlds Within & Without	Octagon P	Malacca Dance Co.	March 7 - 11
Elsa Queen of the Nazi	Dolphin P	One Yellow Rabbit (Canadian company)	March 1 - 4
Love Camp	-	-	March 7 - 11
Lithuanian Folk Group	New Fortune P	-	March 7 - 11
Lochie Leonard	Playhouse P	Perth Theatre Co.	Until March 4
There to be Here	Playhouse P	Lithuanian drama	March 7 - 11

A = Adelaide M = Melbourne S = Sydney B = Brisbane P = Perth

Submit show details, fax (02) 876-5715, PO Box 439, Epping NSW 2121

NEW PERFORMING ARTS HANDBOOK

The Performing Arts Board of the Australian Council has introduced dramatically simplified funding categories and new closing dates for 1995. The new system combines the previous 18 programs of assistance into three simple categories - *Project, Development and Program*. These will apply to all art forms.

The new closing dates are 15 May and 15 November. A *New Performing Arts Handbook* will replace the old Programs of Assistance booklet and all the old application forms have been replaced by two simple forms. Both will be available from early March by calling the Australian Council on (02) 950 9000 or 008 226 912.

NEW!



Remote control is what **CRESTRON** (Videotouch, left) and **AMX** (below, left) excell at. These touch screen controllers fire remote racks, and modules, the race is on to offer every kind of electronic switch, dimmer and control interface. The systems can be programmed for auto-

tomated sequences of events, and are used in boardrooms, cinemas and anywhere control is needed. They have been used for stage productions too.

CONTACTS:
Crestron Australia,
(09) 389-8105,
for AMX call
AV Technology,
(03) 764-8443.



WRITE IN READER SERVICE
NUMBER 202 FOR BOTH ABOVE



WRITE IN READER SERVICE
NUMBER 200

Channel outputs can be combined in up to 4 groups. Talkback sources can be routed to the program buss when the console is not in On-Air mode. Enhanced talkback functions provide 3 outputs in addition to one Studio Talkback output.

Details from Amber Technology in your state, or call (02) 975-1211.



WRITE IN
READER
SERVICE
NUMBER
203

AKG say the **C12VR tube microphone** (above) is a modern classic, designed to continue to tradition of the vintage C12 - which they built between 1954 and 1963. This new version keeps the original 3072 vacuum tube, but delivers today's standard in noiseless operation. It isn't cheap, but it is worthy of an audit on.

Contact AWA Distribution,
(02) 898-7666.

OTARI offer the new B-10 series audio mixing console for broadcast, location recording, and film. It comes in two frame sizes, for 14 or 24 modules. These allow mono or stereo in - it has an 18-buss design comprising 2 x program, 5 x auxiliary, 8 x group 2 x AFL/PFL and 1 x N-1 buss.



WRITE IN READER
SERVICE NUMBER 201

LIFT Australia offer a range of CD listening systems for music stores, the model above sits on top of a CD rack, or wall mounts.

Call Damien, 02-970-6066.



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NEW!



WRITE IN READER
SERVICE NUMBER 204

MARTIN AUDIO will launch the new W-8 system at the Frankfurt Musik Messe as you read this. This new system is a mass market PA product that better confronts what Turbo and EAW are doing in the horn loaded box market. W-8 is interesting, the top box is loaded with 2 x 12" drivers for low/mid frequencies between 120Hz and 850Hz. A 6.5" horn loaded mid/high speaker handles 850Hz to 3.3kHz, where an internal passive crossover sends everything over 3.3kHz to the 1" exit compression horn. Dispersion: 55°H x 30°V.

Size: 575mm wide, 1066mm tall, 925mm deep.

The low box is unique in that it is loaded with a direct radiating 18" woofer and a 15" horn loaded one.

Details: AR Audio Engineering,
(02) 299-3666.

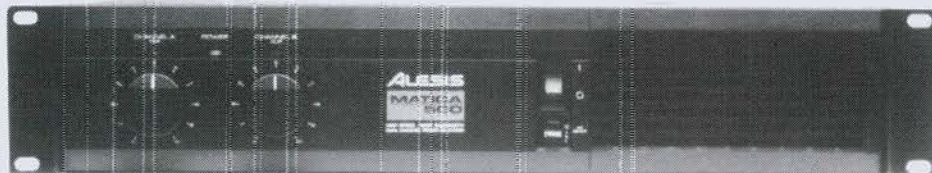
ARX offer a new-ish idea, the Powerdrive is a tri-amp with processing built in, so that you may drive your subwoofer along with a stereo pair of speakers - from one amp. The stereo outputs drive 2 x 500W at 4Ω, and the subwoofer output drives 800 watts at 2Ω. The retail price is \$3540, the amp (below) is sized at 2 rack units tall. Weight: 16Kg. The processing has limiters and enhancement. Details: ARX (03) 555-7859.

ARX POWERDRIVE
AMP: WRITE IN
READER SERVICE
NUMBER 205



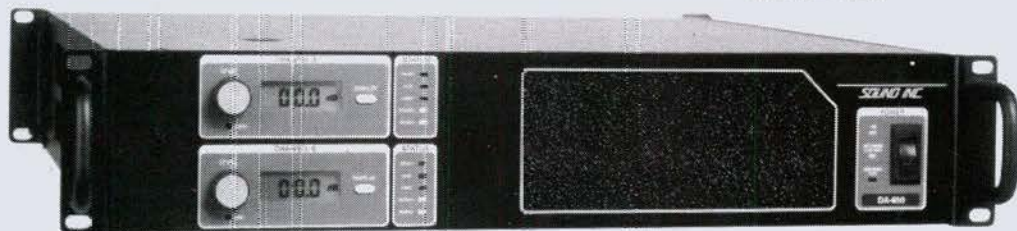
Alesis introduce two all new power amplifiers, the Matica 500 and the Matica 900. These are scheduled to ship as you read this, and they state that the amps are designed for critical studio monitoring. A very quiet CoolSync™ system will keep your control room the way you like it, and a DB-25 connector is provided to allow the aLink™ remote control and monitoring system to be used. Details: Electric Factory (03) 480-5988.

ALESIS MATICA
AMP: WRITE IN
READER SERVICE
NUMBER 206



Apogee Sound say the new DA-800 Digitally Controlled Amplifier (below) can be operated and monitored on the one Wolf Media Link system. And we have, indeed, seen this happen. The amp has 2 x 880W output at 4Ω, weighs 27.3kg, and offers something completely different in terms of front panel display. It may be toggled to read temperature, voltage, wattage, impedance and much more. Details: ESA (03) 562-4625.

APOGEE DIGITAL
AMP: WRITE IN
READER SERVICE
NUMBER 207



JBL released a new compact PA system at NAMM, but we couldn't get a hold of much info. It seems local distributors Jands are holding off launching the EON range just for now. What we have been told is that it comprises a series of lightweight loudspeaker cabinets, using an integral grille design (below) which incorporates horn flare and some transducer mechanicals. There is talk of inbuilt amplifiers, JBL mixing consoles, even JBL microphones, and that this system will bust Hartley Peavey one where it hurts. So much talk, and so little in the way of info that we could obtain.... we did get the pic below, and so remain committed to the chase. It sounds like a major push into the package PA market is about to start.



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Yeah, there's a lot of stuff on this page. But that's kind of the message - you see, we've done all the cramming on our Series II features, not on our prices. In fact, no one out there can match our price to performance ratio. As if that weren't enough, we also give every Series II product a full two-year warranty. So if you want a lot of features, you'll just have to pay less for them.



\$599

866 Series II Stereo Gated Compressor Limiter

- Balanced ins and impedance balanced outs
- 2 discreet channels of compression/limiting & gating
- Independent channel or stereo link
- Side chain ins & outs for direct access to detector circuit
- Compression, threshold, ratio, attack, release, gate threshold, input & output controls



\$529

835 Series II Stereo 2-Way/Mono 3-Way Crossover

- 2-wcy stereo/3-way mono crossover
- Balanced and unbalanced outs
- Low summed output
- Variable cross frequencies from 100Hz to 10kHz

\$929



RTA Series II Real Time Analyzer

- 31-band spectrum analyzer
- Switchable window resolution, 1dB to 3dB
- Calibrated mic included
- Line ins & outs for identifying feedback frequency
- Built-in pink noise generator



\$1549

1222XL Mixer

- 12 mic XLR and line inputs
- 3 band EQ on every channel
- 2 effects sends with 2 stereo returns
- 1 monitor send
- Tape ins & outs
- Switchable phantom power

822XL Mixer

- 8 mic XLR and line inputs
- 3-band EQ
- Switchable phantom power
- 2 effects sends, 1 monitor send
- 60mm dust shielded faders

\$1179



830 Series II Dual Channel Equalizer

- Stereo 2/3 octave EQ
- 15 bands per channel
- +12dB to -12dB boost/cut
- Switchable high pass filter
- True balanced 1/4" ins and impedance balanced outs
- Unbalanced RCA outs
- Avci able with XLR ins & outs

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828 Power Distribution Module

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READER SERVICE NUMBER: 103

NEW!

Soundcraft have a trio of new monitor consoles, the SM 24 and SM 16 are now joined by the SM 12. (See input module at left). SM 12 allows you some flexibility, in that the 100mm channel fader means you could use the console as a live main mix console.

14 mixes can be generated, 12 auxiliary/mix sends are switched pre/post fader in groups of two, while a main left/right stereo mix is likewise switchable pre/post. Four sweep EQ bands are accessed via dual concentric pots, and you can switch the EQ on and off.

The console is fitted with six dual output modules, each of which accepts two direct inputs. The Master Module has the stereo outputs, engineers monitor and solo/talkback facilities.

Details from Jands (02) 516-3622.

SOUNSCRAFT
SM12: WRITE IN
READER SERVICE
NUMBER 208

NADY introduce the SEM-6000 personal wireless in-ear monitor system. The system is based on a dual channel transmitter operating in the VHF bandwidth, which runs 2 x stereo channels. The SEM-6R stereo pocket receiver has an all metal housing, and two frequencies can be user selected. Nady also have some generic in-ear moulds that seem quite OK, if you do not wish to send away for expensive, custom ear moulds. In addition, some walkman type headsets have been reported to work rather well, for one-off and hire company applications. The ear-piece/headset output from the pocket receiver is either 16 or 32Ω. The receiver accepts one 9v battery.

*Details: Production Audio Services,
(03) 415-1585*

NADY
IN EAR
MONITORS:
WRITE IN
READER
SERVICE
NUMBER
209

KRK Monitoring Systems offer the K-RoK close field monitor (right). This has a 7" latex coated long stroke woofer and a one-inch, silk dome tweeter. It will take 100 watts and they say it has a metric sensitivity of 92dB. The box shape is designed to minimise parallel walls, and the crossover is set to 2.5kHz. Retail price here is \$1332/pair.

*Details: Syncrotech Systems Design,
(02) 417-5088.*

K-RoK: WRITE IN
READER SERVICE
NUMBER 210

AUSTRALIAN MONITOR offer a neat little monitor, the Opal S-1 system. Designed by Aussie Richard Priddle, the S-1 measure in at 370h x 200w x 235d. Price: \$699.

Australian Monitor (02) 816-3544

OPAL S-1 MONITORS: WRITE IN
READER SERVICE NUMBER 211

MUSICLAB offer the DELTON range of components, like midi connectors, pro audio panels, stage boxes, leads and much more. Deltron is a UK supplier of quality audio bits. *Contact Musiclab for details- 07 852-1633.*

YORKVILLE is a name from Canada, they make audio gear which is well regarded. The new compact Elite EX-161 is loaded with a 10" woofer and horn, and critically tuned. The wedge shaped cabinet helps when using more than one, you may array them together. The two year warranty is called: "even if you break it", which sounds interesting. ATM Flyware is also available as a factory option, and they are built from Canadian poplar plywood.

*Details: Dynamic Music,
(02) 939-1299*

ELITE EX-161: WRITE IN
READER SERVICE
NUMBER 212



NEW!



HBB are now shipping the Portadat PDR-1000TC, which is the time code model of the popular portable. It has a 4-head transport, 48kHz, 44.1kHz and 32kHz Lp recording through analogue inputs, and Nickel Metal Hydrate battery power.

*Details from Audio Services Corp,
(02) 901-4455*

PORTADAT:
WRITE IN READER
SERVICE NUMBER
213

SABINE introduce the new SOLO Feedback Exterminator, shown below left at actual size. It is an adaptive filter device that senses feedback and is said to swat

it. Two versions of this SOLO brick are available, one has line in/out, for inserting into a mixing console. The other has a mic level input and XLR. Prices: \$747 (line level) and \$831 (mic XLR input version). These are retail prices. *More from Audio Telex, (02) 647-1411.*

SABINE SOLO:
WRITE IN READER
SERVICE NUMBER
214



BITS

• **Audio Services Corporation** in NSW are not affected by the Chapter 11 arrangements entered into by the American company operating the same name. The local outfit is based in Sydney and operated by Geoff Grist, who must be regretting his choice of name! Originally he sourced much from the US operation, but of late he has been obtaining stock elsewhere.

• A **Murray Tregonning** joke: what does a Polish girl get on her wedding night that's long and hard? A new surname!

• **Apocalypse Audio** while noted for its contribution to the music industry, has also built a reputation for their **Apocalypse Post Production** work on TVCs and Feature Film projects. The flagship, Studio One, now has installed an SSL audio system. Tony Lynch, Apocalypse GM believes "with three totally integrated studios, Apocalypse Audio offers all the advantages of the totally integrated SSL 4048E analogue console with the flexibility of the digital AudioFile and Fairlight MFX2". Call (03) 699 1844.

WIRELESS Buyers Guide Page 62



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BEAST COMETH

(continued from page 5)

After the Jacobsen Corporation won the Australasian rights to the show *Beauty & The Beast*, they immediately needed a Production Manager and approached Garry McQuinn. At the time Garry was Head of Technical Production at NIDA in Sydney but was looking to take time off to work on a large show. With only a few days notice, Garry found himself on a plane bound for New York for production meetings.

Today, arranging a meeting with Garry is difficult business.

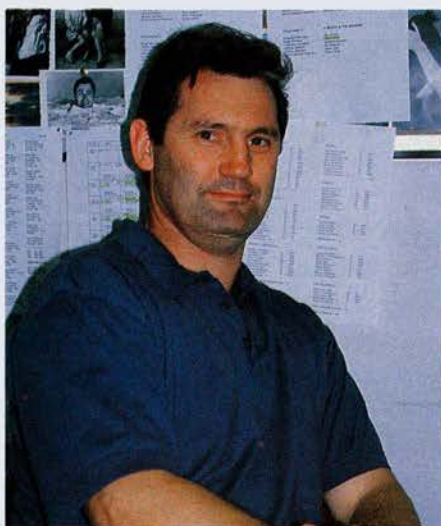
The man jets about the country and world like a super-

star. After several phone calls over several weeks, I was finally instructed to meet him off a plane from Melbourne. There then followed a few taxi rides around town as Garry sorted out pressing business including an interview for the radio.

"I'm not sure which show it is," he said modestly.

Hence our interview took place in the back seat of a cab. The thing is, no matter how much you're stuffed around, it is difficult to become annoyed with the man as he's a genuinely busy and charming person - who apologised frequently.

Garry owns a company called Stage Business, along with Delia O'Hara and Malcolm White, and the division of responsibility is split amongst them. Although it was Garry who was requested to work for *Beauty & The Beast*, he stated his desire to work with Delia and Malcolm and so effectively it is the company which is now employed. Malcolm is the Technical Director whilst Delia is the Production Stage Manager on the show. "We're really lucky to have a Production Stage Manager working on a show so early. She's been doing all the



Garry McQuinn

THEATRE

auditions, early wardrobe co-ordination and selection of staff and resources."

"NIDA has been very good about giving me the time off to do this," said Garry. "I think I needed to renew and refresh my professional experience."

Since Christmas Garry has been working full time on the show and he is due to stay with it until July or August.

"My job isn't what you'd think a production manager does," he said. "To be honest

Malcolm is doing more of what I would say a production manager does. I seem to be doing a lot of the dealing with the relationship with the Disney design and technical people because the production is going to be mounted here as it was in New York. What the audience will see will be much the same as in New York. We had to make some small modifications due to the sight lines at the Princess Theatre and that has taken quite a bit of negotiation. To my surprise, I'm also dealing a lot with the overall management of the production which includes stuff which I frankly haven't dealt with before. I'm quite surprised at the amount of freedom I've been given to involve myself at other levels. I control most of the budget and I have to keep the various partners in the enterprise happy. Jacobsen, Edgley and Village Nine Leisure all have a say in how things go and need certain information provided regularly."

It seems certain that most of the production will be built out of Melbourne as Jeff Kennett made it clear that was what he wanted.

"We approached a lot of the Melbourne set contractors - Stageweld, Screwed & Glued, LMA - and asked them to work on the show collectively," said Garry. "As long as the prices were comparative I didn't mind a joint venture approach.

(please turn page)



Eleanor Glockner, original Broadway cast





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Write in Reader Service number: 129



(Continued from previous page)

They worked out amongst themselves how they would break up the work which suited us. We were left with the problem of putting it together. With theatre time being so expensive, I've insisted that we assemble and test the show somewhere before we install it in the theatre. The main reason is because we've extensively redesigned the understage mechanics. The way that it moves is principally based around a hydraulic system whereas in Broadway it's electric motors. We're going to be taking over an aircraft hanger at Essendon airport for assembly and programming.

"When we went to see the show in New York, frankly it became clear that we couldn't afford to do it the way they had. I think they spent an enormous amount of money on it particularly the machinery that moves the scenery and it's all show controlled in a major way. Basically everything that moves, including the traps

for the smoke machines, is show controlled. We decided to take a lateral view by using hydraulics instead of electric motors. They've excavated a pit and filled it with stage machinery, automation machinery, computer control systems etc. whereas all our stuff fits within a show deck which we sit on top of the stage. It's much more portable and easier to put in but the Americans didn't believe we could do it. They had a great lack of faith in hydraulics and thought the problem rate was too high. We found that, in our experience, that wasn't the case and we guaranteed that we could get it to work. Having built a section of stage as a trial track, we showed it to the Americans who returned to their own people asking why they weren't using hydraulics since they're clearly much cheaper, much more efficient and fit in less space! It's quite likely that system will be exported from Australia to SE Asia and possibly South Africa, Moscow and India."

Garry credits the success of the hydraulic system to several people but particularly John Bick who recently retired from the Victorian Arts Centre. He also credited Paul Kominsky of the Adelaide company Hypac who specialise in hydraulic design and manufacture.

"They took this on as a challenge and did it in a way that is equal, if not better, than what they have in Broadway," Garry said. "It's a real pat on the back for our local

people that we can so impress the producers and technical people from Disney. We're really happy about that. They were also very impressed with our PR and will probably use some of our ideas for their LA launch. The Australian theatrical industry is right up there demonstrating that we can do it just as well as anybody."

All of the props for the show will be made at various prop companies in Melbourne like Big Yellow Octopus, Mothers Art, Stage One, Craig Haire, and Smart RRs. It became clear from the start that a different approach would have to be taken to the costumes because there were so many. In fact the costume budget is bigger than the set budget.

"It's the mother of all costume shows!" said Garry. "It seems to me that there are hundreds of everything. There are also all the wigs and prosthetics so from the start we thought we'd bring together the right people and let them establish their own wardrobe area. We were lucky to find a woman called Cordula Albrecht who we appointed as costume design coordinator. The significant aspect is that the story of Beauty & The Beast evolves around character transformations, not just the Beast to a handsome young Prince but also the servants into household implements. So prosthetics are a big issue and we were fortunate to obtain the services of Bob McCarron who is the most promi-

nent prosthetics person in the country. He's very much in demand for films and I'm pretty sure he's taken a cut in pay to be in theatre! We've chosen Ascot wigs for the show."

Garry said that it had been necessary for him to bear in mind that Miss Saigon was opening two weeks after Beauty & The Beast and, although it's in Sydney, he has been careful not to 'tread on their toes'.

At this time it looks fairly likely that Jands will be supplying the lighting and sound. Until he saw Turandot, Garry was a bit dubious as to whether they could do it but now he is excited at the prospect of working with them.

"I suppose the feeling in the industry is that Jands are rock'n'roll but I have no problem with them undertaking something of this size," said Garry. "Although not renowned for their theatre experience, they are giving every indication that they are capable of doing the show exceptionally well. The show is a big, moving light show - most particularly Vari*lights - and we have Steve Swift in charge of them. He'll meet the original LD, Natasha Katz, who I believe won a Tony award for her lighting of Beauty & The Beast."

Garry will also be spending a month in LA whilst the show bumps in there. The bump in at Melbourne's Princess Theatre will take about ten weeks with opening night being July 8th. •



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Roger Davies

(continued from page 19)

sold 12 million. It was good timing, Olivia wasn't working too much and she got involved in Koala Blue, the clothing shops - which was something I had no expertise in. I think the clothing business is far more sleazy than the music business, and I wasn't involved."

"Tina had become so popular it was really demanding on me, and Olivia had really lost the desire to work, and I told her she didn't really need me anymore. It was a really sad parting because I really adore her and she's a great person."

"Tina and I were on this really big roll, we had 5 years where we didn't stop." Roger had taken Tina Turner from TV Game shows where she eked out a living after giving up everything in her messy divorce from Ike, back into the rock halls. They did Private Dancer together, it sold something like 12 million copies. Tina Turner as you know her now owes very much to Roger's direction.

By this time the cynics back here at home were prepared to concede that Roger, 'that Sherbet boy' as one called him, did in fact have a handle on his job. "I used to be very embarrassed by it, embarrassed that I was rich - because I started with nothing. I'd feel guilty I owned a house in the south of France and a house in England and a house in LA - and (then) I thought, 'I've worked really hard for all this, no-one gave it all to me.'"

It took a few years to settle into

the American way, "they don't want to upset you, because they may need you again, they won't say they hate something, rather they always have an excuse. I can't stand bullshit - don't give me song and dance, just tell me how it is! For a long time in America no one had heard of me, I was managing Olivia Newton-John but I didn't get into the Hollywood dinners thing just getting the job done. It worked in my favour because there was a certain mystique about me".

The Roger Davies magic works with an artist who is prepared to trust and listen to what is said. Mick Jagger doesn't fit this mould, Roger found this out himself.

"After a Live Aid performance in Philadelphia where Tina and Mick performed he asked to work for him on his solo album, which I did for a year. I really liked it, but it was frustrating because I was more a consultant".

I observe Mick Jagger has got an incredible grasp of business - "yes, the Rolling Stones are brilliant the way he does it, but he doesn't have a grasp on his solo career. I think now he and Kieth are getting on a lot better than ever, it's better for Mick to concentrate on the Stones. Mick listens to a lot of people rather than one person, and in terms of his solo career became in-decisive".

Joe Cocker is another solo artist who's career has been improved by our Roger. "Joe had been special guest on a lot of Tina's outdoor festivals in Europe because he's very popular there, so I'd see him socially from time to time. I

went and saw him at the Greek Theatre in LA because three guys in Tina's band were playing with Joe while Tina was off the road".

"I really enjoyed the show, and two days later I got a call. Joe had been managed by Michael Laing for 15 years, I guess they hadn't got on. I always make it a point not to go after an act who already have a manager, though".

Janet Jackson is an interesting situation, because Roger had managed her earlier in her career - then they split, and now he's back in charge. Roger explains the turn of events - "The Control album had been very successful, the Rhythm Nation album hadn't been released, she hadn't really had management apart from her father. They needed someone to launch the album and as they hadn't toured, set up a tour. It was a two year project, the album

sold 8 million and the tour was hugely successful. Then I resigned. About four months ago she asked me to take her on again, so we're doing this tour through Asia, Europe and South Africa."

I'm curious about the expectation this time around. "It's a mutual option, I wasn't sure I would want to carry on afterwards. I said at the time I would set up the tour, so here we are. I've got Tina making an album in August then doing a very big tour next year so I'm keeping my options open".

Business is business, but dealing with creative people is an art form. "There's a knack to this, when you have to tell an artist some bad news you can't just go and say - 'Hey your record just died', you need to say 'we've sold out this concert here or done that and then break it to them gently.

(continued over page)

Mackie gives 'em the dog. Australian Mackie Distributor Dave Croxton is pictured holding a statue of the goddam pesky dog that seems to run Mackie in Seattle. It was awarded for twisted triumphance in marketing. Pic from left: George Mantoan, Greg Mackie, Croxton and Tony Waine of Australian Audio Supplies, Donna Mantoan, David Firestone.



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Roger Davies

(continued/previous page)

Otherwise they'll want to go and slash their wrists. I've seen other managers be too direct with their artists".

A big part of making an act a goer is "concentrating on my acts working in Europe and on a global level, whereas a lot of American businessmen don't realise the rest of the world exists. Although they're starting to now".

"I've got an office in LA and London, and four people working for me, two girls in each office. My form of management is much more personal management than some, there are some management companies that manage 20 acts. They're not personal managers. If all my acts worked at once I'd be in a lot of trouble, but I've got Sade (another artist managed by Roger) and Tina taking a year off, Janet and Joe Cocker are on the road. I can deal with both".

"I don't think there is any big secret in how to manage an act. The fundamentals are to keep it all together, keep them sane. At this stage I've got no interest in managing groups with four or five personalities - I'd rather deal with a solo artist and for some reason I've nearly always managed women. I only have women work for me too".

Roger lives in Sherman Oakes,

in LA. "I'm engaged. I've been going out with this girl for 18 months and I like to think this relationship is going somewhere. I want to have a family eventually."

"Some managers deal with their artists finances, I refuse to. It's much better for artists and creative people to have their own independent lawyers and accountants. I don't sign cheques, anyone could accuse me of ripping them off. If I see they're spending money like crazy I'll certainly tell them".

Do you think Australian music has had it's run internationally?

"I only get to come back once a year to see my mother in Melbourne. My observation is there seems to be a real rut and nothings changing. The acts that were big from the '80's - INXS, Reyne, Midnight Oil, Barnsey - they're all starting to fade, and I don't see anything new coming up that will blow all of Europe away. The state of radio here does not encourage local talent".

Do you see the record companies overseas floating in a sea of back catalogue releases for CD profitability?

"Yes. The music industry is healthy overseas, although the back catalogue has been supporting them for five years. Still, acts come up like Pearl Jam and sell a

lot of records. Record sales are up from what I can gather".

How are the record companies to deal with today?

"The biggest nightmare for a record company is an act that doesn't have management. A lot of promoters can tell you a problem is that overseas an act can happen overnight, and their manager is a school buddy. He's had no experience...and he doesn't know what he's doing. So close to it he can't be objective, and when you don't know the common reaction is to say no. There are some giant acts now, I can't name them, they can't confirm anything. The best thing that helped me in the US was managing a big act here. It's the same there, just on a bigger scale. When I first went there I was in awe of American managers, I thought 'they must be so smart- geniuses' then I realised it was all experience. If I hadn't been a roadie, worked for Chuggie and Gudinski, done Sherbet, I couldn't have done it".

Where's the challenges now?

"Well I've HAD my midlife crisis, I went to England I wanted to settle down and have children immediately and was working too hard - it wasn't meant to happen".

How well do you sleep?

"I'd like to sleep more. I often lie in bed and worry".

What's next?

"There's another major act wants to talk to me about management, I've got to be careful, I only want to manage people I like, people I can invite into my home. My style only works if people listen to me".

What do you do for recreation?

"I play cricket every Saturday in LA when I'm there.

Will you ever come back to Australia to live?

Now I realise what a great country this is. And I will come back one day Coming here with Janet Jackson, they've fallen in love with the place. I say 'this is as good as it gets', because once the tour goes into Asia and then onto the busses in Europe, where it will be winter, it's downhill all the way!

This is the greatest place to start a tour in the world, we went to Brisbane, we rehearsed, the people were friendly - at a technical level everything is so well organised. The Big Picture (Video) Company are fantastic, Jands are a great company, they've got everything you need. The venues are organised.

Look, we had our harbour cruise last night, and Janet Jackson is sitting there looking at the sun setting over the harbour, and she sighs and says 'Yes, I could live here.....' •

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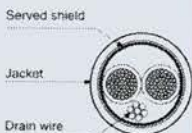
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KISS

The MEAN business machine

from page 6

toured South America with yet another set, and next plan to tour the USA after doing another album. They will then commission a new set. Get the picture? The Sphinx saw it's last gig in Sydney, Eric Robinson from Jands kindly offered the band his services to dump the thing for free if they couldn't sell it.

"I want to say the Jands crew here are unbelievably good", said Tour and Production Manager Tim Rozner. He is also the tour accountant, and because the band manage themselves he does the visas, air ticketing and room lists. This is the tightest crew ratio we've seen in a while, the entire entourage is a humble sixteen persons, including the band! We see forty-plus most times.

Thus they work hard, and get paid more. The band save on airfares and hotel rooms. The local crew number 12, which matches the Kiss crew. Loaders are used, of course. It's a big show too, with 60 S4 cabinets making up the main PA, plus a few sub woofers on the floor. Arena's can be done here with 48 S4's, but Kiss like it loud. The crew hand around the cotton wool, and the band wear ear plugs.

It's Kiss, it must be big. So there are 460 Par Cans, and plenty else, including Vari*Lites, a Laser show, Pyrotechnics, and twelve follow spots. Big, bright, extremely loud. With a set too.

MINIMUM CREW

The minimalist crew comprise Bryan Hartley (Lighting director), Dino Derosé (Vari*Lite director), one time Aerosmith sound engineer Toby Francis, one stage technician per band member (Bass tech Rocko Reedy doubles as stage manager), a carpenter and Sphinx master, security guy, laser tech, and 'personal assistant'. That's it.

Jands supplied 5 lighting crew headed by Nicki Koumos, Michael Kent rigged, Colin Dwyer and Sasha McKissock looked after the Vari*Lites, and Matts Frankel headed the sound team of three. Pyrotechnician Lou Stefanel made

up the twelve Aussies.

THE LD- HIS BIG BREAK

Bryan Hartley worked the second level acts like Joan Jett and Anthrax across the USA before being offered the South America tour with Kiss. He jumped at it, despite going alone to pull together local productions down there.

"I called the follow spots, worked the board, and did Intellabeams" he states as if it's common. Allied to this he dealt with the crews, who of course were culturally touring show deficient.

South America may yield lower ticket prices, but it is made up for in numbers. "The first arena we did I expected 30,000 people and we got 60,000" said Bryan. He handled himself on the tour, so thus made the step up to mainline touring. For Kiss surely are mainline.

His lightrig here had side pods of Pars with colour changers, back rows of Pars peeking through slats either side of the Sphinx, and plenty of Pars, molefays, mole mags and 30 Data Flash strobes by Lightwave Research. Bryan comes in with the lighting crew and works with them. He gets paid more for this, but has a purer motivation: "I can ask them to move something, and they do it". The day I'm in, the focus has run into soundcheck at 5pm, so Bryan is doing a lot of gesticulating and making with the sign language. The Jands guys are dangling all other the grid for hours, sometimes hanging upside down, ten metres in the air. They wear a harness, so it's safe.

Vari*Lites were 22 VL-2C, 22 VL-5 and 12 VL-6. Six follow spots were in the grid and six up in the house.

"In Japan I asked for more of everything because the promoter pays for production there. Here, it's a fee and the band pay for the production. The Japanese promoter came back to us asking to cut it down, so I ended up with what I wanted". Clearly Brian and Co have been there before!

How did it look? Loud, but good!

TOBY TALKS PA

They're all nice, this crew, sound engineer Toby tells me he's not used to the S4 system and so Matts Frankel from Jands has been very helpful. In Japan he used a Showco Prism system, which they use in the USA. The Rolling Stones will bring one here next month.

"It's the best PA in the world",

Toby says, a view held by those who use it. Despite this, the Jands S4 system is pumping during sound check, the drum sound is truly immense. I tell the drummer this later on, he seems like a nice fellow for a drummer.

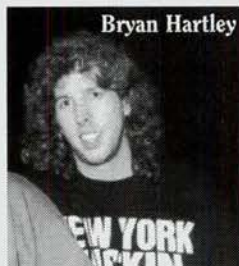
Toby has two mics on each drum, the inside skin on each of two kick drums has an AKG D112 against it, and a Beyér M88 is at the outside end of the drum. These mics are in phase, sometimes two mic's on one source will operate out of phase. "The Sennhieser MD421 is out of phase to most other mic's" Toby says. These are used on all the tom-tom's, with a second 421 underneath. The drums suck up 22 channels on the PM-4000. Each drum is gated via a Drawmer gate.

A band like Kiss is all about live instruments, no samples in sight. MIDI? What's that? It's like AC/DC, who once threatened sound engineer Robbie McGraph with an outside seat assignment on all flights after he uttered that four letter word starting with 'M'.

Guitars are miked with SM57's, one of which is also used on the snare drum with a Sennhieser 441 underneath. This is reverse phased says Toby, so we ponder whether it's been re-wired by someone. "People do this", he says.

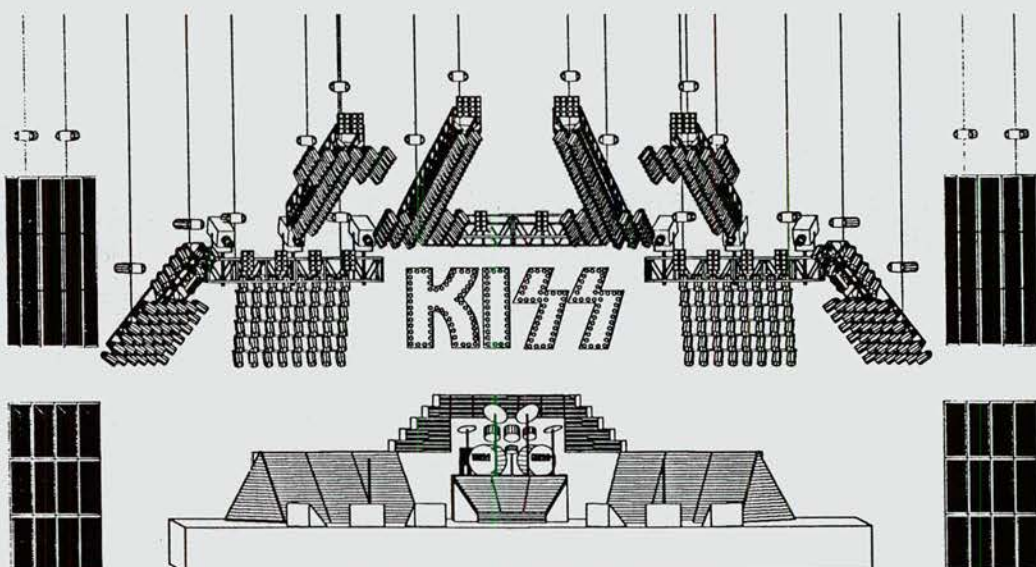
SM-58 vocal mics finish the on-stage sources, the challenge in the mix is apparently getting over the sidefill and drumfill which run very hard and operated by a Jands monitor engineer. There are ten monitor sends run.

How did it sound? Loud. Perhaps a tad too loud, Toby found the famous Sydney Entertainment Centre 'Trip Point', an invisible audio threshold above which things go a little skewiff. But the punters loved it to death!



Bryan Hartley

Toby Francis



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Duncan Fry - Random Noise

I love good advertising ideas. Advertising which both amuses and informs is one of life's great delights. And it's not just me who thinks so; those collections of 'World's Funniest/Dirtiest/Silliest TV Commercials' were the top rating TV shows of last year, so at least I'm in popular company.

But one of the exhibitors at the Winter NAMM show (National Association of Music Merchants), which is held every January in Anaheim, California, had one of the strangest advertising campaigns that I have ever seen. I guess the NAMM show is one of the biggest of its kind in the world. I'll leave the serious evaluation of the show to Ray Bond, but suffice to say it is staged in in the cavernous Anaheim Convention Centre, opposite Disneyland, and for four days it is the centre of the universe for all things remotely related to the music industry.

Personally I love the drum manufacturers' booths. They are staffed by really solid, beefy guys wearing the obligatory black singlets and black nylon track suit pants, and they are so earnest! Now I'm not going to bag drummers, because some of my best friends are drummers, but these guys at the show are a hoot! Endlessly tuning drums, tapping around them with a stick, frowning, turning a tuning key and tapping some more. All day! As if it made a difference! Surely they must realise that these days it doesn't matter a rat's backside what the drum actually sounds like - if the engineer (live or studio) doesn't like it he'll just use it to trigger his favourite John Bonham samples!

Anyway, back to the thread of my story. Five huge exhibition halls are chock full of people

selling anything and everything to do with making a noise. I liked the Morley wah wah pedal slogan: Buy a Morley pedal - It'll never Wah out! At least Morley are in the music biz; as you'll see from reading further in this article, sometimes the product's links to music are fairly tenuous ones.

It is certainly a popular show. Thousands and thousands of people visit it from all over the world, and one of the few things that they have in common is that sooner or later they'll all have to go to the toilet!

Enter Charlie Stringer, from Charlie Stringer's Strings and things. Charlie makes 'Snarling Dogs' guitar strings and other tasteful stuff for the guitarist, and he has based his whole NAMM marketing campaign on the above thing that everyone has in common.

In every urinal (203 at last count) in every toilet block in this huge exhibition centre is a plastic holder which holds those little disinfectant lollies. For the duration of the NAMM show (and maybe afterwards for all I know) each one of those plastic holders carries the message 'See Charlie Stringer's Strings, Booth 3342!'

Now I know you're all probably thinking to yourselves that maybe old Dunk has lost his marbles (or his disinfectant lollies) this time. So, I took a camera in with me the next time I felt the urge to strain the potatoes, and the result is Fig. 1. I got as close as my happy snapper would let me, and although it's hard to read the actual writing, you can see where it is. I didn't want to kneel down too close to the thing in case people thought I was strange or something!

For a while they were selling T shirts and

badges at Charlie's booth which read 'I pissed on Charlie Stringer', but unfortunately they were so popular that when I got there to buy one they had all gone. I was hoping to get one to add to my vast collection of tasteless T shirts. I mean, I've already got my 1994 California earthquake one, one from a Mexican restaurant which has a line drawn on the chest and says 'Fill to here with Margaritas', plus my 'Fido Doodoo' one, and Buttman, which features a pair of buttocks shaped like the Batman logo. Charlie's T shirt would have fitted into this collection very nicely!

Now you'd think that one toilet related idea per show would be enough, but no, this show is big enough for one more.

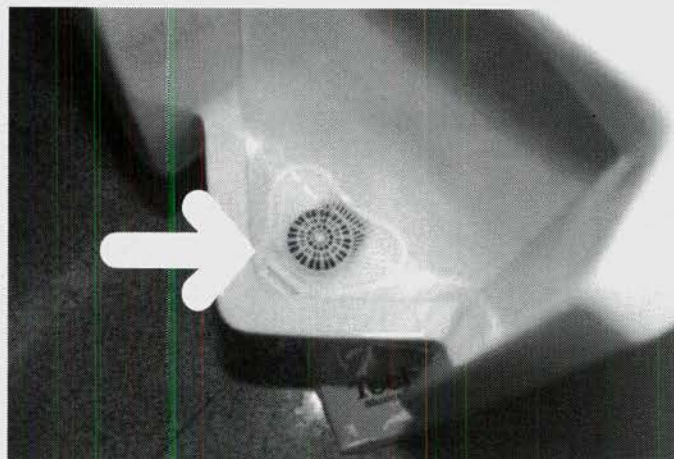
Enter Jammin' Johns. What is it? Well, it's a company that makes custom lids for your toilet seats that are shaped like your favorite guitar body.

What, you don't believe me? See Fig 2.

With one of these at home you could pick up your newspaper like Al Bundy and say, 'Well, Peg, I'm just going to sit on the ol' Hummingbird for a while.' There were plenty of designs to choose from, although rumour had it that Fender forced them to withdraw the Strat-o-seat!

I was sorely tempted to bring one home (after all, they had a Show Special deal and it would have made a great conversation piece) but I didn't want to give myself a harder time than usual time going through Customs when I got home.

'But officer, it's not a guitar, it's a toilet seat'. 'Yes sir, of course it is. Now if you wouldn't mind just taking your clothes off and bending...' Forget it!

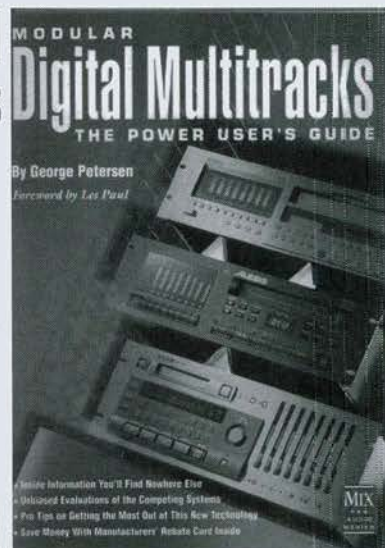


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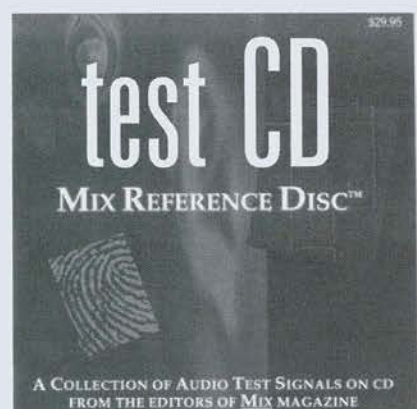
SHOP CONNECTIONS

Modular Digital Multitracks

By George Petersen. 120 pages, written 1994. This guy knows his chops, he is an editor at MIX, the world's greatest studio magazine. This book covers everything you need to know plus more. It details the ADAT, DA-88, RD-8, ADAM and DMR-8 systems, talks about tape, techniques and how to make your own cables.



\$49

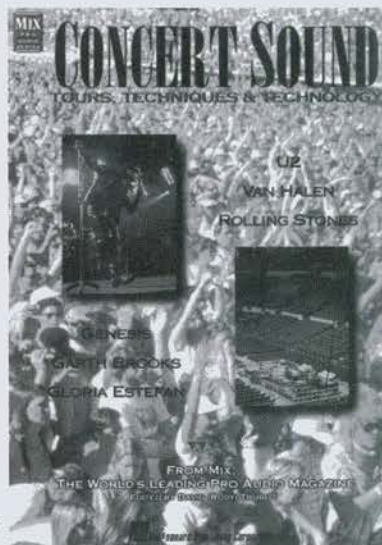


Very handy for audio people, this test CD has:
Tape deck alignment tones,
sine waves, 10kHz through 20kHz,
1/3 octave tones, (30 seconds of each)
Square waves, (30 seconds of each)
Frequency sweeps, 20Hz to 20kHz, sweeps down and up,
Phase test at 250Hz, in phase and out of phase,
Digital 'black', 1 minute of pure silence to find faults with,
Dry instrumental performances, without ambience or reverb,
and SMPTE/EBU time code. Produced by MIX Magazine.

\$29

Concert Sound

By David (Ruby) Trubitt. 166 pages, written 1993. This is a very useful book, Connections say that if you are interested in, or work in, the live sound field, get it! details touring sound for bands like U2, Stones, Van Halen etc. Has gear tips, rigging, pix of major systems, and is well put together! What more do you want?



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LETTERS

*#//@%XX -?!

More Power

Laurie Nethercotes' "POWER" article (Dec/Jan 1995) would have been a commendable effort if it hadn't contained the errors pointed out by James Kenny (Feb. 1995).

Power amplifiers draw non-sinusoidal currents. They snatch current in huge gulps at each mains voltage crest.

The neutral currents of power amps on three-phase power will almost always add without cancellation. The advantage of running amp racks on three-phase is that they will gulp current from the three phases in turn, rather than in one huge single-phase bite.

Phil Allison has probably repaired and tested nearly every brand and model of amplifier available in Australia. He has made repeated measurements which show that the power consumption of amplifiers is almost always 1 amp RMS per 100 watts of available power - not just for sinewaves, but also with compressed music near clipping and with moderately clipped music. Phil has measured mains current consumptions of 16 to 22 amps RMS for various manufacturers' 800+800 amplifiers.

This means that unless you are using your amplifiers at way below maximum capacity you should allow cable capacity & switchboard fusing of about 10 amps per 500+500 amplifier, or 15 amps per 800+800 amplifier. The amplifiers' mains fuse will give a good idea of its expected consumption.

The non-sinusoidal current peaks drawn by amplifiers causes more voltage loss in power cables than their RMS current consumption would suggest. Shorter, over-size power cables may allow another decibel or so out of your sound system.

All of these higher-than-expected neutral currents from your amplifiers and dimmers will cause voltage drops in your cable's neutral conductor. If this voltage is caused by current drawn from one phase, the other two phase-to-neutral voltages will increase. If two

phases are loaded, the third phase voltage will be even higher.

If your cables are too long or too thin, or your neutral currents are high, serious over-voltages become probable.

Very high neutral currents occur when amplifiers not fitted with inrush suppression are turned on. Phil Allison has seen common amplifiers which draw peak turn-on currents in excess of 100 amps, reducing to sane levels only after several full mains cycles. Massive neutral shifts (and resultant phase over-voltages) will be induced by such currents, particularly if a full rack of amplifiers is turned on at the main switchboard. Phil believes that many equipment failures otherwise put down to mysterious "power surges" may be explained by this mechanism.

Finally, I would like to dispel the myth that coiled power cables get hotter due to increased inductance. This is not so.

The series inductance of coiled power cables does not increase because any magnetic field caused by current in the active line(s) is cancelled by exactly the same current returning in the neutral line.

Coiled power cables get hotter because the surface area made available to the air is reduced. Figure-eight cable stacks and random cable tangles will both run cooler than neat coils due to better air exposure.

Maybe the point is that if your cables are getting hot in the first place, they're simply too thin. If the three active conductors are contributing enough heat to make the cable hot, your neutral is probably ridiculously under-sized.

-Doug Ford, Jands Electronics, St. Peters, Sydney

No commies

Thanks for a great magazine. An improvement to same would be to put a serration across the middle of each page as A4 paper gets jammed in the septic here. A2 is far more economical and would appeal to the left wing greenie communist female element who

pop up in your letters from time to time. (Talk about bitter and twisted, I don't know how you put up with them).

Yes you are quite right, (*Connex Dec, Aux 2*) I have been taking a back seat for the last 2 years and I am a survivor. I have been busy as a single parent raising 3 teenage children and regard this as being far more satisfying and important than running Topstage Productions as it is very easy in this business to forget what you are really put on this earth for.

And you do know me. I have a reason for doing everything and all will be revealed when I am good and ready. I am not in the business of losing my marbles or my dollars and you should know that I didn't come down in the last shower. Let me assure you that Devine will always get the last laugh. See you in the big scheme of things.....

Steve Devine, Canberra ACT.

Illiterate (us)

Just a bit of (hopefully) constructive criticism.

I've just finished flicking through Feb. Connections and stopped to have a read of the Soundscape review. As we are a dealer in Victoria for this product I was obviously very happy to see it reviewed and hence took a keep interest.

As I read, I have to say that I was shocked at what would seem to be the complete and total illiteracy of the author. This could have been a great story but the writer's total lack of direction left me with a headache!

Sorry to be a whingeing bastard but I suppose if we don't give you any feedback how are you to judge the progress of the mag? **Shaun Kerrigan, Soundcorp Pty Ltd, Melbourne.**

**Appreciate feedback ALWAYS. Read the next letter and I'll answer them both. -Ed*

Shortchanged

I write with concern regarding the Soundscape review in last issue.

Having just set up and used SS for the past few weeks, I was appalled at the apparent lack of time invested before submission.

The article reveals next to nothing about SS features or operating system (which is being improved via software upgrades at an impressive rate) and so I feel that readers were shortchanged by this particular article.

Please, more facts : less innuendo. **Mark Williams, Mildura.**

**OK. 2 letters about one review. I'd like to say I harbour reservations about product reviews in general UNLESS they are LIKE the one in this issue, written by John Robinson. Reason? He owns the Akai unit, he bought it, he uses it, he knows it inside out. This is the policy here from now, and I fully accept a review written after just hours or a few days with a device is not complete. Here forward we only do USER REVIEWS, if you own it, you use it, you know it. You can then write about the device and we will consider your review for publication. -Editor.*

Happy one!

I'd like to congratulate you and your team for CONNECTIONS. It is without peer in the industry and seems to grow and improve with each copy.

I'd like to make special mention of your article titled "Ripoff?" in the ISSUES section of the February '95 issue. This was an informative piece of work, and I believe that more 'business related' material, similar to this, should find a place on the pages of your magazine. I don't agree with everything you said in the article, having imported equipment from the U.S.A. myself on occasions, however you stated all the facts, and gave us all information that will enable

people to make better educated choices and decisions. Keep it up, well done.

Oh, just one thing. Photography is an integral part of a publication such as yours. It's letting you down. Most shots are reasonably well exposed, but the creative aspects are missing. This pertains to the people shots in particular. I understand that the punters may provide photos but if you don't have a staff photographer, please get one!

Apart from that minor constructive criticism, I think you are all doing a mighty fine job.

Lindsay Nelson, Lilyfield, Sydney.

**Thanks, pix we will continue to improve. It isn't easy.*

Letters to: PO Box 439 Epping, NSW 2121. Fax (02) 876-5715. Email: julius@next.com.au

DA-88 v ADAT

I am writing in reference to a question posed by David Gibson in your February '95 FAQ column.

In defence of the Tascam DA-88 transport mechanism, I recently used the store DA-88 to record a CD for a local indy band and gave the mechanism a thorough 'rocking and rolling' and not once did it present me with an error. The machine worked faultlessly over two days of non-stop recording and playback and it wasn't being used under ideal conditions seeing as it was a location recording.

It is a well noted fact that many engineers prefer analogue to digital because of its inherent warmth, and they say that digital recorders seem to present a 'glassy' or 'brittle' sound. Having not used

an Alesis Adat I cannot compare it, but, while not warm, I found the DA-88 mirrored exactly whatever signal was put into it with no noticeable colouration of the sound. I also found the jog/shuttle wheel an indispensable addition to the machine and something I believe the Adat is lacking.

All and all, for professional use, I personally would choose a DA-88 because of its reliability, speed of operation and functionality. I also personally believe that the functionality that a DA-88 comes with 'out-of-the-box' far outweighs the price difference between it and the ADAT.

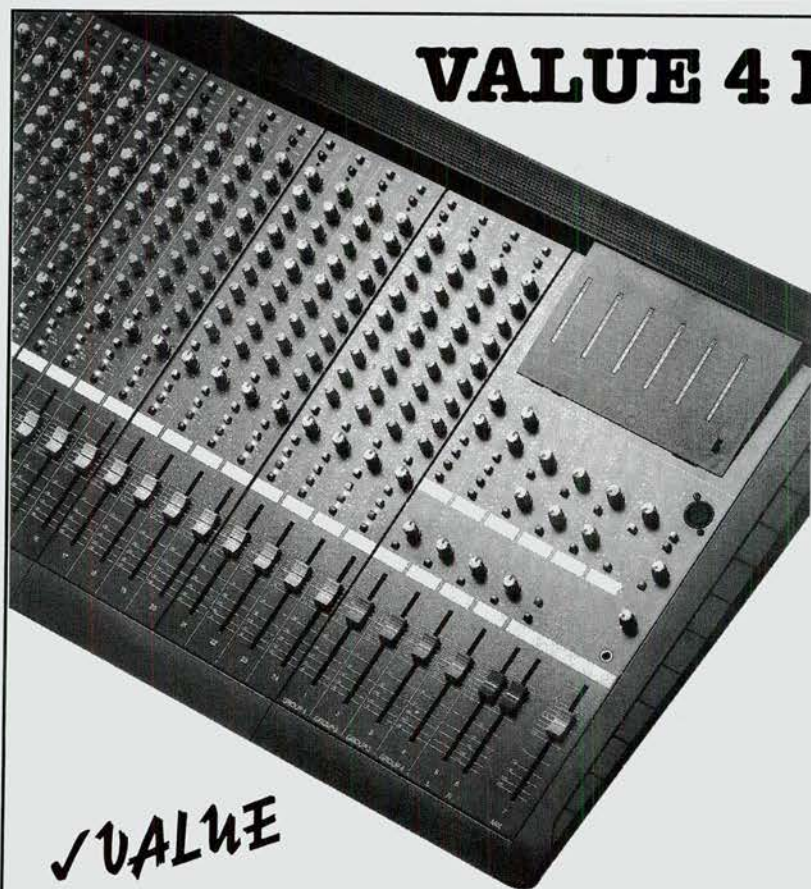
And if anyone out there would like to borrow a DA-88 to compare with an ADAT I will let you take this one if you like.

Geoff Bennet, Music Workshop, Geelong South, Vic.

• **Michael Sykes** of NSW faxed us a survey response last month. Asked what he would like to see LESS of in this magazine, he says:

"False information in reviews to support advertising clients".

**Editor replies: This is the most offensive comment I have received. If Mr. Sykes would like to take stock he will find he is obviously reading a different magazine. The FEW product reviews we have run in Connections (as opposed to the dozen+ that a local music magazine run in every issue) are always honest. Ask the six (at last count) advertisers who have cancelled their advertising with this mag. Mr. Sykes obviously had a bad day in the music shop that employs him (we will not name them), and although I wrote to him asking for specifics, he hasn't yet bothered to respond.*



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Picking Speakers

Q I wonder how I can qualify loudspeaker specifications, some systems sound lumpy while they have a smooth frequency chart, others sound great but the freq. plot looks worse. •AK, Perth

A There is no clear industry standard; just confusion.

Frequency Response— is the most common of all specifications for loudspeakers. Ideally, this specification defines a precise range by listing the extremes (beyond which the levels fall off dramatically) and the tolerance (which is the degree of deviation of the response within the range).

All loudspeakers have variation in the level of the individual frequencies. As you measure the frequencies at the extremes of the frequency range, their level begins to diminish at an accelerated rate until they are inaudible.

Many will define these points as being a certain number of decibels (dB) below the average of the loudspeaker's output, with minus 10dB (-10dB) as an often used limit. This specification gives no indication as to how smooth or even the response is between these points (the tolerance). Another problem with using 10dB "downpoints" is that this level is **less than half** the perceived volume as the rest of the speaker's range. To bring it up to a usable response, it would require more than 9 times the amplifier power. For example, if your system is running 200 watts of power, it would take **more than 1800 watts** to make the low bass as loud as the mids and highs.

3dB is considered by the audio industry as a "just noticeable difference" in perceived volume. So a specification of 123dB ±3dB defines the complete output of the loudspeaker, not just the end points. This means that all frequencies in this range are no more than three decibels above or below the average overall output.

Three loudspeakers, each with completely different performance characteristics, can all be rated as having a frequency response of 65 Hertz (Hz) to 19 Kilohertz (kHz),

depending on the definitions.

Sensitivity— This specification indicates the sound pressure level (SPL) from a loudspeaker when it is measured from a certain distance on-axis, as it is being given a certain amount of power. This figure is generally given as a level, in decibels, a loudspeaker produces when it is fed one watt of signal and measured from one meter away (1W/1m).

A specification for an Apogee Sound loudspeaker, uses an average of the full range listed in the frequency response specification, so you know its level is across the board, not just at a hot spot.

Some manufacturers take this specification one step further and list the actual maximum output of the loudspeaker. This step takes into account a factor all loudspeakers are subject to: power compression. A loudspeaker becomes less efficient as it approaches its performance limits. A loudspeaker may lose a substantial portion of this efficiency when it operates near its maximum volume. The 1W/1m rating will show loudspeaker efficiency only at low volumes (1 watt), not at the levels loudspeakers are typically used (200 watts).

Power Handling— The power, in watts, a loudspeaker is capable of handling, 2 different standards, long or short term can be used.

Long term power handling tells you how much power the loudspeaker can safely handle for 8 hours or longer. The short term standard is important because it tells you how much short term power, or peak power, the loudspeaker can still handle even when it is playing at full power. A short term rating that is four times the amount of the long term rating translates into 6dB of headroom. It is because of this headroom that these speakers are just as punchy at full volume as they are at lower volumes.

Conclusion— There remains a great disparity among manufacturers. Just because the numbers might look similar, there could be an immense difference in the actual performance. Listen and compare for yourself.

• **John Monty, ESA Audio. ESA distribute Apogee Loudspeakers.**

Wood racks OK?

Q I'm designing racks for my project studio, and I've read that "ground loops" can occur when several chassis are electrically connected. I read somewhere a solution is to build wooden mounting rails and to separate the devices with wooden spacers to keep them earthed independently.

Al Pardoe, Dubbo NSW

A I doubt if you will encounter ground loop problems on a rack containing only good-quality, recently designed signal processors, especially if they are all powered by plug-packs. If you do, find the problem, don't fudge, and certainly NEVER remove an electrical earth from the mains supply to ANYTHING. Use a standard rack with metal strips and do it the way everyone in the real world does.

• **Connections**

Bridged?

Q I'd rather not use my name because I should know this. I think. Or should I? Why are BRIDGED and PARALLEL-MONO different on power amps? -Bril, Sydney

A The term "bridged" is not the same as "parallel mono", which refers to feeding from a low impedance output into one or more high impedance inputs. If an amp has both a 'bridged' switch AND a 'parallel mono' switch, take care!

Bridged means the amp is connected so that both channels are used for mono in such a way that the two channels are out of phase with each other to provide the maximum output voltage. Only one input to the amp is required, this is usually marked.

With bridging the chan-

nels are driven out of phase, and the single mono speaker output is taken from the "+" output terminal of one channel and the "-" terminal of the other. Thus the impedance of the "bridged" speaker load needs to be double that of the lowest impedance the amp normally delivers. If your amp is typically rated down to 4 ohms per channel, the lowest 'bridged' load you can run is 8 ohms.

Bridging is a feature rarely required in the real world, where an amplifier should be specified to deliver adequate output from each channel for the task at hand. Parallel mono is simply a switching setup to remove the need for a second signal 'loop' cable or 'Y' feed to get a common input signal to both channels of an amp.

• **Connections**

Recording Horns

Q I'm curious about how to best handle a recording project I've got coming up where a horn section is to be used. I've got plenty of tracks, so thought I'd put each instrument on it's own, wonder on your microphone choices and placement suggestions?

-Horn Refugee, St. Kilda

A If they're playing as a section, mic them as a section. Or try to mic them partially as sections. If there's only one sax, for instance, put it on a separate track, but put the two trumpets on a single mic, and two trombones on a single mic. That will allow you to get a little distance from the horns and let the players determine the balance. It's amazing how well they can do that. I tend to like ribbons or dynamics for horns better than condenser mics.

• **Buck Freeman.**

—20 Years Ago This Month.....

By Julius Grafton

Welcome to our ongoing chronicle of 1975, where the writer ran Zapco Lightshows from a handy base in East Sydney, and when bands were just discovering a PA was more than 2 columns and a four channel head. The fashion of the day comprised hair and flairs, LSD trips at gigs were commonplace.

Billy Thorpe was no longer the highest grossing touring act because Sherbet were, and Skyhooks were on the way up. Daddy Cool tried to crack America, and the Little River Band hadn't been invented yet!

These are the gigs Zapco was hired to do, as detailed in a long forgotten and very fungal dairy unearthed during the Christmas break, when a re-shuffle of the closet-like office accommodation at Connections threw up things old and very forgotten

A MARCH WORKING WEEK

Mother Lightworks in Brisbane have been promising to build me an eight-way dimmer desk for the last six months. He had the great Brisbane flood of 1974 as an excuse, but I've almost given up. We use switchboards made from

pineboard painted black with HPM switches and old round power outlets on the back into which we plug all our gear. Dimmers are a scarcity, let alone 3 phase power at gigs!

Extensive experimentation with different brands of dishwashing liquid are conducted with the bubble machine, because with most gigs happening in public halls the bubble goop is making the parquet dance floor worse than slippery! The bubble machine is the latest tool in a marketing war against Phil Cullen's Mac Lights, and sometimes it gets dirty. The war, not the bubble machines!

A T1 lamp for a Pattern 23 costs \$7.25, and remember a basic Lightshow from Zapco costs \$30, while Phil advertises in GoSet that he will work for \$15!

PADDO TOWN HALL.

The mecca of Concert gigs almost every week, Captain Matchbox Whoopie Band headline one Sunday nite, we charge \$60 for lights. This show is packed, a really fun gig after dealing with the stairs and the amazing fat and uniformed town hall guards. These appear to have mostly died out these days, back then every town hall had at least half a dozen, their job to enforce the booking hours, so you would wait outside at least an hour beyond loadin time while they pretended you were not really there. Of course during the gig they would melt away to the pub or the back rooms and ignore the paying public, who often needed first aid after slipping over in a pool of fog oil or bubble goop and cracking their heads open!

KIRK GALLERY.

Every Sunday I did a love gig at the Kirk, owned by Peter Day who lived in the loft above the former church space. He had a Jag and a way of pulling chicks, and the likes of Bob Hudson and Jon English performed there. I lit the performers as distinct from what Zapco usually did, which was light the hall, so I guess the Kirk gig was a kind of release for me.

The only technical problem I had with the Kirk was the Junior Eight resistance dimmer I had to use, which made a grinding noise as I raised the mechanical faders. Of course I had to hire this from Strand, who charged \$5 for it. The Kirk paid me what they could afford, usually \$25.

•Colin Baldwin called and says he will send some pix of this era!

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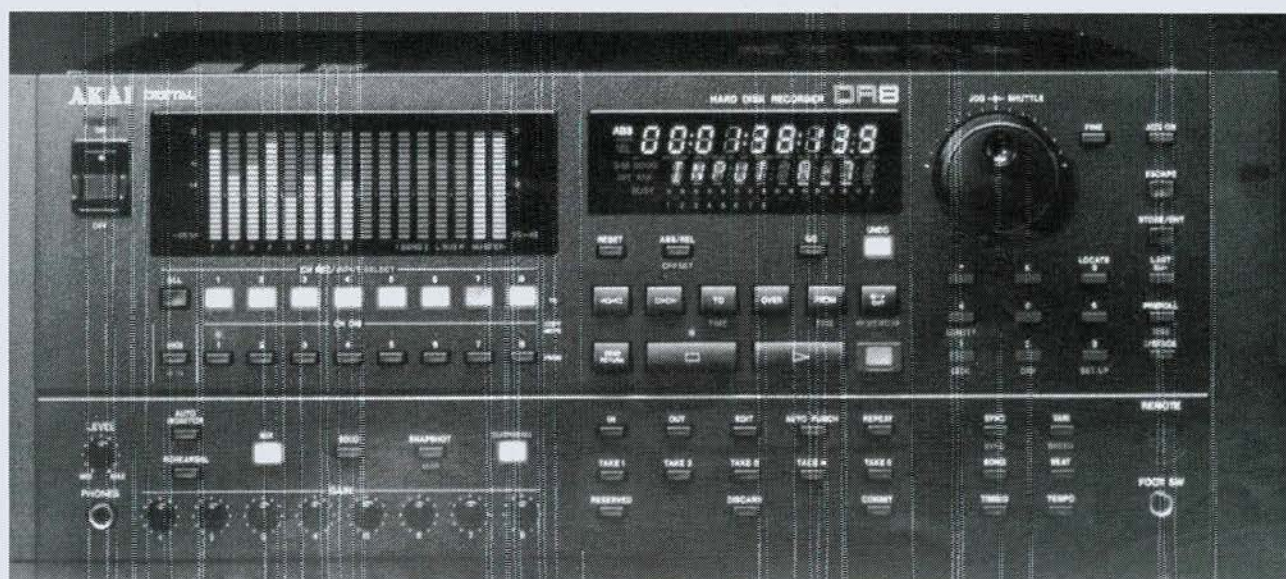
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AKAI DR8 Hard Disk Recorder

- by John Robinson

Over the last few years a number of competing multi-track formats have emerged, each having their own pros and cons. As a studio owner it has been hard for me to decide in which direction to go. I have used almost every type of recording format in my career as a producer and none seemed to beat good ole analog tape until the advent of digital non-linear. This system uses a computer and hard disk to record signals, and allows for random access of that data for editing. I auditioned a number of

well known computer based systems, but found using the mouse to control the virtual transport puts a distance between the interface and the user. Enter the Akai DR8.

We purchased the unit through Turramurra Music and whilst waiting for the new unit to arrive Turra lent us a DR4. This was good, because it gave me a reference. I completed some projects on the DR4, and was happy with the results. Having real transport controls and a large, bright,

USER REVIEW

SMPTE display were pluses.

Our DR8 arrived late November '94 with 2 x 1.2 gig Connor drives. This gives us around 6 hours total recording time. Subjectively, the sound quality is better than the DR4; smoother and more transparent. The ADCs are 18 bit and the DACs are 20 bit. Over Christ-

mas '94, the unit was put through a number of tests which included tracking of vocals and instruments, transfers from analog tape via SMPTE sync., transfers from Midi via SSP, internal submixes and compilation of tracks for CD via digital I/O's.

A problem arose when digital transfer was attempted between the DR8 and a Yamaha DTR2 Dat recorder. It seemed that copy protect was invoked on the first generation. We then tried a new Sony
(continued over)

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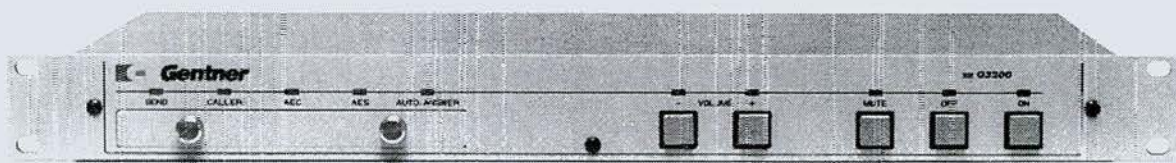
Bringing telephone calls to a live audience can present a technical challenge - how do you make the caller and announcer heard by everyone without generating feedback?

The answer is Gentner's G3200 Superhybrid. Designed for telephone calls with a live audience or in-studio guests, the G3200 provides both advanced telephone nulling and acoustic echo cancellation.

No matter how good the room acoustics, some of the caller audio

appearing on the speakers will work its way back to the microphones. This audio is then retransmitted on the telephone line, creating everything from distortion to an actual "echo" for the caller.

The G3200's DSP Acoustic Echo Canceller (AEC) recognizes caller audio received at the mics, even audio that is delayed by room size, and digitally subtracts it from its "send" audio path. The result is clean, intelligible audio on both sides of the telephone call... plus the ability to turn up the studio speakers as loud as you like!



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CTS-60ES Dat recorder and the problem disappeared. After a number of phone calls and faxes the problems were solved by a hardware mod by Akai rep. Danny Dunn. Apparently S/PDIF2 codes differ and some machines are "more forgiving" than others.

The inputs are TRS type bal/unbal at 52k ohms. The higher impedance allows anything from mics to instruments to be input. This is great for electric guitar pickups as more highs can be recorded and there is less loading. There is no phantom power, so only dynamic, ribbon and electret mics can be directly input but for live, this would do. The outputs are 330 ohms, a little high for driving long lines unbalanced, but fine for normal balanced hook up.

I suggest terminating the inputs to a patch bay as the TRS jacks are prone to weakening over time and connections could become intermittent. Back panel XLRs would have been better but space is limited. As it is, the unit is bristling with ins and outs, and slots for expansion slots. Standard are: 8 ins (analog), 8 direct outs (analog), stereo analog out, sends 1 and 2 (analog), digital in/out. Wordclock in (BNC) and SCSI-A out.

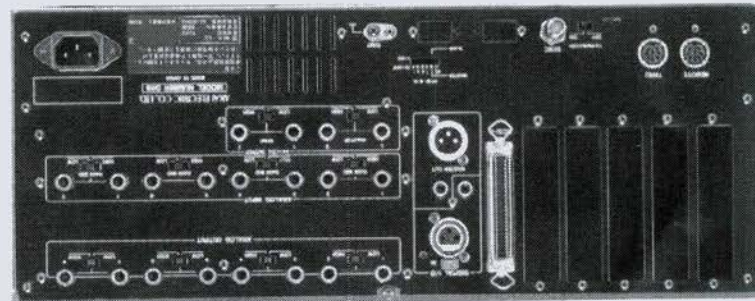
Options are: SCSI-B for MO drives and computer interfacing, SMPTE reader-writer, MIDI, ADAT direct transfer, Bi-phase interface and RS-422 i/f. There are only five interface slots on the rear panel but you only need one card to control multiple DR8s.

Unlike the DR4, this unit has an inbuilt 16 channel mixer; 8 hard disk tracks and 8 external signals can be combined at mixdown. Each input of the mixer has programmable volume, pan, send and buss controls and these show graphically on the meter display. These can be stored as a snapshot and recalled via SMPTE code.

Other mixer features include master volume, pre-post metering, pre-post send and normal or peak-hold metering. The large jog-shuttle wheels are used to input data in all modes and is as easy to use as a mouse. There are eight gain trim pots to optimise the gain to the ADC. They are very small and really precise calibration is difficult. A sine fed into each one gave Ovu at approx. 9 o'clock on the rotary pot (-10 or +4). One of the options is the mix Tablet. This will

allow full analog control of all mix functions mentioned above. This section of the DR8 is very well thought out, and once learnt is very quick.

Speaking of quick, because of physical buttons and transport controls, locating to any point on the hard disk is a breeze. Scrubbing is performed via the jog-shuttle wheels. Some sort of programmable volume drop for scrubbing would be good, as monitoring at high levels could damage your speakers. And yes folks - you CAN perform endless drop-in drop-outs



on the fly!! Only one was available on the DR4. Anyone who is more used to tape machines more than computers will feel at home.

Digital editing for CD compilation is fast and straight forward. Overlaps and cross-fades are possible using the mixer. Combining voice-overs, atmos, Foley and music for film is just as easy. Eventually, the SCSI-B port will give access to graphic editing programs, so total waveform editing and remote control is possible. Non-linear

edit functions like copy, move, delete, insert and track slip are available and edit areas are defined by 'in' and 'out' points. With the option MIDI board, tempo maps and bar, beat, clock are sent to the sequencer and can be referenced to any SMPTE point.

Hard disk house keeping is very basic with the v. 1.02 software. You must store all data and cannot save small sections. Restoring the save data is even slower as the hard disk must be re-formatted first (1.3 hrs for 1.2 gig HD).

As the DR8 stores everything you record to a different location, mega-long pieces become problematical unless you use the align function which erases unused data from the HD.

Some nice touches are the "take" function where up to 5 takes

can be compared before committing to the HD. MIDI control of mixer functions like volume and pan. Solo function with hardware switch for isolating tracks. Memo for storing sets of in and out points. Special play keys "to", "from", "over" and "in-out" which allow quicker and more accurate location of edit points.

How does one cope with only 8 tracks? Well, unless you buy multiple DR8s the best way is to prepare a series of submixes located at various points along the time axis. For example, drums could be

submixed at 00:00:00:00 then stored at a later point beyond the end of the track say at 10:00:00:00. Pads and strings submixed to 20:00:00:00. Guitars and brass to 30:00:00:00. At this stage the resulting three stereo pairs would then be submixed back to 00:00:00:00 leaving 6 spare tracks for vocals, etc. Although this technique does have limits like submix internal balance etc., no noise is built up as in analog recording and because of the peak metering

balancing is very accurate and repeatable. Once selective backup of data to DAT is available this submix operation will become a lot easier. To perform the above submix routine with ADAT for example, one would need 2 ADATs, a BRC and an A-1, plus a lot more mixer inputs.

All monitoring in the DR8 can be done through the stereo outs only, saving mixer inputs. An optional 8 channel EQ board is available for the Hard Disk tracks, but it is not assignable to the mixer inputs. Software switching per channel would be nice guys. No review would be complete without a wish list.

WISH LIST: In the edit mode it would be good to have data reverse between in & out points.

Fade in and out between points and track merge re DR4 would also be handy. A remote control unit which duplicates all the front panel control surface would save a lot of back aches if the main unit is racked. A warning message that memory is low would save time when editing because the unit locked up a number of times on certain tasks and had to be switched off and restarted.

A utility that calculates SMPTE time referred to bars and beats a visa-versa would aid in shuttling blocks of data around (1 bar 4/4 @ 120bpm + 2 secs and/or bar 9 + 00:00:08:00 @ 120bpm etc) as this is fairly standard with software programs.

Torture test dept.

A track was mixed down via S/Pdif to DAT then sent back to the DR8 digitally. This was repeated a number of times and the

sound quality deteriorated with each pass. By the fifth time phase problems were noted. To be fair the DAT recorder could have been at fault, and I have noticed this dubbing digitally from DAT to DAT. Certainly, the quality is still better than any analog recorder.

It was also noted that with all eight tracks full, HardDisk access time slowed and shifts in the stereo image were heard. This is more to do with data retrieval than the DR8. Maybe a faster HD? The problem is solved by leaving space before the track starts.

PROS: Faster to operate than tape or mouse, but not quite as fast as Superman. Familiar MTR operation. 16 channel mixer. Superior sound quality for its class.

CONS: HD utilities very basic and slow. Incompatible digitally with some DAT recorders - might require mod. under warranty. Only one level of "Undo".

WRAP-UP: AKAI have promised all functions will be in place by Vers 2.0 software. If this happens, and they listen to and implement software changes suggested by users, the DR8 could just be faster than Superman.

• Retail \$8995, distributed by Australis, (02) 698-4444.

*John Robinson is a Sydney based multi-talented composer/project studio owner. You can call him on (02) 909-2707.



Workbench

A mic and a sad tale

By Howard Jones. (Not the pop singer!)

A client came into the workshop with a mic and a sad tale. It seems that he had been experiencing crackles and dropouts and so decided to take a look at the mic himself. Unfortunately, he couldn't know that the wires connecting the output transformer to the XLR insert were very short indeed. When he pulled on the insert to remove it from the mic, he also ripped off some of the wires. What made it terminal was that the transformer was sealed in a mu-metal can and the wires had been pulled right out of the can. So, after waiting the requisite 6-8 weeks for another transformer to arrive from overseas, the replacement was fitted and all was well again. In the meantime, of course, the original complaint had been overlooked.

However, after having the mic back for a few weeks, the owner rang to say that he was experiencing much the same problem as before. This time, he felt that the likely cause lay in the mic lead he was using as he could easily make the sound drop out by manipulating the lead where it connected to the mic. Naturally, armed with this information, when he returned with both the mic and the mic lead, it was the latter that I wanted to check out first.

I started with the XLR connector on the end of the mic lead. At first, I couldn't see any glint of metal where the XLR pins should be and I thought that the pins might have been pushed back into the body of the connector. However, when examined carefully under a strong light,

it was apparent that they were there alright - the reason they couldn't be seen was that they were so corroded they had turned the same black colour as the surrounding nylon.

So, the cause of the problem was readily identified and easily fixed. What wasn't so obvious was why the owner had let his equipment get into this condition before doing something about it. And, of course, a fairly simple and easily avoided problem then led to a rather expensive outcome. This repair got me thinking about the old perennial topic of routine maintenance and why so few people bother with it. The reason, I've come to believe in many cases, is that people don't think the issue through clearly.

Many, many things in a studio are mechanical in nature, and mostly the things that fail are mechanical, not electronic. Let's take this simple premise and draw out some obvious conclusions which arise from it. Firstly, mechanical things wear down or undergo chemical change. The pinch roller on your tape machine - it's rubber and the compound will go off over time, even if you never use it. Or course, with rust (aka tape) passing over it day and night, the rubber goes off a lot sooner. A similar thing applies to tape heads - every time you run tape on your machine, you are wearing a layer of metal off the heads. To start with, this is a microscopically small layer, but done often enough, the wear becomes visible. When you can catch your fingernail in the

wear pattern then it's definitely time for a relap! Chemical degradation such as oxidation is another source of aggravation in the studio. As with the example cited above, corrosion can build up until it becomes a major problem. As the plating wears off jack plugs and sockets, for example, they become much more vulnerable to oxidation and all the crackles and intermittents that leads to. And when it comes to problems in patch bays, a whole book could be written on the subject.

The point to remember is this: you expect to have to service your car regularly and if you don't, you're not surprised if it lets you down. Exactly the same thinking should apply to your equipment maintenance. Generally, wear is a readily predictable factor, and with a little number crunching, you should be able to anticipate when your equipment will need servicing and how much it will cost.

• Howard Jones runs Studio Solutions, call 902) 906-4363.

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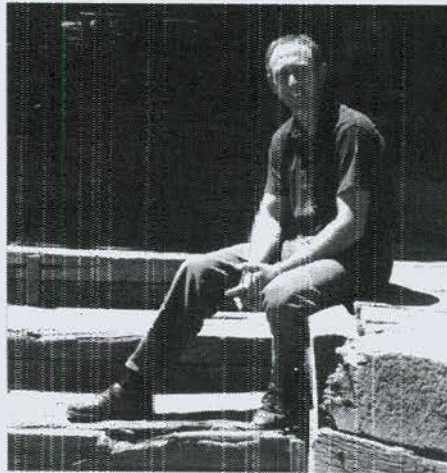
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Tom Kehoe



Tom was no exception. Sometime later Tom was told by his partner that she was going to have a baby and settling down definitely became a consideration. Tom was now a dad, but it wasn't until the baby's health deteriorated that it became imperative he finally settle. After much surgery baby Kehoe's health is pretty good but I don't think

To say Tom Kehoe is a multifaceted personality and has an insatiable love for our industry would be an understatement. His career has spanned many years and job descriptions, from lugging band gear to his current position as General Manager of Gotham Audio as well as controlling his own company TK Entertainment Services. I talked with this eloquent man for hours while I was visiting Gotham Audio and decided to

you'd get Tom back on the road for anything; parenting is another of Tom's loves.

Anyway, Tom started a six year stint at Metropolis Audio (then known as AAV) working with Ernie Rose. Managing Gotham Audio was part of his Metropolis portfolio so his current position was an obvious destination. Tom finally left Metropolis to (among other things) manage engineers and producers. After six months Tom was asked to manage Gotham Audio and he still operates his own business in conjunction.

Tom's approach to business is 'Chameleon Like' - he feels that in the future you'll find major studios experiencing less tracking but more specialised post production projects. Even so, in the current market the need to diversify your projects for full utilisation of your facilities is imperative. Tom says by expanding your horizons you not only benefit yourself but help develop new areas, in an otherwise ill recording industry.

Working with bands such as Jo Jo Zep & The Falcons, Richard Clapton and The John Farnham Band. Tom found himself more often than not, as the Crew Boss or Tour and Production Manager and his business skills really started to develop. Finally he became International Tour Manager for the Little River Band where he enjoyed 'a good life for a single boy' for several years.

Tom commenced his illustrious career, like many of us, transporting and lugging gear around the traps for various bands. This eventually led to an investment in a larger truck and a PA, which as usual expanded into two PAs and two trucks. Now Tom's a pretty smart guy and eventually, like us all, decided that the body can only take so much punishment. Luckily, Tom hadn't just been using brawn over the years, his mind had been squirreling away information and his own business and communication attributes had been expanding.

Preparing and producing material for CD Rom, Corporate Video & Video Clips are just a few avenues open to most sophisticated facilities. An example is that all aspects of the recording industry need to take advantage of the budding multi-media formats. Tom feels the industry needs to lobby the government for legislative changes regarding the quantity of local repertoire included in this product line. "Most government legislation lags behind technology" Tom says.

But life is capable of throwing everyone a few curve balls and

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ARTIST PRODUCER ENGINEER PROJECT

New South Wales

A# Sharp Studio	Jeff Cripps (02) 534 4440 24 Track 1'		
Ian Blakeny	Geoff Cripps	Geoff Cripps	Demo
Blue Heaven	Geoff Cripps	Geoff Cripps	Demo
Heartworm	Geoff Cripps	Geoff Cripps	4 Tk. CD
Airmotion Studios	Kristen Wolek (02) 550 3863 24 Track		
Mike Harvey	Tony Cohen	Tony Cohen	Rec. Tracks
Backsliders	Backsliders	Jason Blackwell	O/Dubs
Radio Zero	Radio Zero	Brent Clark	O'Dubs
Artrage	Peter (Fæney) Williams (02) 564 2509 24 Trk.		
Sirkus Barock	Sawung Jabo	Rusty	Album - Black & White
Blackfeather Music Studios	John Robinson (02) 909 2707 8 Tk	Digital ADAT System & BRC	
Beau Smith	Fran Smith/J. Robinson	J. Robinson	Demos
John Robinson	John/Karl Seglins	John	CD 'Amelia'
Tim Buck 2	Tim Bossheiter/John	John	Demos
Bush Traks Recording Studio	Ruth & Dave (066) 89 1290 24 Track	Ruth Miller	
Gyan & Tim Gaze	Highet/Pike	Dave Highet/Neil Pike	Live Recording & Video
Bourkenbacks	Band/D. Highet	Dave Highet	Album
Hi I'm Home Honey	Band/D. Highet	Dave Highet	Album
Vivid Image	Band/D. Highet	Dave Highet	Album Tracks
Charing Cross Studio	David Sykes (02)387 8362 - 24 Trk Neve		
Solar	Dorian West	Keith Cooper	Album
Dog Trumpet	Martin White	Martin White	E.P.
Mentals	Martin White	Martin White/Aaron Motley	E.P.
Tumbleweed	Paul Mc Kercher	P. Mc Kercher/Aaron Motley	Single Mixing
Very's	Paul Mc Kercher	David Trump/Greg Wales	Album
Pollyanna	Greg Wales	David Trump/Greg Wales	E.P.
Cloud Studios	Parris Macleod (043) 532 429 48 Trk Analogue/Digital Mastering Suite		
Scott Leece	Parris Macleod	Parris Macleod	Album
Amsterjam	Band	P. Macleod/Kim Lemke	Album
The Stuhl	P. Macleod/Band	P. Macleod/Kim Lemke	Demo
Looking Glass	P. Macleod	P. Macleod/Kim Lemke	Demo
The Pure	Band	P. Macleod/Kim Lemke	Demo
Crystal Clear Recordings	(02) 975 3769 Dave Tozer 24 Tk Digital ADAT System & BRC		
Bruce Mathiske	Dave Tozer/Bruce	Dave Tozer	Album Tracking & Mixing
Eeze	Dave Tozer/Eeze	Dave Tozer	Album Mixing
IOU	Dave Tozer/IOU	Dave Tozer	EP Mixing
Brian Benson	Dave Tozer/Brian	Dave Tozer	Demos
Belle Hendrik	Dave Tozer	Dave Tozer	Demos
Mick Junor	Dave Tozer/Mick	Dave Tozer	E.P.
Damien Gerard Studios	Contact Marshall (02) 660-8776 2 x 16/32 Track		
The Deep	The Deep	Russ	Demo
Died Pretty	Brett Myers	Russ	Tracking
Leftovers	Paul Mc Kercher	Russ	Album
Norma O'Hara Murphy	Rob McCormack	Russ	Album
Raw Sugar	Raw Sugar	Dave	Demo
Dee Healey	Dee Healey	Russ	Demo
Eclipse Music Studios	Elise Huntley/Jodie Sharp 24 Tk. Analogue/32 Tk Digital SSL 4000E Series		
Cruel Sea	Tony Cohen/Cruel Sea	Tony Cohen	Mixing
Silverchair	Kevin Shirley	K. Shirley/Phil Munro	Mixing
Margaret Ulrich	Kevin Shirley	K. Shirley/Phil Munro	Mixing
Puppetsphere	Band/M. White	Martin White/Matt Lovell	Mixing
TMC (Koala Foundation)	Scott McRae/Band	Phil Munro	Track & Mix EP
Crop Circles & Pale	Fresh Productions	Jamie Carter/David Lumsdaine	Mixing
Festival Studio	Anne Bellairs (02) 660 3927 24 Analog, 32 Trk Dig. Neve		
Margaret Ulrich	Kevin Shirley	Mark Thomas	Single
Kindred	Paul & Mark	Mark Thomas	Mix EP
Battery	Mark & Band	Mark Thomas	Voc O/D & Mix
Stydogs	Rick O'Neil	Mark Thomas	Track EP
48V Studio	Clare Britton (02)211 6663 48 Track, 24 Digital/24 A'log		
Screaming Jets	Robbie Adams	Robbie Adams/Dave Henderson	Album
Daryl Mather	Daryl Mather	Rob Taylor	Album - Record
Charlie Chan	Robbie Rowlands	Robbie Rowlands	Beyond the Blue - Video
Soundtrack			
Super Freak	Rob Taylor	Rob Taylor	EP
Lode Star	Robbie Adams	Robbie Adams	Re-Mixes
Harlequin Studio	Bruce Waite (02) 457 83304 Mastering & Recording		
Swirl	Ben/Swirl	Bruce Waite	EP Mastering
The Last Unicorn	Nick Dalton	Bruce Waite	EP Mastering
Hullabaloo	Glenn Heaton (02) 684 2039 24 Track, Pro-Tools Editing		
Heaton/McGarvey	Heaton/McGarvey	Heaton/McGarvey	TV Series/Music
Heaton/McGarvey	Heaton/McGarvey/Disney	Heaton/McGarvey	Disney Fashion Launch
Heaton/McGarvey/Langford	Heaton/McGarvey	Heaton/McGarvey	Australia Day Awards Music
Strum Jungle	Heaton/McGarvey	Glenn Langford	Demos
Gary Boulter	Gary Boulter	Daniel Bowers	Demos
JMF Studio	Fran Esther (02) 790 4097 24 Track		
Anthony Vladamir	A. Vladamir	Ralph Esther	Mixing Album
Dennis Dapozzo	Ralph Esther	Ralph Esther	Demo
Jack Stowers	Jack Stowers	Ralph Esther	Demo
Main Street Studio	Rob Specogna 042 834 515 16 Track		
Indonesia Project	B. Robertson/J. Thomas	J. Thomas	Demos
Warwick Marsh	W. Marsh/R. Specogna	R. Specogna	Album
The Vaughans	R. Robertson/Band	J. Thomas	Demo



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ARTIST	PRODUCER	ENGINEER	PROJECT
Megaphon Studios Kristen Wolek (02) 516 3917 24 Track			
Peyote	Tony Cohen	Paul McKercher	Rec. EP
Renaissance Players	Winsome Evans	Guy Dickerson	Mix Album
Backsliders	Backsliders	Guy Dickerson	Record Album
'The Kookaburra Who Stole the Moon'			
	Peter Winkler	Guy Dickerson	Record & Mix Orchestra
Mirage Studios G. Nixon (02) 211 3915 16 Track Digital, 48 Tk. Digital 24 Track Analogue			
Pelican Jed	Nick Mainsbridge	N.Mainsbridge/J.DeWilde	Single
Happy House	Charles Fisher	J.Bonniface	Album
Power Supply	T.Misner/M.Kennedy	T.Misner	Album
Lancaster Bombers	T.Misner	T.Misner/DeeCee	Album
Viva Diva	Martin Sharp	DeeCee	Live Album
Grand Masters	Jackie Orzasky/DeeCee	Dee Cee	Single
Paradise Studios Bill Field (02) 357 1599 48 Track A'log, Custom Mixer,			
Geoff Bullock	David Moyse	Adrian Boland	Album Tracking
David McLeod	D.McLeod/D.Siedel	Glen Phimister	Album
Duncan James	Garth Porter	Ted Howard	Demo
Gotham City Horns	Gary Kee/Justin Kearin	Ted Howard	Demo
Rathouse Studios Mark Macedone (069) 622307, 018 270 731 16 Track			
UnfaithfulHoneymooners	Band/Mark Macedone	Mark Macedone	Album
Peter Jones	Peter Jones/Mark Macedone	Mark Macedone	Jingle
R. & R. Recording Robert Zimola (02) 624 4484 16 Track			
CJMJ	CJMJ	Robert Zimola	Album
Estranged	Band	R.Zimola/S.Thompson	Demos
New Beginnings	R.Zimola	R.Zimola	Motivational
Nu-Skin	A.Woodcock	R.Zimola	On-Hold/Corporate
Eve-Cue Communications	P.Saunders	R.Zimola	Fashion Show
Sony Music Studio (02) 332 0320 Ross Ahern. 24 Track Analog/Digital/Mastering			
Beyond Belief	Charlie Chan	Rob Rowland	Film Score
Graham Jesse	Graham Jesse	Simon Tonx	Album
Silverchair	Tim Whitten	Tim Whitten	Remixing
Godstar	Nick Dalton	Tim Whitten	Album Mixes
Sony Artists	Clayton Dougherty	Ross Ahern	Betacam Editing
Sound Level Pty Ltd. Joe Breen (02) 552 3200 32 Channel - Live to DAT.Multi Track Available			
Grover	Martin Carr	Will	Demo
Jo Campbell	Paul Gannell	Paul Gannell	Demo
Warumpi Band	Neil Murray	Helix Union	Demo
Sunshine Crowd	Paul Gannell	Paul Gannell	Demo
Soundwarp Meredith Brooks (02) 905 7144 Mastering/Post Prodn.			
EGG	Jamie Carter/EGG	Meredith Brooks	CD Mastering - Demo CD
George Hamilton V		Meredith Brooks	CD Mastering/Compile
Sarah Jory		Meredith Brooks	CD Mastering/Compile
Studio Arts Productions (042) 849128 Ed Lee. Independent Recording Studio			
P.Harness	P.Harness/Ed.Lee	Ed. Lee	Album
Mathieu Sylvian	M.Sylvian/Ed.Lee	Ed. Lee	Album
B.M.I.S. Course			AusMusic Industry Course
Sigliola Miccoli		Ed Lee	Industry Demo.
The Vault Contact Terri Barnett (02) 953 0332 2' 24 Track			
Audio Murphy	Mark Moffatt	Mark Moffatt	Album
Back of Beyond	Mark Moffatt		Film Soundtrack
Trackdown Geoff Watson (02) 550 6890 24 Trk., 8-16 Tk. A-Dat, 8 Tk			
Guy Gross	Composer	Guy Gross	ABC Cable TV News Theme
Ghostwriters	Rob Hurst	Brent Clark	Album
Bananasin Pujamas	Chris Harriott	Kathy Nauntton	ABC Special
Blinky Bill	Yoram Gross	Tim Ryan	TV Series II Audio Post
Daryl Aberhart	Daryl Aberhart	Michelle Barry	Song - "We Will Remember"
Tracking Station Studios Contact Martin Cass (02) 281 8899 24 Track A'log			
The Wiggles		Aaron Ruig	Album
Deanote Productions	Bruce Scance	Niel Shepard	Backing Tracks
John Fields	John Fields	Massimo Settemi	Demos
Luzy Acuna	Luzy Acuna	Mal Shepard	Album Tracking
Troy Horse Studio Michael Lewis (02) 557 3129 24 Track			
The Simpletons	Rob Clarkson	Ramesh	Album
Craule Snatch	Band	Colin Wright	E.P.
Nadya	Colin Wright	Colin Wright	Album
Front End Loader	Bub Fiendish	Matt Haddock	Live EP Mix
Qantas	Gordon Pollard	Colin Wright	Voice Overs
Colin Wright's Hot Load	In the Land of Love	Cuddles Stephens	Squeeking Noises
Wirra Willa Studios Contact Will Rout (02)605 1203 24 Track/8 Track Hard Disk			
Shirley Silata	Timothy MacBride	Ian Cooper	CD Album Track
Kokajo	Kokajo	Will Rout/Ian Cooper	CD Album Track
Collin Mclure	Phil Stein	Ian Cooper	CD Album Track
Ian Peters	Ian Peters	Ian Cooper	CD Backing Tracks
Campbelltown Orchestra	Gillian Wheeler	Will Rout/Ian Cooper	CD Album Track
Melanie Noble	Chris Connelly	Ian Cooper	CD Album Track

Queensland

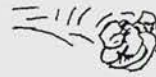
Digital Paradise Ian Peters 075 270722 32 Track Digital			
Issy Dye	Ray White	Ian Peters	Album
East Australian Film Corp.	Bob Hardy	Ian Peters	Vidao Sound Track
Grevillea Recording Studios Malcolm Jacobson (07) 262 8422 24 Track Analogue/16 Tk Digital			
The Music Department	G.McDonald/L.Stone	Bruce Jacobson	Soundtrack
XXXX Gold Crushers	Geoffrey Schuhkraft	Malcolm Jacobson	CD Mastering
Gary Williams	Gary Williams/Rodney Jacobson	Rodney Jacobson	CD Mastering



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ARTIST PRODUCER ENGINEER PROJECT

ARTIST	PRODUCER	ENGINEER	PROJECT
Studio 19 Recording Studio (077) 757 375	Allen Castleton	16 Tk Analogue	DAT
Jason Martin	J.Martin/A.Castleton	A.Castleton	Demos
Daniel Holloway	D.Holloway	A.Castleton	Album
Dog Culture	J.Carscadin	A.Castleton	Demos
The Gardiners	D.Megaritty	A.Castleton	Demos
Sunshine Studios (07) 844 6844	Leon Prescott	36 Channel	Neve 24 Trks
Peel	Joe Malone	Joe Malone	Demos
Brian Cavanagh	Mark McElligott	Mark McElligott	Demos
Dionysos	Mark McElligott	Mark McElligott	Demos
Drebbins	Mark McElligott	Mark McElligott	Demos
Suite 16 Audio Productions Murray Lyons (07) 369 8733		24 Tk Analogue/24 Trk.	Digital
Shane Nicholson	Shane Nicholson	David Richards	Demo Songs
Toyota Lexcen	Garry Smith	Julian Lynch	Commercial
Dan Vogler	Dan Vogler	David Richards	Album
Old. Newspapers	Garry Smith	Julian Lynch	Commercial
Taramalin Sound Allan Lahey (07) 208 9736			
The Brick Babies	Band	Allan Lahey	E.P.
Dan Mullins	Dan	Allan Lahey	Demo
101FM	Rob Fisher	Allan	Station ID
Mick Nolan & Friends	Rob Fisher	Allan Lahey	The Scorpions Theme Song
Vandersound Studios Eric Vandersande (075) 468100			
Manpower Project	Eric Vandersande	Eric Vandersande	Demo
Scott Patterson	Eric Vandersande	Scott Patterson	CD Album
Soliloquy	Eric Vandersande	Eric Vandersande	CD Album
So What?	Eric Vandersande	Eric Vandersande	CD Album
Jake Gilroy	Eric Vandersande	Eric Vandersande	CD Album
South Australia			
Mixmaster Productions Mick Wordley (018) 822 986 24	Track 2'	Dolby	
Free Moving Curtis	M.Wordley/F.M.C.	M.Wordley	Album
Blue Harmony	M.Wordley	M.Wordley	Pre-Prod.
Puck	M.Turrell	M.Turrell	C.D.
Blue Experience	P.Giles/Band	M.Wordley	C.D.
Rash	M.Wordley/Band	M.Wordley	Album
Ear Candy	M.Wordley/P.Bungey	M.Wordley	Album Tracking

Victoria

Bel Air Sound Danny Olesh (03) 563 7887	24 Track	Analogue	8 Track
C.D.B.	C.D.B.	Tim	Demos
Violet Hour	Simon Segal	Simon	Album
Jonestown	Jonestown	Rich Smith	Demos
Wicked Minded Poets	W.M.P.	Simon Segal	Demos
Brad Walker	D.Olesh/B.Walker	Daniel Olesh	Album
Head	Daniel Olesh	Daniel Olesh	Demos
C'est Ca Audio-Visual Services Moira McCourt (03) 419 1506	Auto 24 Trk.-	Digital Mastering	
The Celts	The Celts/Siiri Metsar	Siiri Metsar	Album
Three	Three/Siiri Metsar	Siiri Metsar	C.D. E.P.
Girl Zone 2	Siiri Metsar	Siiri Metsar	All Girl Comp. CD
Snapdragons	Siiri/Girl Zone Records	Siiri Metsar	CD Single & Album
Loot	Phil Turnoon/Chris Pain	Siiri Metsar	CD/Demo
Ruth Friend	Ruth Friend	Siiri Metsar	Flute Tutorial CD
Gotham Audio Tom Kehoe (03) 879 9400	48 Track Dig. /SSL	Console	
Body Motors	Doug Brady	Doug Brady	Album
Ultra Sound	Wily Zygiar/Deborah Conway	Lawrence Maddy	Album Mixing
The Childs	Michael Letho	Michael Letho	Album Mixing
Jane Rutter		Michael Letho	Demos
The Lovers	Jeremy Allsop	Doug Brady	Mixing
Richard Pleasance	Richard Pleasance	Kalyu Tonuma	Re-mix
Hot House Audio Contact Cryss (03) 525 3703	24 Track		
Frog	Paul Annison	Mark Walsh	E.P.
O.O.K.	Paul Annison	Jed Starr	Demos
Ray Periera	Simon Polinski	Ray Periera	Album
Boots	Paul Annison	Paul Annison	Album
Biscuit	Cryss	Craig Harnath	E.P.
Dragonfly	Cryss	Craig Harnath	Single
Newmarket Studio Contact David Bates (03) 372 2722	24 Track 2 Studios		
Emma Franz	Band/Emma	Chris Corr	Album
Archie Roach	Jen. Anderson	Cameron Craig	Pre Production
Dixi Jive	Band/Daniel	Daniel Desiere	Album
Eileen Coble	Chris Corr	Chris Corr	Talking Book
The Preachers	Stephen Boyd	Rob.D.Dillon	Album Mixing
001 Recording Studios Contact George Siew Ooi (03) 348 1300	24 Track /Midi Suite, 2 H/Disc Recorders		
EV Experience	Evan Kelly	Brian Marsh	Single
Kismet	Band/Mark Ingraham	Mark Ingraham	E.P.
Andrew Fowler	A.Fowler	Brett Taylor	E.P.
Beastial Warlust	Band	Adam Calaitis	
Radio 3WRB	Jose	Brian Marsh	Dubbing
Tlot Tlot	G.Ooi/O.Bolwell	O.Bolwell	Album
Platinum Studios Jim Mountford (03) 827 7483	48 Trk. SSL/24 Trk		
Diggers With Amplitude	Barry Palmer	Kalju Tonuma/Phil Jones	Album
Richard Franklan d	Tony Norris	Adam Rhodes	Album
The Big Easy	Band/Chris Corr	ChrisCorr	E.P.
Takao Horuchi	Hisashi Sato	Iguchi	Album Mix
Uncle Toby's	Jeff Hales	Laurence Maddy	Mix
Tony Fletcher		Laurence Maddy	E.P.



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EX-TRACK

Studio news with Caroline Grafton

- **Paul Grant's** been recording and mixing tracks for Asian composer and artist Lee Jun Zhang at Eclipse Music Studios.
- **Brendan "Bam Bam" Morley** is currently in the South of France engineering and co-writing for the Jimmy Barnes album with American producer Joe Hardy.
- **David Nicholas** is presently in the UK working on projects with ex-Eurhythmic Dave Stewart. Then to France for some tracks for the Johnny Halliday album.
- **Martin White** post the Electric Hippies debut album, is co-producing/engineering projects for indie bands Puppetsphere and Bellydance. Contact Jodie Sharp or Elise Huntley on (02) 264 7734.
- **Suite 16** (Brisbane) now boasts both 24 tr. analogue and 24 tr. digital recording. New "Pro Tools" version III, and Tascam DA-88 digital recorder enables the dual production of jobs, and fast efficient digital editing of S.F.X. and music tracks from pre to post production. Simon Lang, a computer 'whiz-kid' and Pro Tools operator, has been bought in to take control of the new facilities. Suite 16 will be running demo's for key agency staff in the near future. Call Murray or Garry: 07 369 8733.
- **JMF Studio** (Syd) has had a facelift. New carpet, paint and mood lighting have given the stu-

dios a warm and intimate aspect. Call Ralph or Fran- (02)790 4097.

- **Sound Level P/L** have a new Mackie 32 Channel Mixing Desk in their recording studio and new Yamaha Mixing Desks in the five rehearsal studios. Call Joe Breen on (02) 552 3200.
- **Digital Paradise** on the Gold Coast, represents a relocated (July 1994) and transformed **Solid Gold Media Services P/L**. Studio owners Ian (House Engineer/Producer) and Irene Peters and Rob McKay have designed various production packages. Digital Paradise Studio A is running with 32 tracks on a Sound Workshop Series 100 Main-frame, various recorders including Tascam DA-88, Lyrec and Otari with Mastering on Otari DAT and 50/50s and a Hard Disk Digital Wave Form Editor/Mastering system. Call (075) 27 0722.
- **SAE - School of Audio Engineering** have announced the first of their International Music Production Workshop to be held in July and August in Sydney, Paris and London. Although not yet announced Tom Misner of SAE has promised me guest speakers will include a plethora of International Producers. For further info contact SAE on (02) 211 3711.
- **Damien Gerard Sound Studios** have been busy with Russell Pilling engineering the 'New Christs' album and the debut release for the new Sydney act 'The Deep'. Dave Trump, now DGs 1st Engineer assisted Paul McKercher on 'The Verys' new album. Marshall Cullen burnt the midnight oil on the 'Ashtray Boy's' new album, the two day schedule with owners Marshall Cullen and Elia Bel about to head off to the USA the pecking order at DGs is: Michelle Green/Studio Co-ordinator, Bob Armstrong/GM and Phil Drew/assistant engineer. Call Michelle on (02) 692 9915.

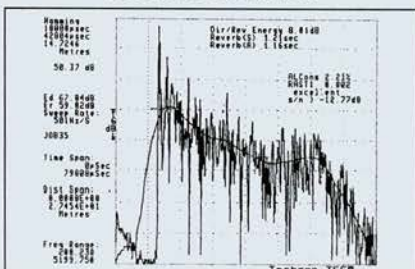



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St. Andrews Recording Studio Mark McCormack (03) 583 2341 or Paul 018 102519 24 Track

Rock & Roll High School	Greg	Greg	Demo
Doctor Dementos	Paul Sherrit	Paul Sherrit	C.D.
Stones Tribute Band	Paul Sherrit	Paul Sherrit	Demo
Sing Sing Studio Phil or Kaj (03) 428 4622 - 24 Tk Digital & 24 Tk Analogue			
Bad Loves	Doug Roberts	Doug Roberts	Album
Mick Harvey	Mick Harvey	Victor Van Vugt	Album
Pot Pourri		Trevor Reading	Album
Manic Suede	Doug Roberts	Doug Roberts	E.P.
The Genes	Band	Kaj Dahlstrom	Album Mix
Alan Zavod	Alan Zavod	David Davis	Album
Studio 52 Paul Higgins (03) 417 7707, 32 Tracks & Studio 2 ADAT 8 Track			
Happy Gas Stare	The Band		Nu-Music #10 Track
Damian Manassa	Trevor Carter	Trevor Carter	Album
Monkfish	The Band	Andrew Wright	Nu-Music #10
Hard Luck	The Band	Trevor Carter	Nu-Music #10
Presence	The Band	Trevor Carter	Nu-Music #10
Grover Rhodes Trio	The Band	Paul Higgins	Demos
The Boat House Jamie Durrant (057) 633 293 12 Track with Valve Mic Pres.			
Spudgun	Jamie Durrant	Jamie Durrant	Album Mix
Michael Meeking	Jamie Durrant	Jamie Durrant	EP Record
Degenerates	Jamie Durrant	Jamie Durrant	EP Record & Mix
Incurion	Jamie Durrant	Jamie Durrant	EP Track Record & Mix
Wombat Road Studio (051) 454204 Barry Clissold 24 Trk. (16 Analogue & 8 Digital)			
Scorne	D.McDougal	B.Clissold	Demo Tracks
Paradigm	W.Fyfe	B.Clissold	Demo Tracks
Tom Robinson	T.Robinson	B.Clissold	Demo Tracks
Jill Meehan	Meehan/Clissold	B.Clissold	Demo Tracks
Candy Apple Green	Band/Clissold	B.Clissold	C.D. (Album)
Joy Lamprell	Lamprell/Clissold	B.Clissold	Demo Tracks

Northern Territory

Kakadu Studios Ken Hutton 089 411344 24 Track, Mobile, Digital Mastering

Paul Francis	K.Hutton	K.Hutton	Album
Alex Taare	K.Hutton	K.Hutton	Original Album
Harry Melios	K.Hutton	K.Hutton	Original Album
Arnhemland Bands	K.Hutton	K.Hutton	Demo
Maestro Music Lindsay Masters 089 321 754 8 Track			
Jenny Taylor	L.Masters	L.Masters	Demo
Soul Agents	L.Masters	L.Masters	C.D.

Western Australia

Bonsal Recording Studio Tom Thorpe (09) 349 6029 24 Track

Criminal Force	Tom Thorpe	Tom Thorpe	Demos
Aurora	Tom Thorpe	Tom Thorpe	Album Tracks
John Pin	Tom Thorpe	Tom Thorpe	Demos
Keith McDonald	Tom Thorpe	Tom Thorpe	Demos
PMFM Morning Crew	Tom Thorpe	Tom Thorpe	Jingles
Blind Cactus	Tom Thorpe	Tom Thorpe	Demos
Planet Sound Studios Contact John Villani & Denise Preston (09) 382 2211 48-32-24, 2 Rooms - Both SSL			
Allegiance	J.Villani	J.Villani	Album Tracking
M.C. Tribal	Brad/J.Villani	J.Villani/Les Williams	E.P. Tracking
Dave Hole	Jim Gaines	J.Villani	Recording
Novak Langer	N.Langer/J.Villani	J.Villani	Album Tracking
Bhangra Music	W.D'Souza	J.Villani	Album Tracking
Poons Head (09) 339 4791 Rob Grant 32 Track			
Spooky	Rob Grant/Band	Rob Grant	E.P.
Spank	Rob Grant/Band	Rob Grant	Album
Beaverloop	Rob Grant/Band	Rob Grant	Album
Jummy Fur	Rob Grant/Band	Rob Grant	Single Re-Mix
SASA	Chris Dickey	Rob Grant/Chris Dickey	Mastering
Hedonists	Rob Grant	Rob Grant	Album
Troppo Sound (091) 922394 Mick Connolly 24 Track Dolby S Dat Master			
Various	Ben Raja	Alan Pigram	Compilation Album
Raymond Petherick	David Hymes	Troppo	Demo Album
Womens Album	Lynn Hazelton	Troppo	Compilation Album
Renovations	Mick Connolly	Troppo	Hard Work
Witzend Recording Studio (09) 331 1818 Alan Dawson 16 Track			
Stephen Charles	Stephen Charles/Alan Dawson	Alan Dawson	Album
VampireDance	Alan Dawson	Alan Dawson	E.P.
Andalusa	Alan Dawson	Alan Dawson	Album

HOW TO LIST YOUR STUDIO:

1. Deadline is ALWAYS the 15th of the month before publication.
2. Mail or Fax the information to us, you do not need a specific form, but you do need to follow the format of the guide. Limit: 6 projects.

Send to: Connections, BASF Guide, PO Box 439, Epping 2121, or
Fax: (02) 876-5715. **More info, call Elaine on (02) 876-3530.**

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WIRELESS

The black magic and hokum associated with wireless microphone technology isn't strictly a spin the sales jockeys have put on it. What's happened is everyone, everywhere is transmitting into the air.

Your mobile phone outputs .6 of a watt if it's handheld, over ten times more powerful than a wireless microphone system. A wireless microphone generally makes about 50 milliwatts output on a good day. That's a VHF system.

UHF systems work happily to a legal limit of about 10 milliwatts, because the law says you don't need a license under a certain field strength. Field strength isn't the same as actual milliwatt output. It's confusing.

So put the thousands of possible frequencies into the pot and you have an environment where the 'knowers' prosper and can figure what works and what won't. Like Murray Tregonning says, large shows are looking for more and more frequencies these days, with wireless everything and in-ear monitors too.

Some wireless pointers:

- Mobile phones operate in the 800 meg bandwidth above wireless mic's. The new Digital mobile bandwidth includes the old 900 meg bandwidth used by many UHF wireless people here :- 902 - 915

megahertz.

- In the year 2000 the 915 - 928 megahertz band comes under review. Don't hold your breath waiting, the digital phone providers will grab this.

- With three separate digital phone networks spanning the nation, the need for additional bandwidth is inevitable.

- 900 meg UHF systems displaced by the acquisition of the 'Group 1' bandwidth were re-engineered by crystal replacement to operate on the 915 - 928 meg bandwidth.

- New 800 meg systems are typically multi-channel digitally synthesized, without a crystal, or fixed frequency 'rock'.

- 200 megahertz systems, VHF, are legal for use wherever there is no TV station. The bandwidth spans 174Mhz to 222Mhz, except for 204 - 208Mhz. Channel nine in Melbourne sits across 195 - 202Mhz.

- The Government body charged with determining frequencies is the Spectrum Management Agency.

- American TV channels are different to Australia. Why? They use NTSC, we use PAL. Their UHF channel 69 is actually part of our channel 67. Some wireless vendors don't understand this, Sony do and they have plotted who is where, what and why.

MURRAY T. SAYS:

"It was a Sennheiser commercial" crowed the cynics afterwards, but for the advertised 50 minutes it was anything but. This was the 'Wireless Directions' workshop at ENTECH hosted by the wise-cracking sound guy Murray Tregonning. And boy, can he talk!

In 1970 when I first started in this industry at HSV 7 Melbourne, I saw the first wireless system. A Sennheiser running on 30 Mhz, with a 3 foot long antennae and a pocket transmitter as big as a hardback book. Unless you really had to use it, no-one wanted it. You know, run the antenna cable down the leg and walk like Ross D. Wyllie (*Sorry Ross!*).

Then 200 megahertz radio systems came in. All the frequency spacing that the P.M.G. (the then, Telecom or The Department of Communication) would allow us at that time were five or six frequencies above VHF television channel nine, and if you were lucky, you'd get four working together.

This of course was way back when the original "Jesus Christ Superstar" and "Hair" were performed on stage with cable mi-

crophones and Wyn Milson was still a rock star.

This frequency allocation was further compromised when the then channel 0 was moved to channel 10 in Melbourne and Brisbane (It was always channel 10 in Sydney but for some reason the government made it channel 0 in Melbourne and Brisbane. Go figure).

Allow me to give you an insight in the history of the radio frequency allocation in Australia. The frequency allocation "cock-up" started with the introduction of television in 1956. Unlike Europe and America using UHF, the Government of the time chose VHF (Very High Frequencies) Band 3. The reason, probably because of cost, was to place a VHF transmitter on a hill, and the signal would go a lot further than UHF. So we had

(over)

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Fact is, the C 12 sound was an engineering anomaly. Each capsule was assembled, tensioned and suspended by hand. So, in reality, no C 12's could sound somewhat different. Creating them was an art, mastered by a score of Austrian technicians as skilled as any Swiss watchmaker.

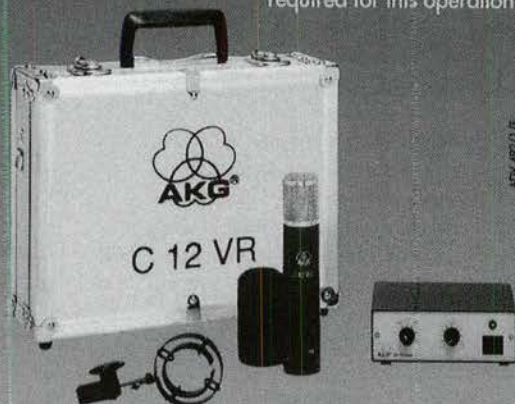
Then again, if you're after a C 12-like sound, look no further.

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Buyers Guide WIRELESS



wiped off by the more powerful adjacent frequency. All Micron channel 81 owners then had to channel change to another frequency at a cost of \$500 per system.

The problem is even worse in Sydney; probably the worst place in the country for RF! This is simply because unlike other

the ABC, the National Broadcaster down on VHF Channel 2. This way they could cover long distances and deliver television services to the masses.

Unfortunately, one of the problems with using channel 2 VHF for the ABC was that it placed the ABC in the middle on the international FM radio band. In the late 70's when FM radio was introduced to Australia, it was evident that eventually the ABC TV network would have to move from the VHF to the UHF band. The international FM radio band goes up to channel 5A on our Australian VHF television band. That's why when you're tuning your TV up past Channel 2, you get lots of FM radio stations blaring in.

So there we were in the early days of radio microphones, jammed in on VHF TV frequencies band 2, between channels 9 and 10. This was all very well until stereo TV arrived in the late 70's.

Then the television stations needed a second sub carrier in their respective frequency. Channel 9's frequency is 195 - 202 Mhz. (Quite a lot of bandwidth). In Television broadcast is the vision carrier is down the bottom of their allotted frequency band, then up the top are where the sub-carriers are for sound.

Of course, they were running mono and then they had to split it into two, so they could have two sub-carriers for stereo. So before the introduction of stereo television we could run a Micron system on channel 81 (202.2) and have no interference problems, but when channel 9 began stereo sound transmission, their 2nd sub-carrier (right) was sitting right on the edge of their band at 201.99, pumping out 50 kilowatts. So our poor Micron channel 81 pumping at 30 milliwatts was

cities in Australia, Sydney's Television transmitters are so close to the CBD. For example, this building we are in - the Sydney Exhibition Centre - is one of the worst buildings in Australia for radio microphone operation. 200 Mhz sometimes works here, not

Overseas, the traditional radio microphone frequencies are in the 400 megahertz band. Countries include the U.K., Japan, America and Europe.

Of course in Australia, we had to be different. Our 400 Mhz is full of police, taxis and couriers two way radios.

This is yet another problem we have inherited. The 400Mhz band is the ideal frequency for radio microphones, but is out of the question in Australia.

The first Sony 400Mhz radio microphone I saw was a demo system that came out from Japan, and it went from venue to venue, TV station to TV station.

A story - a man who liked to try

new things on TV was, my boss at the time, Colin F. Stevenson (*Head of GTV 9 Audio Department 1964-1985*). The event, was a "live to air" Royal Command Performance.

It was the first in Australia at the Opera House in Sydney, held in the mid 70's. Sony provided Colin

with the first prototype of a 400 Mhz radio microphone, the WRT-57, (silver in shape, and a strange windshield). It was powered by a strange 9.4v mercury battery, and had an electret condenser capsule. Sound checks and rehearsals went fine. The Queen arrived

for the show. Colin prefaded the main radio vocal microphone (the only one!), two minutes to air and..... "first cab for the Menzies Hotel.....Crackle.....". You can imagine the awful sinking feeling that set in immediately!

An SM-58 on a cable was on

standby in the wings, and the Taxi signal was strong. He sent his boys outside to find the offender who is sitting in his taxi looking at the Opera House.....of course he took off!

The same thing used to happen to Colin at Channel 9 in Melbourne. There was a taxi truck company across the road in Bendigo Street. "The Don Lane Show" was live at 9.30 pm, and just before they went to air, they would call out on the radio!

At this time, it happened that Sony had designed the same radio microphones in the 900Mhz band for Canada. The GTV Engineering Department, and Colin, spoke to the Department of Communication.

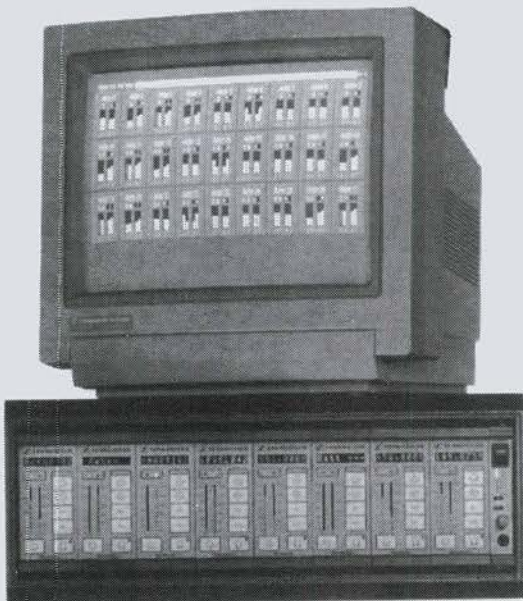
As there was nothing up in the 900Mhz band, we could then "legally" use the band as secondary users. For the first time we had 24 frequencies available, 16-18 of which would work together. Sony delivered the first 900Mhz WRT-57 / WRT 27 / WRR27 to GTV in 1978.

So all was OK. The Sony system had an electret condenser microphone head, fine for variety singing where the microphone is away from the face, but if you shove one into your face like a rock singer does, you overload the front end of it. Peter Allan, the late and great, found this out at the opening of the Sydney Exhibition Centre - there is nothing you can do, you just get capsule overload.

SONY AND THE WRT-67

After much talking to Sony by Colin F. Stevenson again, they came out with the WRT-67 handheld transmitter, with a dynamic Japanese version of a Shure 58 capsule. I believe no Japanese radio microphone manufacturer can use a "real" Shure SM58 capsule in their radio mics, because Shure remembers the war!

I have a lot of Sony for hire, and through the years, I'd get hire requests from Jands and others, who'd, "say we've got Stevie Windwood coming in and he wants a WRT-67 transmitter, but he wants a real SM-58 capsule in it".



Sennheiser system



other times. You need to be very careful with your choice of frequencies.

ENTER UHF WIRELESS

Australia adopted the Canadian 900 Mhz UHF wireless band in the late 70's, it was by chance we got the 900Mhz band.

So we'd do it. We have successfully "transplanted" Shure Beta 58 and Shure Beta 87 capsules on the standard Sony WRT-67 transmitter.

When Neil Diamond came to Australia on his last tour, he bought a truckload of Telex wirelesses with him, (they sponsor him in some way). The problem was that the American frequencies they brought with them picked up everything else and wouldn't work in various venues in Australia.

We had to build a Sony handheld into a Telex case. I was amazed using a Sony transmitter with a Shure Beta 87 capsule. Neil is the only performer I've met who can overload a wireless mic, other than Jimmy Barnes. It must have been all that "Crackling Rose" he had back in the 70's!

He was doing a recording of the Melbourne Concerts with the Metropolitan truck. I thought Jimmy Barnes sang loud! With the 25dB pad in, Neil could overload it. Graeme F. Stevenson of P.A.S. came to the rescue with a midnight realignment of the transmitter.

While on the subject of Jimmy Barnes, Peter Mc Fee, Jimmy's tour guy, hired Sony 67's from me a few times and they would come back reeking of Jack Daniels. The stench was unbelievable.

Jimmy decided to buy a Sony system with a spare hand-held, because he dropped them a lot. As the story goes, one of the first times he used it, the assistant foldback engineer, by mistake in the dark, put a dead battery in it - Jimmy walked out on stage and the mic was dead. He threw it at the monitor desk, the operator ducked and it hit the wall. Two and a half thousand dollars of radio microphone transmitter - dead. The transmitter went back to Sony in Sydney for repairs. The tech striped it down and found that the aluminium ring that mounts the diaphragm of the capsule had "rusted". Jimmy's breath can actually rust aluminium!

<At this time the tape of the workshop contains a warning from Murray not to use this stuff in the magazine! Ha! Too late, Murray...ED >

THE MOBILE PHONE RAINS ON OUR 900 MHZ PARTY

Enter the mobile phone. Where would we be without it? Such a good invention for our industry.

Telecom knows how good they are. For example, I do a lot of corporate work at the Victorian Arts Centre in the Concert Hall. If you've been, there the actual stage level is four stories underground and your mobile won't work. I rang Telecom and they put a cell in! By judging the amount of calls, I'm confident that "cell" has paid for itself.

The government needed to allocate some spectrum for the analogue mobile phone band, and wondered "where will we put this?" In the 800 Mhz band! This was OK and didn't worry us, but I don't think anybody figured that the demand for mobile phones would be so great. The mobile phone "thing" went crazy. Now we have digital mobile phones and where did they put them? Into the low 900Mhz band, which is where we were.

From a radio microphone system point of view, the digital phone network has been a disaster. Group 1, which is 902 - 915 - were instantly lost that to the phones. Anyone with a group one system is threatened with digital phone interference. The government put a public notice in the daily newspapers, to the effect that they were going to take away that part of the spectrum and did anyone mind?

DID WE MIND?! We wrote a lot of letters, including John Scandrett of System Sound, who has got more Sennheiser's than Sennheiser. The Government said we'd only been secondary users so we should piss off! End of story. Then the Australian Broadcasting Authority keeps putting repeater transmitters everywhere on UHF and doesn't tell the Spectrum Management Agency! The Government doesn't talk to government. How unusual!

We should burn the Spectrum Management Agency, lovely people, but not in the real world. We're out there getting our arses kicked if the radio microphone doesn't work, by producers, accountants, everyone.

Now we've got 520 Mhz to 820 Mhz of the UHF TV band, and 915 - 928Mhz (as secondary users - which can be revoked at anytime by some Government whim!) where there are no digital mobiles - - - yet.

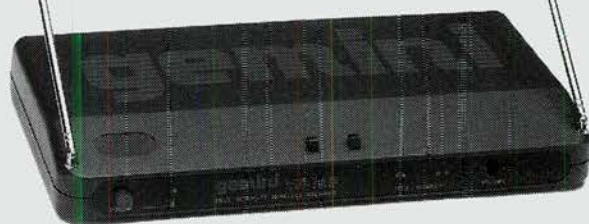
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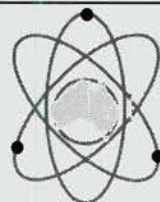
BP-05L Lavalier Belt Pack Mic Transmitter \$299.00

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MODEL BP-05G Instrument Belt Pack Transmitter also available.

BP-05H Headset Belt Pack Mic Transmitter \$499.00



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Buyers Guide WIRELESS

< This frequency range is due for review in 2000, when the digital network may win it back. See other story this section.>

When you do a stage show, producers don't understand. They think radio frequencies grow on trees. Accountants don't understand why sound systems cost this much of the budget, and 'how come we're paying double for the radios?' You're talking a lot of dollars investing in UHF radio microphones..... but they work.

With radio mics, it's a trade off. You find with cheaper radio mics, an A-B comparison with a cable mic, the wireless doesn't always come off best. Other frequencies have opened up around 174mhz, down under Channel 9 (VHF) and above Channel 7. But tour to somewhere like Orange (country N.S.W.) where they have channel 8 up on the hill and you're in trouble. Your 30 milliwatts verses their 10 kw makes for a big problem. 200Mhz radio microphone are great, but you get what you pay for.

The Shure "L Series" VHF system was astounding when I first used it, but for the money, you get what you pay for. With a Beta 58 head they are a wonderful thing. I feel with the new Shure "SC Series" switchable frequency series, I believe sacrificed the sound slightly with their compansion system, squashing the

bandwidth down to get it transmitted, I believe the "L Series" sounds better. < This is perhaps a generalisation about all VHF systems, which sell in large volumes and cost a fraction of UHF systems which sell to upper end theatre and broadcast users. ED>

A couple of years ago when "Jesus Christ Superstar" toured "in the round", I used 31 wireless mics, a mix of UHF and VHF. Anybody whose ever tried that many frequencies knows there is a lot of research involved. I asked the American sound designer when he arrived in the country, why he wanted so many. He said he'd asked for 33 because there were 32 singing parts and he wanted a spare! He hadn't even run that many himself on any other job!

When the present "Theatre version" of "Jesus Christ Superstar Tour" started in February 1994 in Auckland, they wanted 32 radio mics plus eight frequencies for "in-ear monitoring".

It worked through New Zealand for seven months and now it works here in Australia.

By the year 2000, every show is going to have 30 or 40 radios. Guitar bugs, in-ear monitoring, vocal mics, everything's radio. We need spectrum!

**SENNHEISER 1046 SYSTEM
700-800 Mhz**

Enter the most serious radio microphone system I've seen, not just because I hope to sell some. I look at everything and I seek other opinions too. These things are good. I looked at Sony, Beyer, AKG, and Shure too. The Sennheiser has some beautiful features. The battery pack idea that fits into the hand-held is fantastic. There are five interchangeable capsules that simply screw on. You can go from omni to cardioid to supercardioid to dynamic to condenser, or whatever. The head sound is very nice.

Thank Christ they've dropped that old Hand-held transmitter design, which looked like something you'd use it to bang in tent pegs! The New Sennheiser system is switchable through 16 frequencies. The best thing is how many frequencies are available (Unused UHF TV Channels 66, 67,68 and 69).

This to me is the best radio microphone system I've seen or heard, and believe me, I've tried a few. I believe it will stand up in the field. I took it to a foldback guy that I trust and asked him what he thought about the dynamic hyper-cardioid head - he said...."Hmm, very close to a Beta 58". That's the kind of standard now.

I am presently lobbying the Vic-

torian and Federal Governments to give us "primary" not "secondary users" radio frequency spectrum for the use of radio microphones, for Theatre, Film and Television. Radio Microphones are an essential part of our industry and we need "spectrum" and the only way to prove this is to lobby the Government and the Minister for Arts and Communications. I need your help! Please call me on (03) 8196455 or fax me on (03) 8192265

I will be presenting a similar Workshop about Radio Microphones and "in-ear monitoring" at the A.E.S. Convention at Darling Harbour in April.

** Aside from rental and sales of all audio equipment, specialising in radio microphone systems and "in-ear monitoring". Murray also sells "Pack Hiders" made of stretchy material, to hide a pocket transmitter on your performers in Theatre, TV, and Film applications.*

Murray trades as MTA or Murray Tregonning & Associates Pty Ltd, call them on (03) 819 6455 or Fax (03) 8192265.

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Epping NSW 2121 Aust.**
Email: Julius@next.com.au

The Wireless Systems

Buyers Guide is on the Internet all year. Go to NEXT.COM.AU and find us in 'Magazines'!

SAMSON, distributed by ELECTRIC FACTORY, call (03) 480 5988, contact Ray Kimber.

VLP. Non Diversity system, VHF. 200Mhz. Types of transmitters: Lapel Pack, Headset, Gtr Pack, Hand Held Mic. Receiver: Free Standing. Price range: \$399-\$699

Stage 33. Diversity system. VHF. 200Mhz. Types of transmitters: SM58, EV757, ATM71 handheld mic's, Gtr Pack, AKG409, Sony ECM144, Countryman Isomax. Half Rack width receiver. Price range \$799-\$1399.

Concert Series 3. Diversity system. VHF. 200Mhz. Transmitters: SM58, EV757, ATM71 hand held mic's, Gtr. Pack, AKG409, Sony ECM144, Countryman Isomax Full Rack width receiver, Front Mount Aerials. price range \$1199-\$1899

Samson UHF. Diversity system. Transmitters SM58, EV757, ATM71, handheld mic's, Gtr Pack, AKG409, Sony ECM144, Countryman Isomax. Full Rack width receiver, Front Mount Aerials. Prices at over \$3000.

RAMSA, distributed by RAMSAUDIO, call (02) 477 7377, contact John Paillas.

WX-RP700 Receiver, Diversity, UHF, 797-803Mhz (49 Channel Selectable). Complete with Camera Mount, \$5930.00 Inc. Tax

WX-RP410, UHF Diversity transmitter, 797-803 Mhz (49 Channel Selectable) Complete with:- Mic Clips, Hand Held Cable, Lavalier Microphone, Wind-screens, 20Mw output. \$3590.00 Inc. Tax

WX-RP158 UHF Diversity transmitter, 797-803Mhz (49 Channel Selectable) 2.0 Mw Output Shure SM58 Head. \$2950.00 Inc. Tax

ARISTA ELECTRONICS, call (02) 648 3488 contact Brian Lee.

MR310, Diversity VHF system, freq. range 181.60-202.20, with Hand Held, or Lapel mic, VHF Diversity. \$899.00

SONY, call (02) 887 6666, contact: Rod Sammut.

WRR-840A Diversity UHF receiver, freq. range 792-805 Mhz 'frequency agile', 102 Channels. Dual channel receiver, one rack space wide. Price \$3300 + tax, + antennas.

WRT-810A UHF Dynamic Handheld mic/transmitter, freq. range 792-805 Mhz 'frequency agile', 102 Channels. \$1200 + tax.

WRT-867A UHF Dynamic Handheld mic/transmitter, freq. range 792-805 Mhz 'frequency agile', 102 Channels. \$2600 + tax.

WRT-820A UHF body pack transmitter for lapel mic, freq. range 792-805 Mhz 'frequency agile', 102 Channels. \$1100 + tax.

All Sony Wireless Microphone Systems fully comply with the Australian Broadcasting Authority Regulations

LEEM, from C.M.I., call (03) 315 2244. Contact Peter Shillito.

PX-300S. Diversity VHF system. Freq. range: 177.6 MHZ>208.2 MHZ in Six Channels. SM-58 Capsule (Shure) mic. Auto Diversity receiver. \$799.00

PX-300M. Diversity VHF system. Freq. range 177.6MHZ>208.2MHZ in Six Channels. Audio Technica "Pro-4" Capsule mic, Auto Diversity receiver. \$599.00

PX300L Diversity VHF system, freq. range 177.6MHZ>208.2MHZ in Six Channels Lavalier with AT-831 (Audio Technica) Capsule, Auto Diversity receiver. \$599.00

PX-3009, Diversity VHF system, freq. range 177.6MHZ>208.2MHZ in Six Channels. Guitar System with Rugged Body Pack, Auto Diversity receiver. \$579.00

BEYER, from Amber Technology, call (02) 975-1211, contact John Fitzpatrick.

S250: Diversity VHF system, 12 Channels, freq. range 173.8 to 209.3MHz Hand held, lapel or headset Mic with belt pack, Instrument Belt pack. True Diversity, Free Standing Receiver with Dual Front Mount Antennae. Range \$1325-\$1499

S350: Diversity VHF system 12 Channels, freq. range 173.8 to 209.3 MHz Hand Held mic (TGX Head), Lapel or Headset Mic with Belt pack. True Diversity, Rreceiver rack-Mount, Bal. XLR Out, Heavy Duty Carry Case Included. from \$2895

U700 Diversity UHF system, 12 Channels per 8MHz Bandwidth, range available 470-980MHz. Transmitter options: Hand-held with range of interchangeable heads, Belt-Pack with range of lapel & Headset Mics. Receiver is a Eurocard Rack with space for up to 12 Channel cards, Monitor Panel included. \$8000-\$8500 per channel.

Telex U.S.A. from Audio Telex Communications, call (02) 647 1411, contact: Don McConnell

FMR450 UHF Diversity system, freq. range 524-746 MHz. Transmitter options: H/Held with SM87, SM58, 757, Lapel mic. Half Rack width receiver \$3100-\$4048

FMR200 VHF Diversity system. Freq. range: 174.4-220.6MHz. Transmitter options: H/Held with SM58, 757, Lapel mic. Half Rack width receiver \$2680-\$3150

FMR70 VHF Diversity system, freq. range: 174.4-220MHz. Transmitter options: H/Held with SM58, 757, Lapel mic. Half Rack width receiver. Range: \$1380-\$1850

ENG4 Non Diversity VHF system 174.4-220MHz. Transmitter: H/Held or Lapel mic. ENG Camera Mounted Receiver, 4 Channel Range: \$4046-\$4600

Telex wireless mics are manufactured in the USA.

CHIAYO from Audio Telex Communications, call (02) 647 1411, contact: Don McConnell.

DR505A VHF Diversity system, 12 Stock Frequencies. 174 - 229MHz. More on request. Transmitters: Hand held with SM58, Lapel, or Guitar Pack. Half Rack receiver, with Tone & Squelch. \$880-\$1200.

SR3030 UHF Diversity system, freq. range 800-900MHz. Transmitter options: Hand held with SM58, Lapel, Guitar Pack. Full Rack width receiver, 16 channel selectable, Tone & Squelch. \$2150-\$2700

DR318A VHF Diversity system, 12 Stock frequencies. 174-220MHz. More on request. Hand held mic transmitter with SM58, or Lapel or Guitar Pack. Full Rack width receiver. \$910-\$1190.

DR727 VHF Diversity system 8 Stock frequencies. 202.4-220.6 MHz. Hand held with SM58, Lapel, Guitar Pack. Two Channel. One Rack receiver. \$1906-\$2500.

Chiayo sells to hire companies, contractors and musicians worldwide. Please call for information on these and other models.

NADY from Production Audio Services, call (03) 415 1585. Contact Graeme Stevenson.

151VR Non Diversity VHF system, freq's: 185.15, 191.3, 203.4. Hand Held & Lavalier mic options. Budget System for Video Camera Use. \$375-\$450.

9000D VHF Diversity system, freq. range: 174.5-220MHz. Hand Held mic & Body Pack options, Diversity 1/2 Rack Width rec. \$815-\$1445

301 UHF Diversity system, freq. range 915-928MHz. Switchable 4 Freq's. Transmitter options-Hand held & Body Pack. 1/2 RU Unbalanced Output receiver. \$1715-\$2360.

950GS UHF Diversity system 800MHz Versions, 10, 40 & 150Ch. Models. Body Pack & Hand Held mic transmitter options. Rack Mount Professional. \$5495-\$6085.

Hand Held Mics available with Shure & EV Capsules. Body Packs available with Countryman Mics or Customer supplied units.

Electro Voice from Mark IV Audio Australia, call (02) 648 3455. Contact Phill Webb.

MS2000 VHF Diversity system. 12 Standard freq. 174-220MHz. Transmitters: hand Held N/D757 and Capsule Belt Pack

Tx. Receiver: RF Indicator, AF Meter, Balanced Out XLR, 1RU Rack Mount, Internal P/Supply. \$1799.

Vega from Mark IV Audio Australia, call (02) 648 3455. Contact Phill Webb.

Vega AX20 VHF Diversity system, over 170 Freq's, 174-220MHz. Mic/transmitter: Hand Held N/D 757/Bk-1/K 4 Capsules, or Belt Pack TX. Receiver: 1RU RACK MOUNT RF/AF Indicators Internal P/Supply. \$3500.

Vega VX20 VHF Non Diversity system, freq's: Custom Over 170 Freq. 174-220MHz. Hand Held N/D 757/Bk-1/K4 Capsules, Belt Pack TX. Receiver: Slim Line Battery Powered for Camera Mount \$3500.

Series 620 Diversity, UHF, Custom frequencies between 520-820MHz, Hand Held TX/Belt Pack TX, Receiver: 1RU, Synthesized Selectable - Freq. between 524-608, 614-806. \$5675.

Sennheiser from Syntec International, call (02) 417 4700, contact Robert Findlay

BF1051 Diversity VHF system, 2 Freq. Switchable, Hand Held Mic/Transmitter Mains Powered Diversity receiver inc. noise reduction. \$1999

BF1052 Diversity VHF system 2 Freq. Switchable. Guitar Transmitter w/mute Mains Powered Diversity. receiver inc. noise reduction. \$1899.00

BF1053 Diversity VHF system, 2 Freq. Switchable. Pocket Transmitter w/ Lavalier Microphone. Mains powered diversity. receiver Inc. noise reduction. \$2299.

1046 System, Diversity, VHF/UHF Expandable, 138MHz-960MHz. Hand Held & Pocket transmitter options. Computer Controlled Rack Mount System P.O.A.

The 1046 System is a Multi-Channel computer controlled system.

Gemini from Disco World Pty Ltd. call (03) 735 0588.

VH-190M, Diversity VHF system. 300ft Range; 8 different frequencies ranging from 174.6 to 204.6 MHz. Hand Held Mic, Single Channel, Stand alone receiver unit. \$869.

VH-220H, Diversity VHF system. 150ft range; 8 different frequencies ranging from 174.60 to 204.6 MHz. Headset & Mic with Belt Pack. Dual Channel Stand alone receiver unit. \$1375.

VH-180L Non Diversity VHF receiver, 8 Different Frequencies Ranging from 174.6 to 204.6 MHz. Lavalier mic with Belt Pack. Single Channel stand alone receiver unit. \$590.

VH-190G Diversity VHF system, 8 Different frequencies ranging from 174.6 to 204.6 MHz. Instrument with belt pack. Single channel receiver, dual antennas \$809.

Buyers Guide WIRELESS

The Wireless Systems

(Continued from previous page)

All Gemini wireless systems come with free carry case and 12 months warranty. Each model has the option of hand held, headset, Lavalier or instrument transmitter.

Audio Technica from Yamaha Music Australia P/L, call (03) 699 2388. Contact: Steve Leonard.

ATW-0321G Non Diversity VHF system. 169.5 - 239MHz. Guitar Wireless System, Effect Control/Send System \$649.
ATW0322 Non Diversity VHF system, 169.5 - 239MHz. Hand Held Microphone \$599.

ATW-032H Non Diversity VHF system 169.5 - 239MHz. with Headset Microphone Wireless. \$699.

ATW-0321L Non Diversity VHF system 169.5 - 239MHz. Lavalier Microphone \$599

All products available now. More in the

range too.

Shure from Jands Electronics Pty Ltd. Call (02) 516 3622, contact Peter Twartz
T Series. Diversity/Non Diversity VHF systems. 8 freq. Available: 174-203MHz. SM58, BG3.0, Hand held Guitar, WLL93 Lapel transmitters. Rack Mount Option \$595-\$1195

L Series. Diversity/Non Diversity VHF systems. 32 freq. Available: 174-209 MHz. SM58, Beta 58, SM87, Beta 87, Handheld guitar, WCM16 Headworn, WM98, WL93, WL83, WL84 lapel mic's, instrument transmitter options. Marcad Diversity receiver. \$1395-\$2095.

SC Series Diversity VHF system, 19 freq. Available: 174-209 MHz. SM58, Beta 58, SM87, Beta 87 Handheld guitar, WCM16 Headworn, WM98 transmitters. Marcad Diversity receiver. Selectable Channels on each of 19 frequencies. Tone Key & squelch. \$1795-\$2695

EC Series VHF Diversity 34 freq's available, 174-222 MHz. SM58, Beta 58, SM87, Beta 87, Handheld guitar, WCM16 Headworn, WM98 Instrument transmitter options. Marcad Diversity Digital Synthesis receiver \$2195-\$2995.

Other models and combinations are available. Contact Peter Twartz at Jands Electronics (02) 516-3622 for details.

LECTROSONICS from Audio Services Corporation, call (02) 901 4455. Contact Tracey Wong

CR185/M185 VHF very popular, compact system, powered by 9v batteries, Rx can be externally powered, headphone jack, adjustable level on Tx and Rx, no external antenna on Tx, includes M119 microphone \$2790.

CR190/M190 UHF same as above but on UHF frequency, Tx includes antenna, camera mounting bracket is available. \$3690.

UCR195/UM195 UHF high powered version with incredible performance, all above features plus pilot tone squelch, wide deviation and dual band companders, RF and audio metering, headphone jack, 9v batteries. \$4590.

AUDIO LTD, from Audio Services Corporation, call (02) 901 4455. Contact Tracey Wong

RMS MX2000/TX2000 VHF very small pocket system, runs on 9v batteries, can be externally powered, two switchable frequencies built in to avoid on location interference, low frequency cut, LED display \$4390.

RMS DX2000/TX2000 VHF diversity receiver version of above, 3 x Lithium batteries or external powering, noiseless switching for almost complete elimination of dropouts, LED display of battery condition, carrier reception and diversity activity, two switchable frequencies, rack mountable. \$5790.

Comtek Camera Companion kit includes M72C Tx with antenna, XLR line in cable, MRC82 camera receiver with antenna, mic in XLR cable, camera mount bracket, complete in carry case, 9v batteries. \$1790.

AKG from AWA Distribution, call (02) 898 7666, contact Bob Middleton

WMS100HT-D Diversity VHF system, 10 Frequencies 174.50-217.75 MHz Handheld Dynamic mic, True Diversity receiver w/dbx Noise Reduction \$1660.

WMS100 HT-C Diversity VHF system, 10 Frequencies 174.5 -217.75 MHz Handheld Condenser mic, True Diversity dbx Noise Reduction. \$1750

WMS50 HT-D Diversity VHF system 4 Frequencies, 174.50 - 218.75 MHz Dynamic Handheld mic, SR50 receiver Fixed Antennas, 2 Outputs \$910.

WMS50 PT-5 Diversity VHF system 4 Frequencies 174.50-218.75MHz Belt Pack with Guitar Lead, SR50 receiver, Fixed Antennas, 2 Outputs \$790.

TOA from AWA Distribution, call (02) 898 7666, contact Bob Middleton

System 270, VHF Diversity, 9 Frequencies 174.5-203.7 MHz. Toa WM270 Cond. Mic. WT870 & WTU870 receiver \$1180

System 290 VHF Diversity system, 9 Frequencies 174.5-203.7MHz. Shure SM58 Head mic transmitter. WT870 & WTU870 receiver. \$1400.

System 270 VHF Non Diversity system 9 Frequencies 174.50-203.70MHz TOA WM270 Mic Condenser, WT780 \$725.

System 370 Non Diversity VHF system 9 Frequencies 174.50-203.70MHz TOA Lavalier Mic, WT770 Rec. & WTU770 \$990.

* Note: Dual Frequency operation requires the addition of one extra mic and tuner module only in both Div. and Non Diversity.

**NOTE: All vendors
have more available
than the four systems shown.**

Buyers Guide

Coming:

April: audio signal processors

May: effectors, reverbs, delays

June: live mixing consoles

July: yearbook

August: studio mixing console

Sept: Microphones

October: amps & samplers

November: loudspeakers

December: recorders, software

February: studio monitors.



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Write in Reader Service number: 134

Sony's 800 meg system

Sony have been in the wireless microphone business in Australia for longer than anyone, and last year released a new 800 megahertz UHF system after the government un-expectedly moved to shut down half the 900 meg bandwidth.

Historically wireless UHF users used the 900 meg band where broadcasters, rental companies and theatre audio production houses have a very heavy investment in fixed frequency 900 meg systems. How heavy? Try millions of dollars across the land. UHF is expensive because it is sold in a fraction of the volume VHF systems are.

Existing 900 meg users have had their systems re-engineered to the remaining 900 meg bandwidth which is to be reviewed by the Government in the year 2000. Remember how they said they would phase out the analog mobile phone network then? Don't hold your breath. The mobile mania is a hugely powerful fiscal force, whereas us audio types are outnumbered.

Faced with the reality that come the turn of the century the 900 meg bandwidth would likely depart, Sony got the lab working on a 800 meg system for Australia. The UHF Synthesised wireless system comes with combinations of wireless channels that work together.

The combining of wireless systems is fraught with inter modulation difficulties, where a 'phantom' frequency appears adjacent to the primary frequency. Sony

have calculated these, and although their system offers 102 different possible frequencies, there are 12 which positively work together at the same time without intermodulation problems according to their wireless expert, Garry Rhodin.

This is a rock solid conservative company statement, which is not quite final in reality because frequency jockeys like John Scandrett (System Sound) or Murray Tregonning (MTA) will and can go finding more frequencies and make them work together. They will know without doubt why certain frequencies have problems in certain locations across the land.

THE MODELS ARE:-

Handheld mic's in the Sony line all have PLL synthesised control so they can work on any of the 102 frequencies. There are 2 models offered here, they are both dynamic, and have uni-directional characteristics. Battery size is AA. Also a pocket transmitter is available.

At the receiver end you can buy a one-rack space dual channel unit, or indeed a portable battery powered one for ENG or field work. There are antenna options, racking options and all one would expect.

Importantly, Sony say the pre-programmed channel plans make it all easy, there are six combinations of inter modulation free channels. • Contact Garry Rhodin (02) 887-6610.



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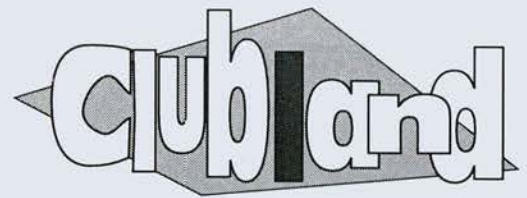
- Packages may vary from dealer to dealer.
- Available for hire from selected stockists.

JANDS

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Phone: (02) 516 3622 Fax: (02) 517 1045

Night Club and DJ News

with Natalie Apostolou



New, Melbourne HEAVEN

Melbourne's King street has been graced with yet another play pen for wanton clubbers. Housed in the expanded premises of the previously named bar- St Elmo's, the elaborate renovations have created an atmospheric scene jam packed with exuberant clubbers.

The ambitiously named Heaven is inhabiting a stylish split level 600 square metre space, that encompasses the gamut of recreational pleasures.

The lower level is swathed in polished floor boards and ambient mood lighting, with pool tables. and a performance space for live bands which Con assures has people dancing 'just about everywhere'. The upper sanctum facilitates the hardcore clubber, with a sound system featuring an EV Mongoose 30,000 watt system (the raves choice), cutting edge lighting and Robo scans. Inhouse DJ's Gabe, Papa and Phil K play the latest progressive dance tunes.

The proprietors; Con Georgiou, Con and John Athanasi, have an impressive pedigree, namely an extensive sojourn on the Greek isles successfully cornering the over zealous club mega market and running the notoriously happening Hollywood Bar in Cyprus for over four years.

Where: 195 King St Melbourne.
Contact; Con Georgiou; (03) 670 0980

Opened on December 2nd.



New, Ballina REO'S

The Gold Coast has come to the eager punters in Ballina, courtesy of Guido Conte, owner of The Ballina Hotel. Located at the rear of the Ballina Hotel is REO's on River street which has been pleasing locals since its opening just before last Christmas.

The 24 hour licenced club has brought some pizzazz to the sleepy town, using light and sound technicians from the Gold Coast. Mick James from Mick James electronics designed and installed the lighting and the sound system was designed by Richard Hulston from Pro LA.

Bookie Bill Trembath has been getting the right bands for his patrons, with bills including, The Doors Experience, The Australian Nirvana Show, Mental As Anything, Gangajang and Solar and more, which can be seen every Thursday, Friday and Saturday. A large scale video facility ensures that there is never a dull moment. Operated by Peter the DJ on an 8' x 10' screen from Daylight a Sony VPH1001 projector and using the Nightlife video system.

The average door charge is \$4.
REO's on River Street. Ballina.

People dance 'just about everywhere' at Heaven - this stupid woman dances on the bar. Try it at your peril....



Refurb, Victoria JOOCE

In order to keep up with the inner city Joneses, the 2 year old Jooce nightclub recently shut down only to re-create themselves with major renovations. Working around the idea of 'Jooce. 4 new concept rooms illuminate the theme.

Luminous peel hover as you walk in, highlighted by a magical light show designed by I.D.S and operated by Trevor Harding. Four distinct bars are placed through the complex the chilled out Ice Bar, the Rose Bar- an intimate drinking area the Holodek, a futuristic modern space with computer themes and the Legends bar, with its down home, rough textured saloon bar feel. Promotions manager Dean Jones feel these radical theme rooms with different musical styles and decor will offer patrons a fresh approach to clubbing. The rooms were designed by the Modern Design Group with sound by Lava systems.

The proprietors were inspired by the Excalibur club in Chicago, which offers punters the choice of viewing a live band or savouring the bar before being charged a club entrance. Club door charges are typically \$10 or \$5 with a pass. Expect to see live bands on Thursday and Sunday Jooce re-opened from the 23rd of Feb.

• 93 Maroondah Hwy Ringwood Vic. (03)879 1933.

Kiss my FM

It is fitting that Australia's leading club city gets amplified with its own 100% dance station. Melbourne's KISS FM was founded by notorious club night promoters the Gingerbreadmen, in an attempt to bring Melbourne the most progressive techno, house and specialist dance music programs hosted by leading DJ's and artists. The multi-media friendly team is also developing their own lifestyle and club culture television program to air soon.

The gang at KISS which has a

healthy mix of professionals and volunteers sees a huge need for the station as a facilitator for the promotion and support for rave culture. Offering our local acts, which are increasingly sought after overseas, coverage and access to a wider audience. They have experienced many teething problems, namely the difficulty in acquiring a licence, but the worst is over and broadcasts are resuming from February 20 on 90 FM.

The multi-media friendly team is also developing their own lifestyle and club culture television program.

New, QLD SIRENS

The dreamy sounding Runaway Bay (not to be confused with Summer Bay), has been recreationally enhanced by the opening of Sirens nightclub. Situated in The Runaway Bay Tavern, Sirens offers locals and escapees from the city, all the pleasures of larger clubs but in an intimate atmosphere. Manager Chris Condon, chose the optimum time of January to open, which was a star-studded affair hosted by Richard Wilkins and Jenny Morris. With a crowd capacity of 400, its a perfect venue for live acts which can be seen every Saturday night, past acts include Daryl Braithwaite and the Australian Nirvana Show. Every Thursday night there's a 'Battle of the Bands' comp with \$4000 up for grabs.

The ultra modern decor was designed by Burleigh Heads firm Raby Architect and has a 1950's nostalgia aspect Making this venue a great chameleon from club spot to live venue to home of private functions and fashion parades.

Technology has been installed through the club, all from Access Audio. featuring an extensive video system with Panasonic monitors and Sony 1001 projector., a sound system including Jands 3000 amplifiers and Numark DM 2160 mixing console and copious lighting effects using Abstract Futurescan, Monstermoons, & Scatterspots. among others.

Sirens Nightclub at Runaway Bay Tavern 075 373 066

AXIS Expands

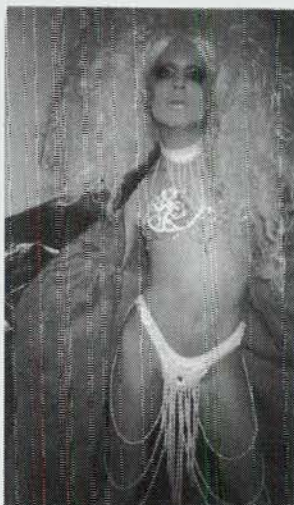
The absolutely thriving Axis club at Bondi Junction has diversified into gigdom. Providing the East side with a tasteful venue with room for 800. This should prove to be a blooming live band spot with Def FX opening the initial night and a huge list of band coming up on Alternate Thursdays. March will feature Tumbleweed and Died Pretty, complemented by inhouse DJ Mike Sommer spinning an alternate mix. For those who don't like to watch, Saturday the 11th of March is the opening of Axis biggest dance night with DJ T.A.S.K and Mike.

Axis 195 Oxford st, Bondi Junction Mall. (02) 386 1423.

Surry Hills (NSW) Shenanigans

Chalmers on Cleveland was enjoying a successful if albeit brief stint as a crowd pulling live band venue but due to the machinations of the venue holders universe, has terminated operations for the time being. Yet the whiz behind bookings and promotions-Carol at Pathological Promotions-has moved her assets down the road to the landmark Journalists Club, which has been given a new lease of life (again) as a spanking new, refurbished room with 400 max capacity, open 24 hours and bookings are underway for the live punters pleasure.

• Call Carol for bookings (of venue and bands) ; (02) 569 7440.



Glam ham Tasty Tim tasted Sydney and Melbourne this summer.

R.I.P Bowlow

Sydney's gain one venue, lose another game continues with the closing down of The Bowlow on City Road. Shutting down for renovations at the end of February and ostensibly reopening with a view to keeping up the 'commitment to rock', hopefully this means it will still operate as a live venue.

Going Down

That cavern on Eayswater Rd previously known as the Kardomah Cafe, The Tom Tom Club, and Ice has been resurrected after the floods and landslides etc in the form of The Underground Cafe. Currently focusing itself as a venue for live bands, it is a welcome return to the gig scene having one of the best grungey atmosphere's

around and ofcourse the history seeps off the wall. Expect to see The Truth, Juice, Presto, to name but a few, through March. Bands are on from 11:15- 2:00 and the night rolls on with inhouse DJ's till 7:00 am. Look out for Grauzone from March 2nd and every Thursday after that as a slightly dismembered Sanctuary moves there with DJ S.H.E, who will also be hosting this night on a Saturday at least once a month!

Northern Exposure

The recently renovated Sands Hotel at Narrabeen has its own dance night called B.L.A.S.T. The central nightclub area has been lavished on with \$100,000 worth of renovations which include pool tables, courtyard, bistro, chill out bar and restaurant. House DJ's Glen Hockley and John Alsop get to run riot with their crazed mixes of Techno, High Energy, Italian House and Hard Core. Doors opened on Feb 22nd and admission is always free for the Northern Beaches biggest dance night every Wednesday. • 1260 Pittwater Rd, Narrabeen. Ph. (02) 913-1166.

SHOTZ

The Eastern Suburbs Leagues Club in Sydney has a new club room. Opening from Thursday to Sunday it has a grab bag of DJ's, pool tables galore and the usual leagues club pursuits to keep the night pumping. Located at Bondi Junction Lv 1/10 Bronte Rd. No cover charge.

MEANDERING @ MELBOURNE

•Melbourne gets another retro night for the glossier, streaked and flouro-ed members of the generation that refuses to grow up. So get to FLASHBACK! for the creme de la creme of the 70's +80's, to rekindle those memories with DJ Seuss + The Cookie Monster. 480 Victoria St Melbourne.

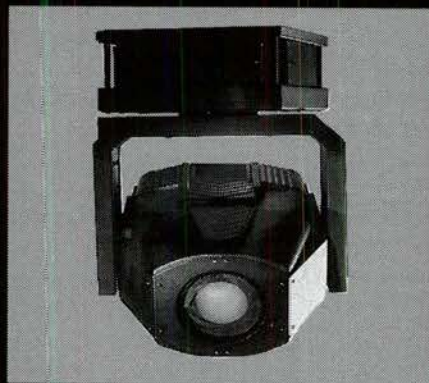
• On King st - **The Grainstore Tavern** has been sold, with the new owner renovating and keeping operations as are.

• Fridays are alter-kid heaven in Melbourne with the opening of yet another alternate club night during February. **Lithium**, lurking at The Chamber, is being administered by DJ's Skinflint Jackson, Jenny and Cisco, upstairs in the harder more rocking room. While downstairs Fiona and Dave hold court in the Chupa Chup room with Pixies, Poppies, Dinosaur Jr etc. Lithium-The Chamber, 127 Dorcas st, sth Melbourne.

•**TECHNOFEST**; March 17th, 18th, 19th. Australia's first techno grouping with 20 bands and 30 DJ's from Sydney, Melbourne, Adelaide and Byron Bay. Being held in Gippsland on 400 acres situated on a lake, the festival will also include a cultural smorgasbord of comedy acts, film room, performance dance, world and ambient music.\$25 bucks to bid farewell techno style to the Summer days..

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Write in Reader Service number: 110

Red Raw

January 28 was D-Day for Melbourne's Gay and Lesbian community and started the frenzy for gay party season throughout the land. The lead up and post event vibe sparked off larger than life club nights and the mammoth Midsumma Carnival, charging international and interstate guests for the Sydney Mardi Gras in March.

Red Raw is Melbourne's premier dance party event and is touted as an 'oasis of pleasure for queer people to leave their prejudices at home and the only rule is to have fun!'

The event was held at the Victoria Docks in a huge jetty warehouse (Shed 14) spanning a 400ft long x 60 ft x 8 metre high space. Producer Nigel Triffit had a field day concocting three terrific shows that celebrated the 'beauty of the queer body'. An over-the-top drag show featured, as well as an all boys dance number and lesbian marching girls. This was Nigel's last production for the ALSO foundation, and



certainly left an indelible mark on the revelers.

The super special guest DJ and all round glam-ham was the infamous Tasty Tim from London. Pop culture addicts would remember him as the one hit wonder from the mid 80's who is now enjoying superstardom as London's gender bender, disc spinning doyen.

Operating in haunts like Vague, Trash, Ministry and Essence, Tasty was apparently charmed by Melbourne and Sydney's club life. Also on the DJ'ing bill were local fave's Gavin Campbell, Dr Jon and Peter Mcnamara.

Nigel's shows made full use of the 180 x 50ft stage that was riddled with ladders and chains over a post-industrial landscape. Choreographers Tony Di Dio and Amanda Morris manipulated the bodies on stage in accordance with the stage design, while the lighting design was expertly handled by the renowned Allan Parkinson who worked with (*this is what the PR said*) was the biggest intelligent light system ever seen in Melbourne. Well, we know

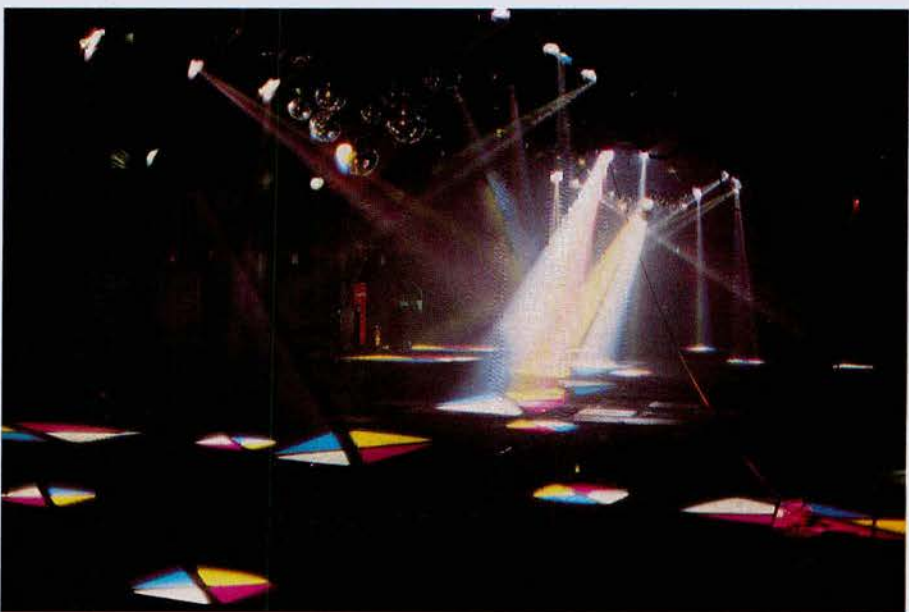
that isn't true, but it was the largest CYBERLIGHT rig ever seen in Melbourne...

Cearlight provided the staggering equipment including 27 Cyberlights, a Status Cue control desk, and an Instinct 60 control desk. The pumping sound system was by Troy Balance Corporation, Stage sets were from Capricorn and Aggreco provided the generator.

Red Raw was proudly presented by the Alternative Lifestyle Society Organisation (ALSO), which regularly holds warehouse parties throughout Melbourne and kept festivities buzzing over the gay and lesbian festival.

A highlight was Leather Pride week, which took place over mid Feb as a converging of like-minded leather fetishers and fettes, who discussed, explored and shared a raw hide load of leather concepts. Events featured included a Twilight Leather BBQ, leather sexuality forums and exhibitions and 3 massive boys only dance parties; Temptation, Throb Bound and Cell Block. ■

(Red Raw Pictures by John McKissock)



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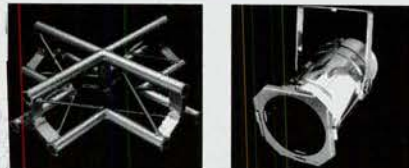
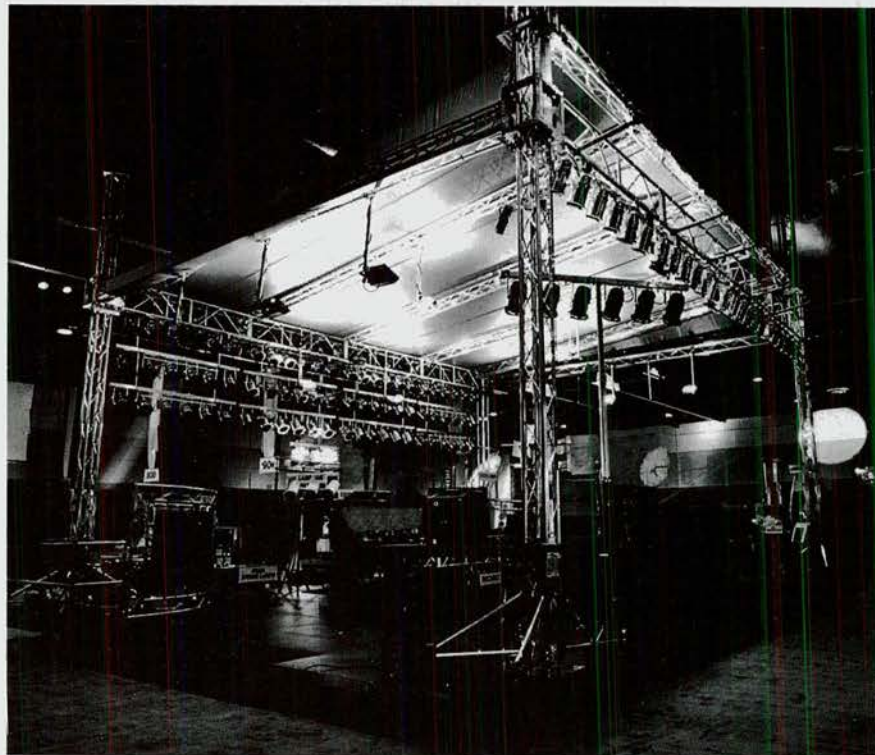
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LIGHTING MONTHLY

March 1995

Edited by Catriona Forcer

JOHN BARRY GROUP ANNOUNCE NEW ARRI PRODUCTS

The Australian distributors for ARRI Lighting products, John Barry Group, have announced several new products within the ARRI line up.

Firstly, ARRI have developed two new big spotlights using, they claim, the largest fresnel lens currently in manufacture of 625mm diameter. The basic housing is used for a Daylight 18K (which can also be used as a super-efficient 12K) and a 20K Tungsten Spotlight.

With the Daylight 18kW only a flicker-free electronic ballast is being offered - there will be no magnetic ballast.

With the Tungsten 20kW Spotlight an in-line, in this case separate, soft/start dimmer is very necessary to protect such a large high power unit. Without this protection, the initial surge current during switch on would not only damage the expensive bulb, but could also severely affect the supply.

There is an increasing demand for large units such as these and ARRI, by not rushing into production, but spending more time on R+D, firmly believes that these two large units will be the best available on the market.

The first ten units have arrived in Australia recently and 6 have already been sold.

ARRI also announced the development of the brand new ARRISUN 6K Par lamphead. This is the first time that an ARRISUN has been offered with a 420mm diameter lens. The combination of 5 lenses and a remarkable beam angle adjustment gives virtually continuous



The ARRI Daylight 18/12kW

range from flood to spot. In common with its two relatives, the ARRISUN 40/25 and the ARRISUN 12 Plus, the new unit uses a single ended lamp. All three units are constructed from lightweight aluminium and are all dimmable to 50% with electronic ballasts.

For further information contact: Vince d'April at John Barry Group on (02) 439 6955.

CHAMELEON TO SUPPLY LX FOR MISS SAIGON

Congratulations to Chameleon who have been awarded the LX contract for Miss Saigon.

The Australian production have specified a Jands ETC Obsession control system with full dual redundant electronics, riggers control and remote video monitors. Also specified were over 192 channels of Jands new HP series dimmers, chosen specifically for their channel by channel 110 volt output facility.

Also supplied will be a large rig of Rainbows quiet 2/16 and 15 inch theatre scrollers. On stage there will be 43 x 2/16's 8 inch scrollers and, fitted to Riche & Vogel followspots, 5 x 15 inch plus units. At time of publication, 600 metres of special data and V+ cable with distributed Maxi PSU power supplies are being loomed together to control this by Richard

Pacholski's Cam Mac crew in Adelaide.

Chameleon will also supply a large quantity of customised Selecon Cyc 500/800w units fitted with permanent dichroic filters and 'Enhanced' 1200w zoomspots.

The 34 x 4 ways, 2 x 3 ways and 52 x singles are modified with additional lockoff and width reductions to be mounted permanently within the set pieces which travel.

**The Connections Guide to
Moving Lights
starts on page 85**

Bits

● Coemar De Sisti's sales have had a real lift since Entech with further sales of MacLux Pro to freelance designers and Microlux to the Sydney Dance Company, as well as Stardraw 3D to TCP and Rohan Thornton.

● DF-50's continue to prove popular with sales to Stagecraft, Lightmoves Technologies and Entertainment Lighting Supply.

● TAS Windy's have proven increasingly popular with Film Gaffers, with Image FX clocking up their fourth sale of the year, hot on the heels of DF-50 sales.

● Performance Lighting (QLD) have been successful with a large sale to Griffith University of De Sisti Leonardo 1Kw Fresnels, Botticelli Softlights, Giotto Cyclights and Varibeam portable lights.

● In the first major injection of new lighting equipment since it's original fit out, the Sydney Convention and show venue at Darling Harbour has chosen Selecon equipment to brighten it's halls. The new equipment is worth in excess of 100k. This is the first major venue to buck the trend and go for G22 based 2000/2500w equipment in the Arena range as most venues have chosen to stick with the cheaper and more available GY16 based CP72 2000w lamps.

● David Lee of Brisbane Channel 7 has recently purchased a quantity of the new Selecon Acclaim 650w Profiles for use in his light entertainment studio.

● Premier Lighting Melbourne have been awarded the Sound and Lighting contract for the new Frankston Community Centre. Lighting equipment will include:

- 1 x Jands Event 60 plus
- 11 x Jands Roadpak Digital Dimmer Racks
- 4 x Selecon 1200w Zoom Profiles
- 4 x Selecon 1200w PC Spots
- Plus patch panels, wired lighting bars and accessories.

Audio equipment includes:

- Jands Ezicom Talkback system
- Shure Radio Mics ELS 24/58
- Shure SM58 and SM 57 M:cs
- Jands SR1500 power amplifiers
- Rane signal processing
- Soundcraft Spirit Live 24 Mixing console
- JBL Control 10 loudspeakers

● Dracula's Theatre Restaurant on the Gold Coast have recently installed an ESPII 48 and a DDX 60 - bloody good!



THE CULT

Now I remember seeing The Cult in London over eight years ago when they were a band with an attitude. Today Ian Astbury has cut his hair, shed his leathers and is a family man. No more wild tours. What's worse is that between songs he says things like 'be kind to dolphins and other farm animals' in a weedy northern accent. Perhaps I'm getting older and less easily impressed.

A lighting designer with boundless enthusiasm, Martin Phillips managed to join The Cult's crew through sheer perseverance. Joining them last October, they are the first major band he has worked for.

"I used to be loud and obnoxious but I'm nice now," Martin tried to convince me. "I've not been doing lighting that long now. When I lived in England I worked in video and film but I screwed that up. So I moved to the States where everyone I knew seemed to be associated with a band but no one was doing lights. They weren't making any attempt with them, just a couple of lights half-arsed focused. So I bullied some friends of mine into letting me do their lights as well as any other band that would suffer me. I got more and more into it, bought lots of books on the subject and talked to anyone I could that did it. I'm based in San Francisco where there are quite a lot of clubs where I wangled my way in. I ended up a technician and, for me, the best way to be creative is to know the technicalities. I did a lot of work with some guys resurrecting the old sixties light shows and we did some wonderful stuff. I worked with the guys on a lot of the raves and gradually intelligent lighting was used."

Martin was also working as a bus boy in a Pavilion until he asked the production manager if he had any work and was asked if he



Ian Astbury auditioning for the Sally army?

could run a follow spot.

"I thought 'how hard can it be?' and said yes," admitted Martin. Eventually he was asked to run spots although he had never run a board in his life. "Thinking about it now it was only sixty channels but at the time I thought: whoa! I taught myself."

Eventually Martin got to work on a rave with some Intellabeams. He nicked their manual, photocopied it and spent all night learning about them. From then on he would run the Intellabeams with his manual on his lap.

"The best part about it was that everyone was so wasted on Ecstasy they couldn't tell if it was good or bad," he laughed. "As long as you left something running, you could get away with it! I found out as much as I could about intelligent lights - how they run, how you fix them and how you can trick them into doing things. Every time there was something new in town, I figured out how to get in there

and learn about them."

Martin met some guys from LSD and hassled them so much about the Icon system, they invited him to do the course on it. He was then sent as a tech on a Ronnie H Dio tour but eventually became the LD and from there he joined The Cult.

Prior to the Australian tour there were a couple of small shows in Vancouver, Canada, where the band had been recording and a European tour. The criteria Martin had to fulfil was 'its got to fit on the truck'. The lighting had to be cheap and Martin impressed them by fulfilling that requirement.

"It was a case of upstage, downstage, some odds and sods on the floor, a couple of Intellabeams and away we go," he said. "We actually ended up dropping out a piece of truss because it didn't fit on the truck. It didn't hurt me that much, even when we were playing arenas, I covered myself enough. Fortunately, with the exception of the singer, the band aren't all over the stage. We lost our rehearsal day so the first week of the tour was me trying to put it together. The crew was just me and the crew chief."

Originally Martin had the use of eight Intellabeams and some custom gobos because Ian wanted a rave vibe to the show in fact that's why Martin got the tour. A week into the tour Martin invites Ian out to the front to look at the show and unfortunately he didn't like it! So Martin got some gobos made up of the tour logo and he completely re-thought the patch so the show is more angular. A lot of mileage is got out of the nine floor cans - even more so when they have colour changers on them.

"I had a bunch of 202's up there as specials for a wash and I broke them up so it was good for things like chasers," said Martin. "Consequently the board is all over the place. I kind of cheated on the Big Day Out, they told me I had 200-300 instruments and I just doubled up my rig. I changed the specials around a little bit, put an awful lot of 181 and 80 in there so they could keep up with the brighter colours. I had spec-ed a Celco Gold because I had the show on the Q-Card but I was told there wasn't one.





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Sound-to-Light setups	12	24	36

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- Crossfade or snap steps on individual chases
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THE CULT (continued)

Also we had 12 Icons instead of Intellabeams. With the Intellabeams I had been using the remote analogue access out of the back of the Celco straight into the Intellabeam controller. It was good but I think there's a split second delay which drove me barmy.

"I like the Icon system a lot. Everytime I go to LSD there's something new, it's constantly changing. I'm not bad at calling spots but I have trouble calling them as well as intelligent lighting cues and running the show. My shows also tend to be pretty fast so I like the fact I can control conventionals and moving lights from one board and just call the spots. Some people are hesitant to run everything off the Icon desk in case it takes a dump but I've never heard of a desk screwing up ever. I actually programmed The Cult show so it could be run off the Icon desk but there was a problem with running the DMX here so I'm like Rick Wakeman for an hour or so!"

For the Newcastle Workers Club gig Martin was using a Jands Event console which he wasn't very familiar with although the more he used it, the more he warmed to it. The rig was similar to the European rig minus the colour changers and the Intellabeams.

"For a place this small I've got stacks of coverage," he said. "I'd prefer to have the Celco as the faders seem to have soul, you can feel



Martin Phillips

it. It's a big, rock'n'roll, rocktrousers, rocktastic kind of thing. People look at you, it's all ego. I like the fact people look at you because you're wearing a headset!"

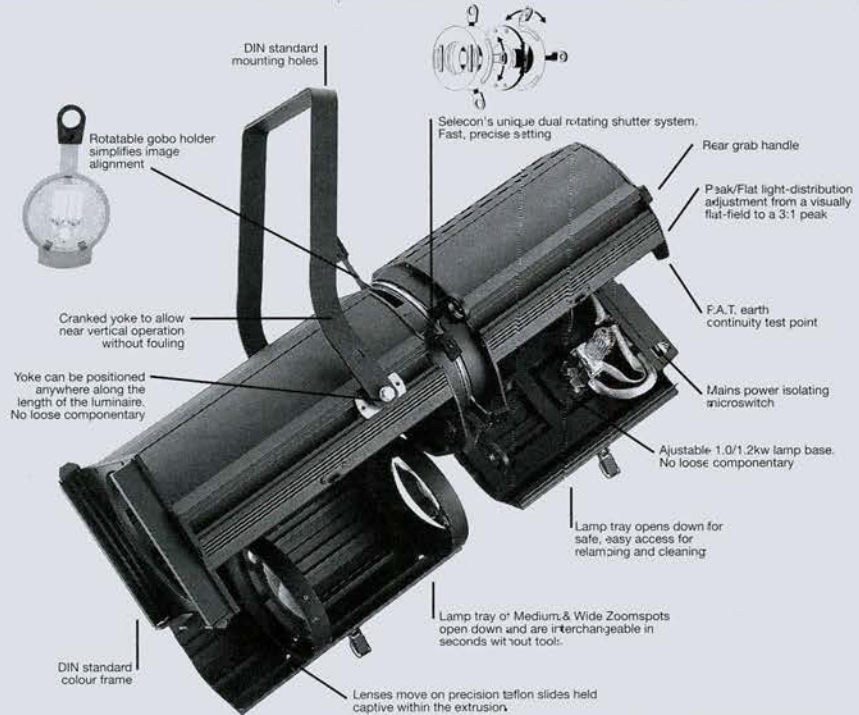
Martin has always been a Cult fan and he used to see them years ago when he was a 'pudgy, little old Goth' ('but now I'm nice', he added again). So far he has really been enjoying the tour although it has been tough because everyone has been doing two jobs. He admits to irritating follow spot operators wherever they go by singing along to all the songs. He also has an amusing way of dancing to the songs!

Martin was very impressed with the local crews who he described as very hard workers.

"When we were in Melbourne we had a patch problem which we just couldn't figure out," he said. "But the guy worked right up to the intro tape trying to work it out. We didn't fix it but I appreciated him working his bollocks off like that. I've also had generator problems throughout the Australian tour because I go from sombre little looks to these big numbers and the generators freak out. They start belching black smoke out of them because they can't keep up with the draw. They splutter and come back up again. Consequently my Colourmag desk is re-setting, my Dataflash board is re-setting etc. But I have every faith in my crew as I know they'll sort it out. If they don't I'll have to have a serious benny (that's pom talk for a fit of temper) at the next one!"

● Cat Forcer

'Ingenious' would be putting it lightly.



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COLORTRAN GOLD MEDALLION DESK CHOSEN FOR SAS 7 ADELAIDE

Peter Robins of SAS 7 explains why

What can you say about a lighting desk that can do everything? Well, we're about to try.

The Colortran 'Gold Medallion' was presented to us just over a year ago along with some other consoles, supposedly in the same class, for us to play with and ponder over as our old dinosaur needed to be replaced.

So with all these lighting desks in front of us a criteria was set by all concerned. It had to be simple in operation, with a clear layout and minimum keystrokes involved in any operation. There were other operational requirements as well but I won't bore you with all those. Even without an instruction manual and a basic understanding of digital desks anybody could "make something happen" with the 'Gold Medallion', as opposed to some other models we couldn't quite fathom even with a manual.

A unanimous choice was made, the Colortran Gold Medallion was miles ahead, it met our criteria, and it's operation moved along very clear, defined lines of thinking that was found to be very 'user friendly'. As well as all of the above, we were visited by Paul Sherbo, who was out from Colortran in the States and only too happy to show off their new 'jewel'.

About the desk itself, it has every feature we have ever needed but have never found before in one desk. The Gold Medallion has two totally separate CPU's, with separate power supplies and separate disk drives, just in case something 'dies'. With the turn of a key you have full backup and could resume a show with no time lost, which is very handy for us. Along with the usual basic timer fades, cues within cues, macros and effects, editing any of the forementioned is a breeze. The console also has the facility to assign any channel or groups of channels to what is called

Automated Channels. This will enable those assigned channels not to be affected by the grandmaster or blackout switch, especially good when dealing with scrollers and moving lights.

The console uses a windows driven system using OS2 to handle all the multi-tasking. It's possible to have many, many open windows at the same time. (You'd confuse the hell out of yourself before you confused it!)

Some of the other features include a trackball which can be used for moving win-

ners as we do, with both JTM & ENR installed, or if you're running a 5K and 2K lamp side by side and you'd like the fade to rise and fall together. Dimmers can also be assigned to run as hard switches (relays), so motors and other inductive loads can be run, where dimming is not practical or required.

The 'Gold Medallion's' flexibility and facilities to deal with any lighting requirement you may have from the simplest to the most complex seems to be boundless. One of the many beauties we have found with the desk is, to

move from A to B several paths can be chosen, all equally easy and quick, this allows the operator a little bit of individuality without locking you into a rigid format of operation. This in itself makes the desk interesting to use and an even greater extension to creativity.

After the purchase of the desk, and its installation, a few minor glitches were found but the guys at Mediavision and Colortran were only too happy to be on the phone or fax to help us out. Already a couple of software updates have been forthcoming which make it better and better. The people at Colortran are also open to suggestions, so if we come up with an idea they'll look at it, if they like it we'll possibly see it in a later software update.

A third backup system, comprising an LSC 'Softlink', was supplied and installed by Osmond Electronics, along with LSC multiplexers and a DMX splitter, to convert our analogue JTM racks to DMX.

Whether you work with a large touring band (the desk travels well), or have it installed as we do in a television control room, or have a theatre application, we would strongly suggest you have a close look at the Colortran Gold Medallion.



SAS Studio 1: New Control Room featuring Colortran Gold Medallion with Lighting Staff from top left: Ian Linton (Lighting Supervisor), Peter Robins, Kim Johr (seated), Harlee Grzelak

downs, picking up channels and assigning levels etc. (The ball at a later date may be used to position moving lights), otherwise keystrokes or a thumb wheel will do the job if that's what you prefer.

Three VGA monitors give a clear picture as to what state the desk is in, and where you are, and can be configured to meet whatever the user would like displayed.

The desk can run 1536 channels and each dimmer can be assigned a fade profile. This helps if you have to match two types of dim-

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CHOMP! A VISUAL FEAST

John Rayment, LD for The Sydney Dance Company, has a healthy appetite for design

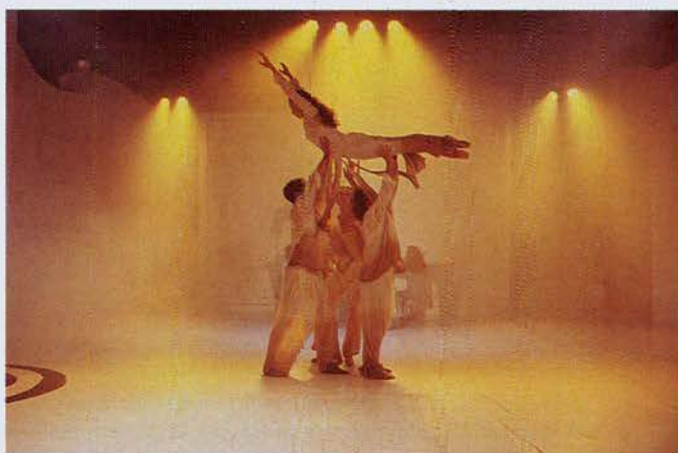
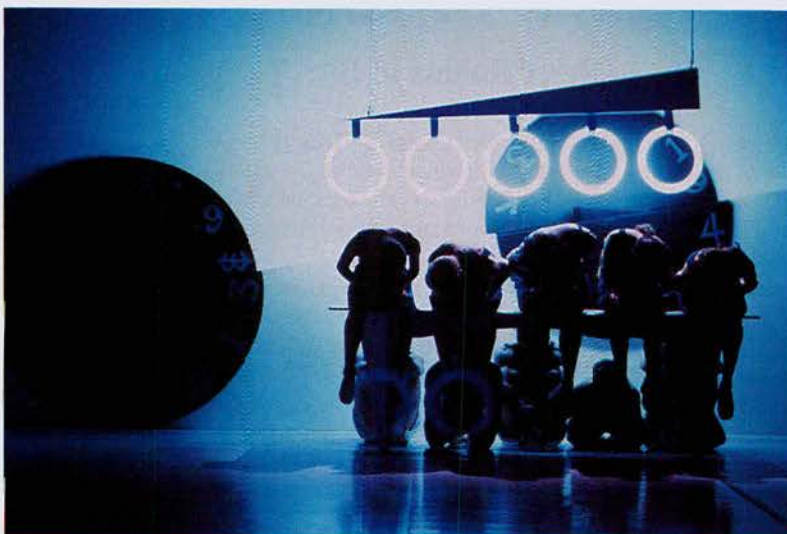
Lighting designer John Rayment was with the Sydney Dance Company in what he describes as the 'glory days of 1978-82' when the big deal was touring Dubbo and three years later the company were in New York. After a period of freelancing, John returned to the company in mid 1992 on Graeme Murphy's request.

During his freelance period, John was Technical Director for all entertainment at World Expo 88.

"I did the lighting spec and consultancy for all the equipment for the five theatres," said John. "I got to buy about one million dollars worth of gear which was a hoot. I had 200 staff and 9.8 million dollars!"

The Sydney Dance Company has an ongoing philosophy to try to nurture talent from within and various successes have included Paul Mecurio, Kim Walker and Stephen Page. Graeme Murphy likes to give young, would-be choreographers the resources of the company - the dancers, designers and the time - to explore their talent. The production Chomp! comprises of eight dance pieces all on the loose theme of food.

A license was obtained to convert the companys' two largest studios into a theatre with raked seating in Studio 3 looking into Studio 2. Although the license is permanent,



there are no plans to make this a permanent venue particularly as the company is on the road so much. Studio 2, the main performing

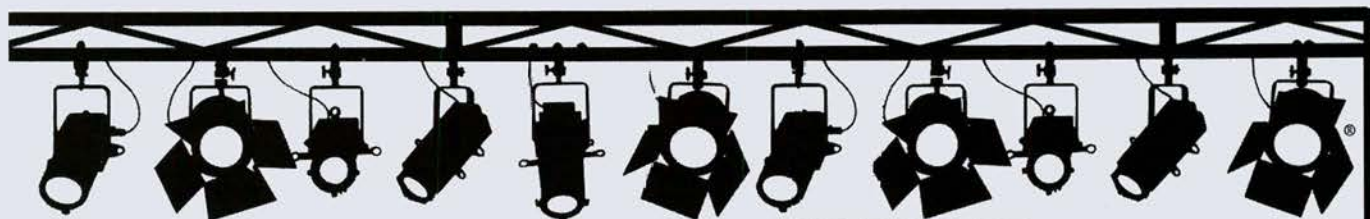
area, is actually 18m deep x 11m wide which is deeper than most stages and only a bit narrower than the proscenium opening of the Opera Theatre.

"It's great having the venue just outside your office door," said John. "All the cabling is up on the mezzanine level where our offices and changing rooms are, looking down onto the theatre itself. The space was never designed for what we're now making it do and the power restrictions are our biggest problem. At the moment it's

only got two 30 amp feeds which means I can really only hook up 24 dimmers. Consequently I'm trying to light a space not far off the size of the Opera Theatre stage, where I'd normally hang about 300 instruments, with 48 lamps. Matt Doyle, our board operator for the show, is becoming very adept at spaghetti plaiting and cross patching. I'm patching the last four dimmers, the ones easiest to get to at the end of the bottom rack."

To help John achieve eight different looks from the small rig he has eight colourscrollers with eleven different colours on them.

"Each piece has a different flavour to it," he said. "It's a matter of setting up peoples expectations when you first reveal the work and a



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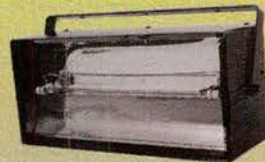
MULTIBEAM



BABY STAR



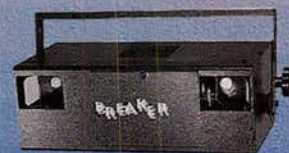
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CHOMP! (continued)

matter of how you play with the colours. The works themselves are highly individual. The biggest difficulty is not only trying to make it technically work with such a small rig, but to work with and support seven different choreographers. Some are more back lit, some have more saturated colour and some have smoke. With some I 'roll' the colours so they're washing back and forth over the stage."

The whole of the set is white and was designed by Matthew Serventy, the head mechanist at the SDC who John describes as having serious design ability and should be watched. All of the audience are, in some way, looking down on the set and so John is able to use the floor a lot more as a type of cyclorama. He also plays around with the use of shadow, silhouettes and the bounce of the beams.

"You strive to not only give each piece an individual look but then all eight pieces

through the evening has to represent a little visual journey," John said.

The lighting equipment included eighteen par cans, some Selecon 1200 spots and some Preludes which were hired from Chameleon. Years ago the company used to own gear but the demands are too much now. Also most theatres they play tend to be already equipped. Control desk was an Accent 24 which John rather likes.

"You don't often have a narrative so there's no story, place or time," he replied. "So you're creating an abstract environment for a piece of music and a piece of dance to be seen in. That may sound like stating the obvious but lighting often is stating the obvious. You're also, given that light has to bounce off something, often lighting an empty space. You have to create an environment that, most importantly, the dancers feel supported by because you put enormous demands on them. A lot of dance lighting stems from low cross lights

which is tremendously disorientating to the dancers and there's a black void in front of them. The dancers here will let you get away with almost anything as long as you lead them along and let them know what you're doing. You have to also create an environment for the audience. If they see something which is lit in a way which supports their response to the work then they'll either not notice the lighting, which is good, or they're going to notice it for a moment and then forget it. It's an impressionistic art, you give people something to hang whatever it is that they want to feel about a work on. Some works are blue, some works are yellow and there's no formula for that. Good lighting designers have an instinctive response with light and colour to a number of different stimuli be they the dynamics of the music, the nature of the script or whatever. You could wax lyrical about lighting for days."

● Cat Forcer

Bits

● Denise Tilles has resigned as editor of **Lighting Dimensions** magazine and her successor will be David Barbour.

● The **1995 International Lighting Exposition** will run simultaneously with the Energy Management Exposition from September 27 - 29 at the Metro Toronto Convention Centre, Canada.

For further information call: 905-890-1846.

● The **Victorian Arts Centre** have recently purchased two ETC Reflection Backup consoles for use in their venues.

● Dean McFadden has been appointed as a sales consultant for **LSC Electronics**.

LSC ELECTRONICS appointed Australian agents for AVOLITES

LSC Electronics has been appointed Australian agents for Avolites and are proud to offer the new Rolacue range of lighting consoles.

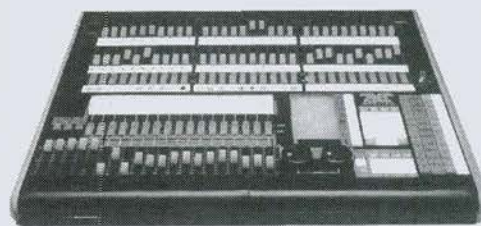
Avolites say they set out to design an affordable console with the control of moving and conventional fixtures in mind. The result is the Rolacue Pearl.

The Rolacue Pearl is surprisingly powerful with 512 channels, 450 memories, HTP LTP control, preset focus, Colour Palette and a 3D intelligent tracking system for moving lights. All of these features, plus more, create a console that can simultaneously control all types of fixtures whilst allowing the operator maximum control with ease of programming.

For the more demanding situations, there is the Rolacue Sapphire and Diamond II, both

have similar features as the Pearl but are capable of up to 6000 channels (Diamond II fully expanded).

For further information on the Rolacue Pearl, Sapphire or Diamond II, contact: LSC (03) 561 5255



Avolites Rolacue Pearl

Discotheque...or...Professional

PAR 36 \$19



Including mounting plate and fuse.

PAR 56 \$49



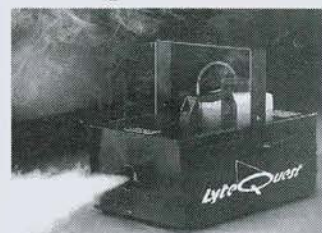
Aluminium including colour frame, silicon cable. Black or Polished.

PAR 64 \$59



Aluminium including colour frame, silicon cable. Black or Polished.

LyteQuest USA \$330



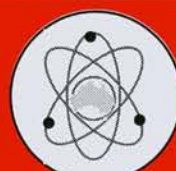
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IMPORTING & DISTRIBUTION
The Peter Kemp column

I would like to support the editor of the magazine in his Article in last months connection titled "Ripoff? What you pay". Having been in the importing business for the past 20 years, I believe I can talk with some qualified experience.

When considering a new product one often will see the product at some trade show or read about it in a magazine. You then need to get a sample of the product in order to correctly analyse its potential, assess its suitability to our market, determine if any changes are necessary for Australian electrical regulation or other changes that maybe necessary for our particular market. If changes are necessary you may need to get subsequent modified samples until you are totally happy that it is suitable.

Once you have settled on the product you go through the actions to secure the distribution rights to the product (this may include some outrageous demands from the manufacturer as many believe Australia is such a large market due to our land mass size) and then try to get some agreement regarding warranty spares and labour. The issue of warranty spares and labour is quite involved and in most cases will involve the importer in having to shell out a lot of money to stock spares for warranty work. OK the manufacturer may credit you the cost of faulty spares returned to them, however they usually only credit the purchase price of the spares not the freight and duty you may have to pay when importing them and also not the freight and other associated costs when returning the faulty parts to them. In regards to labour involved in warranty work the importer is usually stuck with this cost together with the cost of freighting the equipment from the person who brought it (and this can be anywhere in Australia - Darwin, Perth etc.) and also the return freight cost after the repair.

The costs for an importer re warranty and spares can be enormous, you have to finance the stocking of the spares, cover the costs of a good technician/engineer (which can involve high cost such as sending them overseas for training in the manufacturers factory etc.) and all their test equipment, tools etc. When an importer carries many different products (not forgetting the sophisticated equipment we see in our market today that can incorporate many intricate parts/electronics etc.) the stock holding of spares can run into many tens of thousands of dollars which is not really possible of earning the importer any revenue.

The importer must then get the message about a new products out to the market, this can involve costly advertising, mail outs, personal demonstration of the product, trade shows etc. Do you, the end user of our product, actually realise what it costs to regularly advertise, to participate in trade shows etc.? Demonstrating the product could be in-house whereby the importer must have a showroom facility which is costly to equip and also a further overhead meaning larger premises are needed and a portion of ones rent is associated to this. If the demonstrations are to ones customers this will involve personnel's time away from home base, airfares or similar related travelling costs, accommodation etc., all of which must come out of the profit you make out of the sales.

The unfortunate part of dealing in is Australia is the enormous land mass we must cover and therefore our costs associated with this are extremely high. Add to this the fact that our market is quite small and you can see why a number of Australian manufacturers have taken to exporting there products, thus allowing them a broader market base on which to base there product developments and production. Once people overseas release the actual size of our market and the associated costs of servicing this, most of them are dumbfounded and how we survive.

Another important point especially in today's market is the fact that the importer must try crystal ball what products should be stocked and what quantities. With the current advances in today's products, it is very easy to find yourself with product that has been come obsolete/out of date and then you have no alternative but to offer it at ridiculous prices in order to shift it, however there goes any possibility of making any profit on that product in order to cover all of the costs I have spoken earlier about.

Naturally distributors in Australia and also retailers also incur many costs associated with getting the product to the end user, however this too, I believe is over looked many times by the end users.

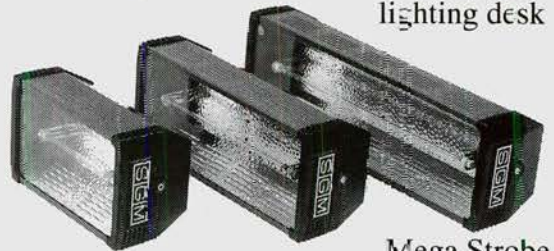
As the editor said " Who would want to be a distributor ?"



The Quality Alternative

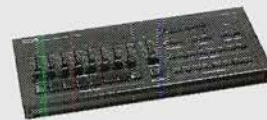


240 channel lighting desk



Midi Strobe Super Strobe

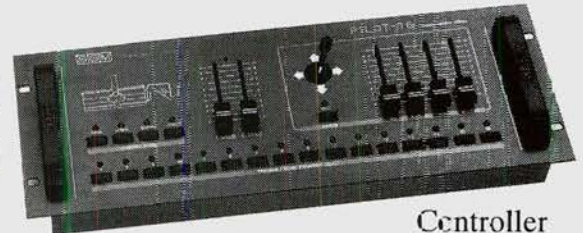
Mega Strobe



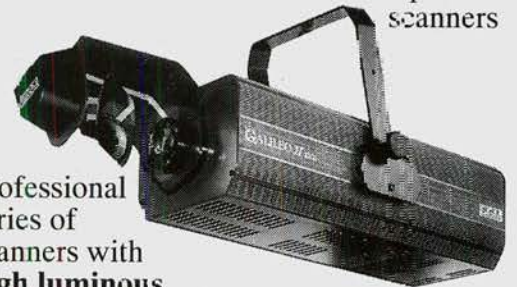
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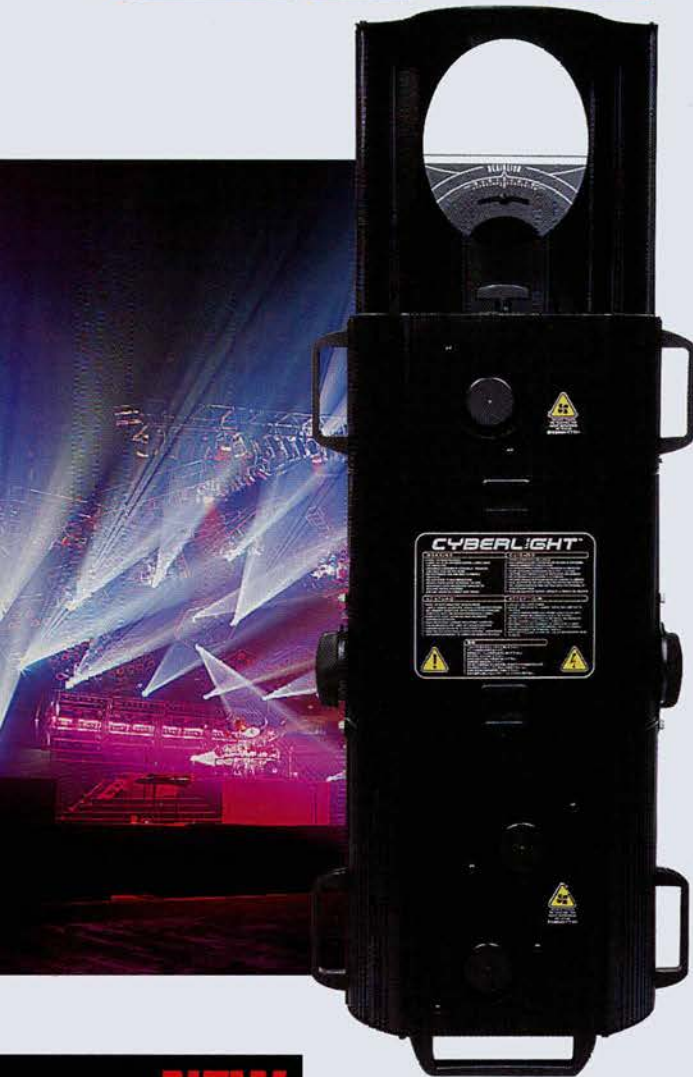


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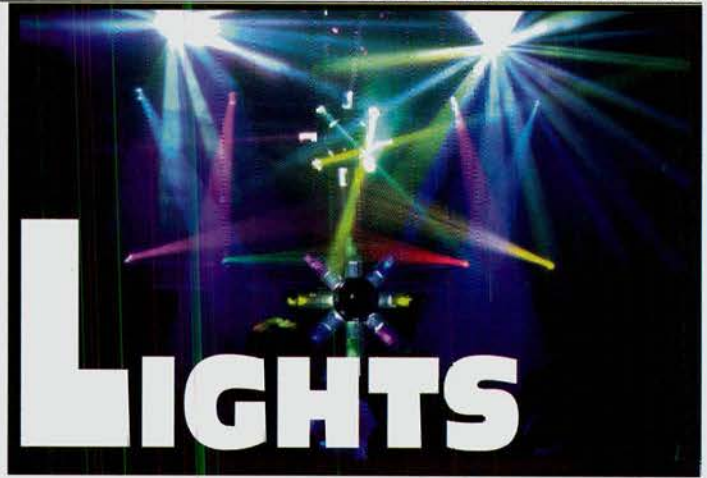


Been a long time -it seems- since we all first saw lights 'move'. Things have progressed somewhat, now there

is a programmable light for everyone.

The Buyers Guide examines:-

MOVING



Eight years ago the *Intellabeam 400 Series* became available in Australia and today it has developed into the *Intellabeam 700 Series* distributed by GUVT and manufactured by Lightwave Research. With over 200 of the units available in the country, mostly with production hire companies, they are popular with international touring acts. The most notable use was probably the Dire Straits tour a couple of years ago. Intellabeams have encroached into television land particularly on 'Hey, Hey It's Saturday'.

Sales of the Intellabeam have declined in the past year but not due to the fact there's anything wrong with them. Their sister lights the *Cyberlight* and *Cyberlight CX* have steadily eaten into their market since they were launched a year ago. Like the Intellabeams, the Cyberlights are at the expensive end of the moving light market and are out of the reach of many people. They are also proving popular with international touring acts and there is speculation that they may be seen on the forthcoming Phil Collins and James Taylor tours. GUVT hope to see them used more in television and several were used on the Channel 9 talent show series 'Pot of Gold'.

"They feature more output for television people being 50% up on the 1200w range currently available," stated Noel Bourne.

Also available from GUVT are the *Trackspots* which have been around for the past three years. In number terms, these are the lights that GUVT shift the most of with an estimated 300 placed in various production companies around the country. They can be seen in a wide range of productions from live concerts to theatre.

Coemar De Sisti's biggest seller at the moment is the *Mini Ultrascan* by TAS mainly because it fits into a certain budget area. The light has been available here for nearly two years and it's main market is the nightclub scene although they have been put to architectural use. About a month ago they also started distributing the *Babyscan* by Leisure Lighting and already several units have been sold to the club installation market. Costing only \$825.00, there has been a lot of interest in the unit but don't expect them to be able to do what the larger more powerful units can. As with all the mentioned lights, you get what

you pay for.

Although Peter Kemp admitted there was a saturation of the larger moving lights in the rental market, the Coemar NAT range seems to be doing quite well. Several are currently being permanently installed in a television studio in Beijing, China.

With all of the lights they distribute, Coemar De Sisti keep an extensive stock of spare parts at their Melbourne base.

Show Technology distribute several brands of moving lights - *Clay Paky, Martin and Geni* - which they insist do not clash in the market.

"They appeal to different areas and also it's a lot to do with the way we market them," said Emmanuel Ziino.

Most popular at the moment is the new series of Martin *Roboscans* which were launched at Entech. Since then 300 plus of the units have been sold and Emmanuel puts their popularity down to the features and price.

Most of the lighting fixtures that Show Technology distribute are destined for the nightclub market except for the *Golden Scan 3* and the *Super Scan Zoom*. Although they can be found in a few clubs they tend to be a bit too expensive for that market and usually reside with production companies and television stu-

dios. Golder Scan 3's and Super Scan Zooms have recently been used by Channel 9, Sydney for their Worldvision Telethon and Carols By Candlelight events. Two Superscans were used at the Chinese New Year celebrations in Melbourne as well as the Foundation New Year Dance Party at the Festival Hall. Goldenscan 3's were used at the Tamworth Country Music Festival.

A newcomer to the moving light distribution game is Ashton Admor Pty. Ltd. who launched the S.G.M. Electronics *Galileo* Series last September. Although the lights are still establishing themselves in the market, they have been used in a couple of nightclubs and, according to Stan White of Ashton Admor, they were received very well. The main market for the Galileos will be night clubs although Stan believes, with a powerful 1200 HMI version available, they could be used for outdoor work. The Galileos are also popular with circuses from Mexico to Moscow! Warranty is for 12 months and the back up from S.G.M. is supposed to be excellent.

"When the Galileo's first arrived we discovered a virus in one of the components," said Stan. "S.G.M. immediately sent us twice the amount of replacements needed."

Ashton Admor claim the Galileos are extremely popular throughout Europe and Asia outselling other Italian manufacturers of moving lights into China and other Asian countries.

AE Australia launched the *Colourscan 512* at Entech last October and again the main market looks like nightclubs with some casual hire. Rick Chisholm of AE Australia believes the 512s to be the very cheapest form of true DMX lighting in the country and warranty is for 12 months. AE Australia are solely importers of the lights and once they have been passed on to dealers, they have no idea where they are installed.

Black Express Light & Sound aim specifically to the disco market with their *IQ250 MkII* manufactured by N.J.E. and the *Prince Scan Light 575* by Sagitter.

Competitors in the disco market are Universal Light & Audio who supply *Abstract's Futurescan II DMX* and *Futurescan III DMX* as well as the *Magiscan* by Given.

>>>>To the BUYERS GUIDE, & MORE!



BUYERS GUIDE:

Model	Colours	Gobos	Lamp	Lamp Life	Lamp Cost	Iris	Dimmer	Sugg. Range	Fan angle	Tilt Angle	Length	Height
Colourscan			Manufactured in: Taiwan				Distributor: AE Australia					
512	7+white	8	EL24v 250w	50 hrs	\$28.00	-	-	-	180°	160°	430mm	150mm
S. G. M. Electronic Light			Manufactured in: Italy				Distributor: Ashton Admor Pty. Ltd.					
Galileo 575	8	2 x 4	575 HMI	750hrs	\$272	yes	no	4 to 40m	180°	90°	865mm	210mm
Galileo 1200	8	2 x 4	1200HMI	750hrs	\$380	yes	no	5 to 60m	180°	90°	985mm	210mm
Galileo II 575	8	4 fixed, 4 rotating	575HMI	750hrs	\$272	yes	0%-100%	4 to 40m	180°	90°	985mm	210mm
Galileo II 1200	8	4 fixed, 4 rotating	1200HMI	750hrs	\$380	yes	0%-100%	5 to 60m	180°	90°	1100mm	280mm
Lightwave Research			Manufactured in: USA				Distributor: GUVT					
Cyberlight	infinitely variable + 8 position dichroic colour wheel	4 bi-directional rotating+8 fixed	MSR 1200	800hrs	\$550	motorised variable	motorised variable fade to black	-	170°	110°	1066mm	311mm
Cyberlight CX	8 position dichroic	4 bi-directional rotating + 8 fixed	MSR 1200	800hrs	\$550	motorised variable	motorised variable fade to black	-	170°	110°	1066mm	311mm
Intellabeam 700HX	12 position dichroic	12 inc. open	MSR 700	1000hrs	\$369	motorised variable	motorised variable fade to black	-	170°	110°	925mm	207mm
Trackspot	10 position dichroic	10 inc. open	QT8500	500hrs	\$20	no	yes	-	170°	110°	650mm	178mm
Clay Paky			Manufactured in: Italy				Distributor: Show Technology					
Miniscan 300	8	5	HTI 300W	600hrs	\$457.38	-	0%-100%	35m	150°	100°	582mm	280mm
Golden Scan 3	24	4 rotating	HMI575/ HMI1200	750hrs	\$445.18 \$587.83	yes	0%-100%	35m 40m	150°	110°	1105mm 1230mm	235mm
Super Scan Zoom	infinite	2 gobo wheels 4 rotating, 4 stat.	HMI 1200	750hrs	\$587.83	yes, quick acting	0%-100%	50m	150°	110°	1470mm	235mm
Martin			Manufactured in: Denmark				Distributor: Show Technology					
Roboscan 812	12	12 motorised	HTI 150	750hrs	\$234.99	-	-	20m	180°	90°	436mm	165mm
Roboscan PRO 518	36	5 rotating+1 open	MSD200	2000hrs	\$524.12	-	0%-100%	30m	180°	90°	530mm	185mm
Roboscan PRO 218	20	18 motorised	MSD200	2000hrs	\$524.12	-	0%-100%	30m	180°	90°	530mm	185mm
Roboscan PRO1220XR	81 combinations	4 rotating, 10 motorised	MSR 1200/ HMI 1200	700hrs 750hrs	\$791.73 \$587.83	yes	0%-100%	40m	175°	83°	1090mm	290mm
Geni			Manufactured in: Taiwan				Distributor: Show Technology					
Microbeam 250	6	6	ELC	50hrs	\$25.33	-	-	15m	150°	90°	520mm	160mm
Coemar			Manufactured in: Italy				Distributor: Coemar De Sisti Australia Pty Ltd					
TM1200/2500/1200DX	unlimited	10	HMI 1200W/GS HTI 2500/SE	750hrs	\$500	yes	0%-100%	4 to 40m	360°	360°	1m	0.4m
Samurai 1200	12 dichroic	12 interchangeable	1200 MSR	800hrs	\$500	yes	0%-100%	4 to 30m	170°	80°	930mm	335m
Samurai 700	12 dichroic	12 interchangeable	700 MSR	800hrs	\$400	yes	0%-100%	4 to 25m	170°	80°	1115m	335m
Microscan I & II	10 dichroic	10 interchangeable	650/1000 TH to 575 MSR	750hrs	\$60-\$400	-	0%-100% (some)	2.5 to 21m	170°	80°	775m	245m
TAS			Manufactured in: Italy				Distributor: Coemar De Sisti Australia Pty Ltd					
Mini Ultrascan	10 dichroic	10 interchangeable	200 MSD	2000hrs	\$300	-	-	3 to 12.5m	170°	110°	775mm	290mm
Leisure Lighting			Manufactured in: United Kingdom				Distributor: Coemar De Sisti Australia Pty Ltd					
Babyscan	8 dichroic	5	250W 12V	-	\$12	-	-	4m	170°	110°	400mm	140mm
N.J.D.			Manufactured in: United Kingdom				Distributor: Black Express Light & Sound					
IQ250 MkII	8	5	24V 250W ELC	80hrs	\$29	-	-	-	180°	90°	394mm	148mm
Sagitter			Manufactured in: United Kingdom				Distributor: Black Express Light & Sound					
Prince Scan Light 575	12	12	MSR 575	750hrs	\$470	-	-	-	175°	110°	770mm	250mm
Abstract			Manufactured in: United Kingdom				Distributor: Universal Lighting & Audio					
Futrescan II DMX	8	5	HLX 150	300hrs	\$18	yes	no	6m	170°	110°	450mm	165mm
Futrescan III DMX	14	8	GE (HLX 250)	300hrs	\$18	yes	no	7m	170°	110°	470mm	190mm
Griven			Manufactured in: Italy				Distributor: Universal Lighting & Audio					
Magiscan	8	7	1000W Halogen/ 575 HMI/1200HMI 150 HTI	-	\$50	yes	electronic	5 to 12m	160°	110°	700mm	350mm

NOTE: All Vendors have MUCH MORE than the (maximum) four products illustrated here.

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Phone: (02) 896 4033 Contact: Rick Chisholm / Peter Hoermange			
125mm	yes	Can be used stand alone.	\$959.00
Phone: (09) 478 3800 Contact: Stan White			
280mm	yes	SGM 256 0-10v Analogue RS 232/423	\$4,076.00
280mm	yes	SGM 256 0-10v Analogue RS 232/423	\$4,842.00
280mm	yes	SGM 256 0-10v Analogue RS 232/423	\$4,885.00
280mm	yes	SGM 256 0-10v Analogue RS 232/423	\$5955(std) \$6667(touring)
Phone: (07) 358 5022 Contact: Noel Bourne			
339mm	yes	Motorised variable focus. Manual zoom 3 position. Lithopatterns™. Multi image Prism effect. Diffusion. Strobe 1-13.5 fps. Colour correction. LWR Protocol + DMX512. 2 year manufacturers warranty.	\$8,462.00 inc. lam
339mm	yes	Motorised variable focus. Manual zoom 3 position. Lithopatterns™. Multi-image Prism effect. Diffusion. Strobe 1-13.5 fps. Colour correction. LWR Protocol + DMX512. 2 year manufacturers warranty.	\$8,462.00 inc. lamp
330mm	yes	Bi colours. Strobe. Lens options. Mirror speed control. LWR Protocol + DMX512. 2 year manufacturers warranty.	\$6,947.00 inc. lamp
221mm	yes	Bi colours. Strobe. Mirror speed control. LWR Protocol. DMX512. Analog. Stand alone. 2 year manufacturers warranty.	\$2,643.00 inc. lamp
Phone: (02) 898 1111 Contact: Emmanuel Ziino			
238mm	yes	Compact, lightweight design.	\$2,999 inc. tax
330mm	yes	Power factor correction. Prism effect. Frost filter.	\$9,499/\$10,499 inc. tax
330mm	yes	Rotating prisms. Frost filter. Zoom feature 8-16. Remote focus. Effects colour wheel. Colour correction. Power factor control. 12 control channels.	\$16,999 inc. tax
Phone: (02) 898 1111 Contact: Emmanuel Ziino			
190mm	-	Remote lamp turn on. Stand alone activation. Power factor correction	\$1,899 inc. tax
280mm	yes	Remote lamp turn on. Stand alone activation. Frost filter. Prism effect. Microstepping. Elliptical tracking. Colour correction. Power factor correction. UV filter. 18 flash per second strobe effect.	\$3,299 inc. tax
280mm	yes	Microstepping. Remote lamp turn on. Fan speed control.	\$2,399 inc. tax
315mm	yes	Rotating gobos. Colour and gobo mixing. Power factor correction. Modular and upgradeable. Digital assigning. Remote lamp turn on. Remote focus. Prism feature. Frost filter. High speed shutter.	\$8,499 inc. tax
Phone: (02) 898 1111 Contact: Emmanuel Ziino			
150mm	yes	Stand alone program for multiple heads.	\$995 inc. tax
Phone: (03) 467 8666 Contact: Peter Kemp			
0.26m	yes	Inbuilt focus. 16 bit positioning. Variable speed strobing shutter. Additional effects wheel with multi-facet multiplying prisms. All effects bi-rotatable. Variable speed frost filter. Power factor corrected.	from \$9,000
290mm	yes	Rotocolour effect. Adjustable strobe/blackout effect. High precision optics. External ballast.	\$5,400
230mm	yes	Rotocolour effect. Adjustable strobe/blackout effect. High precision optics. External ballast.	\$4,500
160mm	yes	Rotocolour effect. Adjustable strobe/blackout effect. High precision optics. Soon to be available with rotating gobos.	from \$2,100
Phone: (03) 467 8666 Contact: Peter Kemp			
160mm	yes	Rotocolour effect. Adjustable strobe/blackout effect. High precision optics.	\$2,255
Phone: (03) 467 8666 Contact: Peter Kemp			
170mm	no	Built-in microphone for stand alone operation	\$825.00
Phone: (02) 559 4367 Contact: Con Andrews			
120mm	yes	Own controller available.	\$1,250 inc. tax
Phone: (02) 559 4367 Contact: Con Andrews			
300mm	yes	0-10V. Own controller available.	\$5,800 inc. tax
Phone: (075) 290 688 Contact: Cuono Biviano			
165mm	yes	Strobing. Stand Alone Mode. 2 year warranty.	\$899
170mm	yes	Strobing. Stand Alone Mode. Lamp economy.	\$1,119
Phone: (075) 290 688 Contact: Cuono Biviano			
350mm	yes	12 months warranty. Joystick controller. Available 1 to 9 flashes strobing.	\$2,500

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THE ICON

Since its introduction to Australia a year ago, the LSD Icon system has proved very popular and has certainly eaten into the Vari*lite market. They have been seen on Depeche Mode, Tori Amos, The Big Day Out, Australia Day Concert as well as several corporate events. Expect to see them in action at the Gay Mardi Gras Dance Party this year.

The Icon is an exceptionally bright light source, housing an Osram 600W HTI, 5,300 Kelvin lamp, in fact it claims to have the brightest beam of any moving luminaire. It has 7 static and 7 rotating gobos with varying speed and direction. The light has its own dedicated control console with the option of programming from a Macintosh.



The success of the Icon has led to the release of the new LSD Washlight, a colour change system to compliment the Icon console. Weighing under 25lbs, the unit enjoys unrestricted 360° pan and 270° tilt motion when hung on 16in centres. The colour-change system is unique and consists of LSD's graduated colour media - a specially developed gel string that goes from white to full saturation. The Washlight utilises two scrolls that can be combined to achieve virtually any colour requirement and colour change is fast, from one end of the roll to the other is 1.5 seconds.

Supplied by Bytecraft, there are usually anything between 30 and 60 fixtures available in the country plus two consoles. Bytecraft are planning to stock the new Washlight but at the moment demand for them is exceeding the supply. The units cost \$500 per week each or \$150 per day each although these prices are negotiable depending on the amount hired. The longer term productions, Bytecraft will train your operator in the use of the system.

For further info call: Bytecraft (03) 587 2555.

VARI*LITES

Vari*lites are still the most popular form of moving lights used for concert productions and over the years, the family of lights has constantly been upgraded.

The VL2 family of spot luminaires started with the VL2 which featured a gobo wheel with 9 interchangeable custom patterns and the Dichro*Wheel colour system for access to over 120 hues. Then along came the VL2B which has a 400 watt arc source and aluminium reflector which maintains a consistent 5000°K colour temperature as well as the access to the 120 hues. The VL2C is based on the Osram 600W HTI and the lamp's flicker free 6100° Kelvin make it a supremely efficient light source. With a fine tuned reflector and redesigned optics, the unit is more than 50% brighter than the 2B. The optics have been changed to provide a tighter focus than the VL2B and the resolution of the beam iris has been much improved.

The VL3 tungsten wash luminaire features the crossfadeable Dichro*Tune colour system with independent cyan, magenta and amber colour panel control. The VL4 wash features a high speed douser for instantaneous blackouts, bumps and strobe-like effects. The VL5 is convection cooled and very quiet. This is achieved by a cold-mirror reflector that removes heat from the light beam, eliminated fans and associated fan noise, and reduces heat on stage. It has an improved cross fading colour palette, a 1000W/3200°K tungsten halogen lamp plus DMX on board to widen control access.



The VL6

The new VL6 is a lightweight, neat, virtually silent profile spot in fact it is the smallest automated spot luminaire currently available. The standard configuration is 11 colours and white, plus 11 gobos and an open slot. Light source is a Philips MSR 400W short arc lamp with a colour temperature of 5000°K. The lens system uses a highly efficient multi-element lens that has a very flat field.

The Artisan and mini-Artisan control consoles allow instant access to the Vari*Lite family of spot and wash luminaires. And, with the integration of the VLD dimmer interface, you can control the entire show - Vari*Lite luminaires, gel changers, fog machines, curtains - from a single console.

For further information call: Vari*Lite Australia (02) 317 5200.

PAN COMMAND

Concert Lighting Systems in Melbourne are the Australian agent for Morpheus Lights/Pan Command Systems Inc. Pan Command is the manufacturing company and Morpheus the production wing.

C.L.S. owns and operates P.C. Spots which are soon to be upgraded to run the 600HTI Xenon lamp. This is the same lamp used in the VL2C. The P.C. Spot has fading dichroic colour mixing, a zoom lens and rotating gobos.

Morpheus not only use the P.C. Spot but

also the P.C. Beam which is a wash light that incorporates a moving head that can pan, tilt, focus and change colour by means of a Color Ranger or Color Fader.

Pan Command now have a new compact 600HTI multi-purpose moving light called a Pro Spot. The Pro Spot is available with different configurable features but as yet C.L.S. have not purchased any.

For further information call: C.L.S. (03) 646 8444



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THE PA PAGE

WEDGE TALES

By Michael Orland.

Say you've got this big stoopid fallolopping pet dog. And you've left the back door open. And you've left this big juicy sirloin steak lying on the kitchen table for tonight's dinner. Mmmmmmm steak..... So you walk into the kitchen and like, your steak's gone; there's this fresh steaming booba on the dining room rug, and there's the culprit, sitting on the back doorstep, tail wagging, big smile on its face.

Now, you could yell at the dog, although such action is unlikely to recover your steak, or clean your rug. You can't even be sure the animal will make the connection between the noise from your mouth and any recent pleasurable activities. You just get this puzzled blank stare. Somewhere along the line you simply have to accept responsibility for having left the door open. The dog, being the far less evolved carbon based life form (Trekkie talk) that it is, should not be expected to exhibit human levels of intelligence or restraint.

Which brings me to the subject of musicians. I've often thought running a live music sound system would be a lot easier if it weren't for musicians, in much the same way that Basil Fawly maintained running a hotel would be a lot easier if it weren't for the guests. Still, as long as we're stuck with them, maybe I can pass on a few precautions.

Try not to give fold-up type mike stands to singers. They just don't last. Singers usually prefer round base types. I prefer to give them cast iron base types. For singer/guitarists, position boom vocal stands so that the legs are less accessible. I try to keep them to the side of the monitor wedge with the boom angled back towards the centre of the wedge. This is not just a neater look, it lessens the chances of having the goose rock back and forth with his foot on one leg of the stand, gradually sawing into the plastic pivot, ruining yet another stand.

Most system owners find the most expensive things to main-

tain in their rig are the wedges. None of my previous articles about 18dB passive crossovers or passive limiting are going to save your horn diaphragms against the ravages of drink spills. It makes no difference whether they're the top model in a manufacturer's catalogue or home made orange carpeted wedges with sharp aluminium edging because that's all you could justify starting with.

If I can foresee a chance in some crowded little gig for punters to lean over wedges with drinks, I'll usually try to set up some sort of barrier. Say, a row of cases, maybe even with truss chained to them. Most such damages to my wedges however have been caused by the musos. One of our regular clients recently picked up a jug of coke to throw over the crowd during a hot sweaty gig. Most of it ended up on the wedges. Another of our regulars insist on spraying their crowds (and my wedges) with high pressure kiddies water cannons. Talent, eh? Protesting to the band or management simply labels me Mr Downvibe and future work is threatened.

Many people in recent years have taken to covering the front of their wedges with acoustic foam which goes a long way towards minimising drink damages, and gives the wedges a nice 'pro' look. Until some drunken pack of guitar wielding thickheads start pawing at them with their Doc Martens, ripping chunks out of the foam. And then spilling drinks down the holes.

Now I've had some pretty blotchy looking speaker cones as a result of drink spills, but I've never had any actually fail as a result. So, I've opted for simply covering the horns, of which I'd previously had many drown. Acoustic foam about 1" thick can be obtained from most speaker box manufacturers. If you ask nicely, they may even sell you cheap off-cuts which may suit your wedge horns just fine. Remove the horn. Cut the foam to size and place it within the mouth of the flare.

Stretch a piece of plastic speaker grill cloth over it and secure it to the underside of the flare with gaffer. Re-install the horn, puncturing the plastic grill cloth with the screws as you go. Before replacing the overall metal grill, look for ways of preventing it being kicked in to the extent that it may touch the speaker.

Some brands of professionally made "off the rack" speakers have very little clearance between grill and speaker and need tailoring to withstand a musician's abuse. The Electrovoice FM series is a prime example. The speaker exerts in extremes, hitting the trodden-in grill and buckling the cone. Eventually the cone tears along where it has creased. My response to this possibility was to double the thickness of the wooden frame on which the grill is stapled, raising the grill flush with the surrounding lip. By adding an extra frame under the horn flare so that it still presses against the grill, a sculptured foam insert can be held in place by the grill.

If your wedges are more like the current JBL or Etone types, and feature folded edge steel grills, then despite the much larger clearance between speaker and grill, you may still have to add stand-offs around the speaker to prevent it caving in under a determined boot. Four pieces of wood screwed to the grill with self-tappers through mudflap washers do it fine.

Michael runs The Public Address Co in Sydney, call (02) 799-7219.

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