

a FRESH look at presentation & entertainment technology

Connections

New Zealand \$6 • Malaysia 36r • Indon. 170,000r • Thai 2500bt • Singapore \$9 • Hong Kong \$35 • Philippine 240ps • Elsewhere US\$6 SEPTEMBER 1998 A\$4.50

vision

AUDIO
LIGHTING
staging
AUDIO

vision

LIGHTING

staging

ISSN 1320-5595



9 771320 559004

Print Post approved: PP255003/007511
Published and printed in Australia



WHATEVER
THE WIRELESS
TECHNOLOGY

SHURE HAS A HEAD START

VHF or UHF, non-diversity or diversity, budget or premium features - just some of the choices faced when selecting a wireless microphone system. One choice however is simple. Only a genuine Shure wireless system can deliver the same unique sound you get from a Shure wired microphone. Audition one today.

SHURE®

THE SOUND OF PROFESSIONALS... WORLDWIDE®

JANDS ELECTRONICS PTY LTD 40 Kent Road Mascot NSW 2020 Phone (02) 9582 0909 Fax: (02) 9582 0999 ACN 001 187 837
Visit our Website: www.jands.com.au

Write in Reader Service Number: 118

Connections

THE PRESENTATION & ENTERTAINMENT TECHNOLOGY MAGAZINE - SEPTEMBER 1998 #56



TIGER'S 32T HARD DISC SYSTEM ATTRACTS HUMAN NATURE

A Sydney advertising music studio shows just how times have changed in the recording business

This is a story about how a Los Angeles based producer recorded vocals for the next Human Nature album. The band are hot, the record company are in loving and support-

ive mode, and the album likely contains profitable platinum hit songs. So why were the vocals recorded in an advertising music studio in North Sydney?

I went to Tiger Recording Stu-

dio to find out.

Surprise- the place is REALLY hip. There are sort of Tiger motifs in the decor. But there is also a serious technology story here. > to page 12

Computer Music Market Defined

Allans get it right with The Groove Room

Melbourne: Allans Music at Bourke street have read the high tech music market right. Manager Mark King has just opened The Groove Room, a small studio where DJ product is demo'ed.

"They like their own environment, they don't want to hear guitars or drums" he told me one recent afternoon. The studio has basic items like Vestax mixers (from \$449), turn tables, CD decks, and a suit of Roland Groove products. Roland have identified

the DJ market properly, and moved synth and sequencer into a simple interface. One box can do it all, with neat features like a midi interface to a DJ mixer to establish the BPM (*beats per minute*) of a track being played.

The three digital markets Mark has identified each have their own area of the store. Dance computers is the Groove Room, Pro computers is next door - where professional hard disk recording products on Mac or PC can be appraised.

• continued on page 5

500 lumens in a Magnesium Diecast body

REGION: Sony's impossibly small SVGA Ultra Personal LCD projector is released this month. Acceptable signal formats are composite video, Y/C (SVHS) video, RGB, and component video (Y/R-Y/B-Y) signals. A wide variety of computer inputs such as Mac, VGA, SVGA and XGA formats can be displayed.

The short arc 120W UHP lamp, and zoom lens make for a bright image. We've seen it working at INFOCOMM. Sony's LCD panels are dual activated. Each pixel has two "switches" working in parallel which provide redundancy. If one switch stops working the second will continue to work, thus significantly reducing "dead pixels" or "blemishes."

• Price starts at \$7,650 ex tax. Sony: +61 2 9887-6666.



THIS MONTH: TECHNICAL TRAINING GUIDE
BUYERS GUIDES: MICROPHONES & FRESNEL SPOTS

CONNECTIONS PUBLISHING

Pty Ltd. (ACN 058443182)

All Mail to:

P.O. Box 439, Epping, NSW 2121 Australia
We moved! Our Office is no longer at Century Plaza

Phone: +61 2 9876-3530

Fax: +61 2 9876-5715

E-Mail: mail@conpub.com.au

Web site: www.conpub.com.au

ADVERTISING:

Call 1-800-635-514

Sales Director: Caroline Grafton

EDITORIAL:

Publisher & Editor: Julius Grafton

Email: julius@conpub.com.au

Assistant Editor:

Catriona Forcer Email: catriona@conpub.com.au

Profile journalist: Madeleine Murray

Safety & OHS writer: Anthony J. Muzik

Regular Contributors:

BRISBANE: Sid Kidman

PERTH: Jacqueline Molloy, Andy Ciddor

MELBOURNE: Mandy Jones, Duncan Fry

SINGAPORE: Nazir Keshvani

EUROPE: Mark Cunningham

USA: Buck Freeman

ROLL CALL:

Production Manager: Sharon Miceli

Business Development: Nicole Morris

Accounting: Jenny Royal, Louise Shanahan

Printing: Superfine, Sydney

Reprographics: Omicron, Sydney

Platform: Starting to love the Mac again....

Newsagents Distribution: NDD, Sydney

DEADLINES:

Monthly except January, deadline 15th of the month prior.

SUBSCRIPTIONS: SAVE up to 33%!

Free call: 1-800 635-514 or fax +61-2-9876-5715 from O/S

AUST: \$39.90, (12 months) or \$58

(2 years). NZ: NZ\$65, Asia A\$70, USA A\$95, Europe/UK A\$110.

Pay half price for this magazine

(Aust. only) Buy 5 or more copies to one address each month - for resale or for staff or for customers. Pay only \$2.25 each, invoiced quarterly. Call Nicole 1-800-635-514

Legal stuff: All contents © Connections Publishing Pty Ltd, 1998. Nothing herein to be reproduced in any way or transmitted by any means without the express written consent of the Publisher. No Warranty is extended in respect to any information herein. Opinions expressed in Connections are not necessarily those of the Publisher. Materials herein reproduced in good faith. Corrections made wherever material errors occur. It is a condition of purchase that the Publisher does not assume liability or responsibility for loss or damage that may result from any inaccuracy or omission in this publication. Opinions expressed herein are not necessarily the publishers'. Please do not sue us. 100% produced in Australia and air expressed to the entire South East Asian region.

How to make a Submission: We WELCOME well written articles and stories for consideration. Send hard copy, preferably WITH a PC or Mac word processing RTF file and NORMAL file together. RTF means Rich Text File, also known as 'Interchange format'. Most word processors will SAVE a file (in the 'Save To...' field) as an RTF file. Photograph prints, B&W or colour, preferred. Have them printed at 5" x 7" or larger if possible. Digital images - you CAN email us a high resolution JPEG image as an attached file, but not a TIFF image. It takes too long to download. A stamped self addressed envelope is required if return desired. No responsibility for loss accepted, sorry.

We operate under the journalists code of ethics, as detailed by the Australian Media Entertainment and Arts Alliance. **Respect for truth and the public's right to information are over-riding principles for all journalists.** In pursuance of this principle we have always committed ourselves to these ethical and professional standards:

1. We shall report and interpret the news with scrupulous honesty by striving to disclose all essential facts and by not suppressing relevant, available facts or by distorting by wrong or improper emphasis;
2. We shall not place unnecessary emphasis on gender, race, sexual preference, religious belief, marital status or physical or mental disability;
3. In all circumstances we shall respect all confidences received in the course of their calling;
4. We shall not allow personal interests to influence us in our professional duties;
5. We shall not allow our professional duties to be influenced by any consideration, gift or advantage offered and, where appropriate, shall disclose any such offer;
6. We shall not allow advertising or commercial considerations to influence us in our professional duties;
7. We shall use fair and honest means to obtain news and documents;
8. We shall identify ourselves before obtaining any interview for publication;
9. We shall respect private grief and personal privacy and shall resist the compulsion to intrude;
10. We shall do our utmost to correct any published information found to be harmfully inaccurate.

Contents

SEPTEMBER

Commonwealth Games Audio	16
How it almost didn't happen!	
AV & Presentation news: Staging seek a partner	22
Digital video device from Alcorn	24
Caribiner go shopping	26
Telstra and the amazing phone number switcheroo	26
Gore & Sex	28
Docklands Stadium: the launch gig	30
Sails: the Car Launch	32
LETTERS, abuse	36
Duncan Fry	36
Training feature: where to get it!	38
What technical industry training is out there? We explore....	
Classifieds	46
BASF Tracking guide: who recorded last month >	49
Microphones: 200 best selling microphones detailed	51
On tour with Paul Kelly	57
Date with Disaster	58
Lighting Section starts:	61
Inside Vari*Lite	61
Lighting city of angels	66
Review: Jands Echelon 1k	70
Lighting on a budget: Part 1	73
REVIEW: Coemar CF1200	74
Buyers Guide: Fresnels	78
The PA Page:	82
.... and MUCH MORE INSIDE!	



Only in Connections.

Editors note

Change scares some people, it's the breath of life for me.

I saw a high tech audio product distributor recently who confessed he didn't really know WHO was using his products. Sure he has a fair idea, but no real idea. He was just being honest.

Look at how PC's are sold for an example of a 'temporary technology market'. Do you really think consumers will always buy 'mix and match' computers like they do today -and wrestle with Windows? Or is 'one box' more realistic? Usually a car has an engine, doors, wheels and seats - you choose a model that suits you. Exit the PC, enter firmware. A box for a task.

Someone who is wise also told me how music will be delivered in the future. It'll come out of your TV or whatever your internet box is. Chances are several multinationals (try News Corp) will control the cable coming into your place, and offer 'play and pay' like a big jukebox. Charging you a micro payment every time.

They'll have pay to view live concerts running on your TV all the time, so little video OB units will be run at clubs everywhere by technicians who know how to get quality audio and vision happening - and fast. Big concert tours will be very rare events. Surprise- people don't actually enjoy going to venues, they just like the content once they get in there. After parking the car.

Already many successful recording stars make more money playing for 'private' corporate events than they do touring.

Welcome to 1998!

Next issue mailed 2nd October, on sale 7th October.



Numark launch seminar push at AVLA

PERTH: AVLA have established a custom DJ workstation room at their East Perth premises.

The new facility was introduced to the trade recently with a full scale product presentation, night, sponsored by Numark DJ equipment. To celebrate, free Numark T-shirts were handed out all around and Numark mixers were given away as prizes.

To show off some of Numark's latest products was well-known Perth DJ and all around nice guy, Kenny L. Being witness to this exciting event was a great turnout of over 90 young budding and professional DJ's.

Numark's new CD player, the CDN-24 was shown for the first

time. The special edition DM1190SE mixer was also welcomed, with comments on its blue face plate and advanced studio features.

"This is not just about selling products, it's about educating and showing how DJ's can make a reputable name for themselves in this very competitive industry" says Michelle Rajcany from Show Technology, importers of Numark. As Frank Miranda, AVLA's Managing Director commented "Numark have a whole array of equipment and mixers suited for the beginner bedroom DJ to the Studio Series for the professional DJ"

Numark are holding seminars all over the region during Spring.

Turbosound Announces Sales Policy

Electric Factory opens up range

MELBOURNE: Turbosound Floodlight PA cabinets are now available direct from Electric Factory, who have announced their first system sale since recently taking over Turbo distribution.

Melbourne production company James (Jim) Gallagher Productions has ordered a system comprising eight Floodlight TFL-760H mid-high enclosures, with eight TSW-718 low frequency enclosures. Jim currently offers complete production packages for musical acts such as Burns, Cotton & Morris.

Jim will power his new system with his existing Australian Monitor amplification.

The TFL-760H (Floodlight) is the companion cabinet to the Turbosound Flashlight, which is a 'high Q' version - meaning very tight dispersion. Floodlight dispersion is 50° horizontal, making Floodlight more suitable for general use. Flashlight is suitable for large arrayed arena systems, where its extremely tight dispersion is designed to allow each cabinet to 'shine' or squirt audio to a defined area of a venue.

Flashlight and Floodlight use exactly the same flying gear, although Floodlight cabinets are not as deep as Flashlight. Turbosound only offer Flashlight in a package with amplification and signal processing. Floodlight on the other hand is available without amplification.

"We don't mind whose amplification you use with Floodlight" says Graham Rowlands, head of Corporate Audio at Electric Factory. "You can also use your own low frequency cabinets if you prefer - although we would like to demonstrate how effectively Floodlight integrates with Turbo's TSW low frequency enclosures".

Turbosound has just been sold, with a new

management group in the process of taking over. Managing Director Alan Wick (pictured) told Connections that his partners paid a price which was "somewhere between a bargain and a ripoff" to buy the firm from the Harman Audio Group.

He spoke against the corporatisation of pro audio, saying that large corporations acquiring diverse pro audio manufacturers is driven by a "short term-ism" view.

With Turbo now back in the hands of some of those who previously ran it, will the direction

change? "Yes".

Clearly there is change in the air.

• **Meanwhile,** Electric Factory have released the new IMPACT LIVE series (pictured) from Turbosound through their general dealer network. IMPACT LIVE is a cost point sensitive range of cabinets which sell from A\$1,399 each. All cabinets are fully imported from the UK, made from birch ply and fitted with proprietary speakers from the same manufacturer who produces speakers for the Flashlight and Floodlight range. IMPACT LIVE is the only Turbo product sold exclusively through dealers.

• Call +61 3 9480-5988



Outside The Groove Room - Jamie Dalton with Mark King

Allans get the Groove right

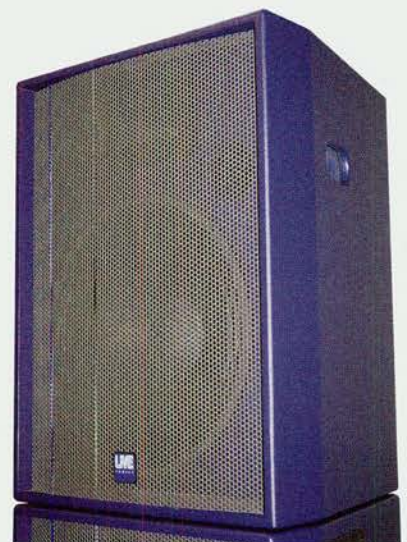
from previous page

Just across the aisle is Home Computers, where simple sound cards and lower cost packaged software is sold. Many people front up to buy a soundcard for their new PC, and leave with a pair of nearfield monitors and a microphone.

"We also like to show the DJ guys how they can produce a

track and then even burn a CD" says Mark, illustrating how the three departments feed each other. You can even buy stylis there, I got one for my Stanton 500 cartridge.

Allans are looking at introducing some basic disco lighting to further enhance the product mix in the Bourke street store -JG



Powered speaker market growing fast

RCF 500a grabs hire inventory market share

There's a growing range of amplified loudspeakers out there, from Meyer MSL-4 to JBL EON and now a lot in between. RCF's new ART 500a (right) is a good example.

It has a bipolar, split rail dual power amplifier loaded into the back of the enclosure. Because the amp is configured to drive the 15" woofer and the 3" compression driver, it can be tailored very particularly to those components.

The amp has speaker excursion monitoring, thermal protection, DC protection and input compression.

These features assist in preserving the



life of the components when overdriven, a major consideration when a speaker system is offered for hire.

Internal equalisation curves are offered for Voice or Music, to further tailor the characteristics of the system.

The amp delivers 400w to the woofer and 100w to the high frequency driver. The H/F horn has an 80° x 40° dispersion pattern.

Cabinet weight is 38kg, which is not unreasonable.

• **A\$3,495, from Group Technology, call +61 3 9872-5000.**

DeltaMax for Mt Isa

Mt Isa Civic Centre recently upgraded their audio with eight EV DeltaMax DMS 1183 3-way PA cabinets. The system was supplied by Wild Gravity from Townsville.

Safe Tape Vault

Safe Tape & Film are a subsidiary of Comcopy, and they operate vaults for the storage of film and tapes in both Sydney and Melbourne. Their internal fire security system is so alert that striking a match in the vault will trigger the alarm.

Oldest HiFi

Audiosound Laboratories are the oldest hi-fi manufacturer in Australia, having just celebrated their 30th year. They are located in the Sydney beach suburb of Curl Curl.

Rental Guide

ASC (Audio Sound Centre) have produced a new Rental Equipment Guide which has some handy stuff like a world power guide at the end of its 78 pages. To get a copy contact ASC on +61 2 9901-4455.

30 years of entertainment technology '68 - '98

1968 AWA Technical Review is published, setting the scene for Australian influence in loudspeaker design - the theory of which is later dominated by Neville Thiele.

1969 Road cases and speaker boxes were made from pine board. They exploded when wet!

1972 Phil Burkinshaw brings the first Par Can into Australia and forms Crazy Maze Lighting.

1976 Jands introduce the J-600 amplifier, which went on to be the most popular amplifier ever built in Australia!

1979 Philips develop a DAD - digital audio disk, with a diameter of 11.5cm. Does anyone still have one?

1984 Power Point was released by the Trade Secret company. The computer started to become the primary source of projected graphics in audio visual.

• These are *random* and *fractured* events from The Connections Archives. Email us your historical highlights or corrections now, to- mail@conpub.com.au or fax to 'Historian', +61 2 9876-5715.



MAJOR TRADE SHOWS

? *Contemplating a study trip, possibly tax deductible, to any of these overseas shows? Feel free to call the editor if you need further information. Email julius@conpub.com.au, or call +61 2 9876-3530.*

- **PLASA 98**, 6-9 Sept, London. Call +44 1 323 410-335. web: www.plasa.org.uk
- **AES 105th**, Sept 26-29. San Francisco. Fax +1 212 682-0477. web: www.aes.org
- **REPLitech Asia**, Oct 19-22, Singapore. Fax +1 914-328-2020
- **IES 42rd**, Lighting Convention Nov 9-11 '98, Brisbane. www.iesanzq.asn.au/light98
- **LDI**, Nov 13 - 15 '98, Phoenix. Ph +1 212 229-2965 web: www.etcync.net
- **NAMM**, 28-31 Jan 1999. LA. www.namm.com
- **AES 106th**, 13-16 Feb, Munich. Fax +1 212 682-0477. web: www.aes.org
- **REPLitech Europe**, 23-26 Feb, Vienna. Fax +1 914-328-2020
- **MusikMesse**, 3 - 7 March 1999. Frankfurt. www.messefrankfurt.com
- **Music Convention**, 29 April - 2 May. Gold Coast QLD. web: www.australianmusic.asn.au
- **NAB**, 19 - 22 April, 1999, Vegas, USA. www.nab.com
- **PLASA SHANGHAI**, 13 - 15 April 1999. Ph +44 171 370-8231. web: www.eco.co.uk
- **NSCA**, April 27 - May 1, 1999. Nashville. Ph +1 904 273-2760, web: www.nasca.org
- **InfoComm**, June 10-12, 1999. Orlando. Info fax +61 2 9531-6777, www.icia.org
- **SMPTE**, July 13-16 th, 1999. Sydney, Ph. +61 2 9977-0888.
- **LDI** November 19 - 21st, 1999. Orlando. Ph +1 212 229-2965 web: www.etcync.net
- **NAMM**, 3 - 6 Feb 2000. LA. www.namm.com
- **ENTECH 2k**, March 5th - 7th, 2000, Sydney. Fax +61 2 9876-5715. web: www.conpub.com.au
- **MusikMesse**, March 15- 19th 2000, Frankfurt. www.messefrankfurt.com
- **SIB**, March 26 - 29th, 2000. Rimini, Italy. Ph +39 541 711711. web: www.fierarimini.it
- **NAB**, April 8-13th, 2000, Vegas, USA. www.nab.com
- **NSCA**, April 27 - May 1, 2000. Las Vegas. Ph +1 904 273-2760, web: www.nasca.org



Olympic PA on schedule

SYDNEY: PA People are on track to complete the PA installation at Stadium Australia, the new Olympic stadium in Sydney. The facility is expected to be commissioned by February next year, a clear year and a half prior to the games in September 2000.

PA People managing director Chris Dodds (pictured) told Connections that the Stadium will now use a custom control system developed by his firm. This software sits in front of Peavy Media Matrix and Crown IQ systems, which control signal processing and amplification. A CobraNet system distributes actual audio signals via ethernet.

"Our system talks to best of breed software" Dodds said. The system was designed for the Sydney Opera House stage management console contract, which is about to be commissioned.

PA People are tendering for the other two large stadium audio contracts to be completed in 2000 - the Millennium Dome in Sydney, and the Docklands Stadium in Melbourne. These contracts will be awarded soon, and many firms have tendered.

PA People has a Projects manufacturing facility located close by its Sydney base at Enfield. Custom electronics manufacturing, woodwork and steelwork are done in house, for example Dodds says there are over 200 custom mounting brackets required for the Olympic Stadium alone.

-JG

SCREEN SOUND AWARDS NEXT MONTH

SYDNEY: FAIRLIGHT and CONNECTIONS MAGAZINE have signed as sponsors for the inaugural ASSG Screen Sound Awards to be held next month.

The Australian Screen Sound Guild is running the awards, which will see sound professionals in television and film recognised by their peers for the first time.

The awards, which will be held annually, are a big step in establishing recognition for sound and raising the image of sound professionals. Nominations have now closed.

Awards for Television Sound include best sound for a training, educational or corporate program, commercial, documentary,

current affairs story, lifestyle program story, television drama series and a telemovie.

Feature film awards will recognise the craft skills required to produce the sound track for a film and awards will be presented for: best location recording, best dialogue editing, best sound design & FX editing, best Foley, and best mixing for a feature film.

The awards will be held at the Sebel of Sydney on Friday evening, October 16, 1998. They will be hosted by Water Rats star Jay Lag'ala, and awards will be presented by high profile industry figures.

• Further sponsors are invited, call ASSG President Phil Judd +61 2 9413 8737.

NIGHTLIFE GOLF DAY UNITES INDUSTRY

Nightlife Music Video, the Queensland-based music video supplier, hosted the 1998 Hospitality Industry Golf Day recently. A total field of 140 players attended including 100 of Nightlife's hotel and club customers and 40 major hospitality suppliers including Triple M FM104, Castlemaine Perkins, Jim Beam, Coca-Cola, Universal Lighting & Audio, Greater Union Entertainment Technologies, Total Concept Projects and AWA.

Congratulations went to the winners on the day, Dave Allen and Rod Iseppi from Melba's On The Park, a long established and successful nightclub on the Gold Coast. There were over \$6000 worth of prizes donated by all the suppliers with the biggest prizes taken out by two of Brisbane's best known DJs, Hayden Butler from Fridays Riverside and Chris Mothershaw from City Rowers. The event also recognised a very important charity for

the kids of Australia with over \$500 raised and donated to the Variety Club of Qld.

Nightlife's next big social event is their 10th birthday celebrations in January 1999.

Pic: Mark Brownlee and Tim de Souza from Nightlife, schmoozing with young females. Hmm.



GEAR TO MOVE?

**IF YOU'VE GOT GEAR TO MOVE,
CALL STAGE & SCREEN ON (02) 9700-1718**

STAGE & SCREEN
TRAVEL & FREIGHT SERVICES PTY LTD

Recording Industry Charged for 'News' Story

Editorial or advertising? ARIA in payment row

By Julius Grafton

A row over payment of thousands of dollars for a story appearing in Audio Technology magazine has arisen after the recent Australian Government decision to allow open import of CD's.

In the weeks leading up the Government introducing the new laws, a large lobbying effort to prevent them was coordinated by ARIA, the Australian Record Industry Association. Sydney recording studio owner Jim Taig worked very hard to try to turn opinion against the new law, sending emails, making calls, and holding high level meetings with ministers, senators and back bench politicians of all persuasions.

Taig was desperate for media coverage of the issue, contacting and emailing many publications. "It was a mad rush in the weeks leading up, I was in meetings, in the air, everywhere" he told Connections.

A four page article arguing against the legislation appeared in the July edition of Audio Technology, headed 'Don't let the Federal Government stop the music', written mainly by Taig. It starts 'As this article goes to press, the future of the Australian music industry hangs in the balance'.

The magazine has presented the article as a news story. But Taig says he has been charged A\$5,200 - representing the publishers 'costs' to run the article. Technically then the article is 'advertising' or 'advertorial'.

"We would always put 'adver-

tisement' at the top to avoid misleading the reader" says Margaret Cott, publisher of Drum Media. "We have never charged to run editorial. This is a case for Consumer Affairs" she states.

Publisher of the Australasian Music Industry Directory, Phil Tripp, is more forthright. "As

Don't let the Federal Government stop the music

Your job, your career, and the entire Australian music industry is under threat from the Federal Government's plans to introduce the parallel importing of CDs.

A s this article goes to press, the future of the Australian music industry hangs in the balance. Legislation that allows parallel importation of music recordings will soon be passed in the Senate. This legislation will allow the Copyright Act to be amended to allow the importation of CDs from other countries. This will allow the Australian market to be flooded with CDs imported from other countries, meaning lower prices and less revenue for Australian artists and labels. It will also mean a loss of control over the quality and production of music in Australia.

Copyright protection is an intellectual property right of artists and musicians across the world, and must be maintained to be. Currently, only the owners of CDs are permitted to legally import or manufacture CDs for sale in Australia. Parallel importing will prevent artists and labels from doing this. This will mean that artists and labels will lose control over the quality and production of music in Australia. This will also mean a loss of control over the quality and production of music in Australia.



The story that cost \$5,200 (above), the index page below identifies it as a Feature.

Features

23 **Don't Stop The Music!**
As the Federal Government moves towards a new legislation to increase the parallel importation of CDs, we explore the possible negative effects.

28 **Recording Massive Attack**
Producer Neil Davidge talks about his work on Massive Attack's new album.

someone whose been a journalist a long time, I consider it a violation of ethics to charge the music industry to run a story on an industry issue. It's shameful".

Another major publisher feels that if a magazine charges for editorial, then readers will quickly switch off. "Where do

you draw the line? If one magazine charges for editorial, then it is a cancer on the whole magazine trade. I deplore this, if it is happening. It violates the journalists code of ethics".

ARIA are also concerned. Spokesperson Marcella McAdam states that during the runup to the senate vote which introduced the new law, ARIA administered an industry fighting fund of over half a million dollars. "We were approached by Jim Taig as part of the music industry campaign to contribute \$1,500 towards the story appearing. We had no communication with the publisher of the magazine, but we sponsored the article. I am very concerned that Jim Taig has been left to pay the difference".

Taig himself is upset about the matter, and somewhat out of pocket. "I'm not a publisher, I didn't know that charging for the story wasn't ethical, I was just working hard to try to defeat the legislation" he told Connections.

Connections spoke with one of the publishers of Audio Technology, Greg Simmons, who confirmed the article was paid. "We used a different font - they wanted it to look like a news story" he said. Simmons was unhappy that we were planning this article. He asserted that we should not dictate ethics to him, stating his firm is 'bullet proof'. He suggested that Connections had a vendetta against his publication. His partner, Philip Spencer did not return our calls.

Rocky Accident

SYDNEY: SHOWSAFE, the Australian Entertainment Industry Health and Safety Association, join technicians and performing arts managements in sending condolences to the family of Dale Jewel who was severely injured in an accident on the Rocky Horror set last month. Dale was the Deputy Stage Manager for the production. ShowSafe understands he fell from stage level to the underfloor loading dock, through the floor while a stage lift was lowered for a scenery change.

ShowSafe understand that the stage lifts at the Star City Showroom can operate when lowered without safety barriers when in 'performance' mode.

Ordinary practice requires that all scene changes and operations where scenery is flown or raised are rehearsed actions. All stage performances typically carefully choreograph any mechanical action under normal lighting conditions, and involve all stage personnel.

Historically the performance industry is a low risk workplace, where a performance is run as a disciplined and structured event. All staff and performers know what is happening, and where they should be at any moment.

ShowSafe is in the process of establishing Safety Guidance Notes for the industry, and will closely monitor investigation of this accident to ensure that all constructive recommendations are properly incorporated into practice.



ShowSafe reorganised, new address & contacts

SHOWSAFE has been restructured following its annual general meeting last month. The association has had its structure changed to better reflect its needs and role.

Simon Jenkins (left) has been elected unanimously as Chairman, following the resignation of Byron Conninos. The association is at turning point according to Jenkins, who says that its role is firmly that of industry guidance.

The previous structure was recognised as cumbersome, so a leaner more efficient management committee of three was elected.

They comprise Jenkins (Chair), Mal Barnes from Greater Union Entertainment Technology as Treasurer, and Julius Grafton (Connections) as secretary.

- Showsafe can now be reached on +61 2 9617-0092, fax +61 2 9876-5715 or at PO Box 785, EPPING NSW 2121 and web: www.showsafe.com

acoustic technologies



"OUR MISSION"

**To Research
Develop and
Manufacture
Loudspeaker
Systems
and related
Electronic
Products
with no equal**



HLO1

New generation
Fullrange Loudspeaker
System
Utilising our proprietary
BLUE TONGUE
TECHNOLOGY

ACOUSTIC TECHNOLOGIES 8-10 Staple Street Seventeen Mile Rocks Qld 4073 Australia
Phone: (07) 3376 4122 Fax: (07) 3376 5793 Internet: www.acoustic-tech.com.au Email: info@acoustic-tech.com.au

Write in Reader Service Number: 172

CueStation™ 2.0

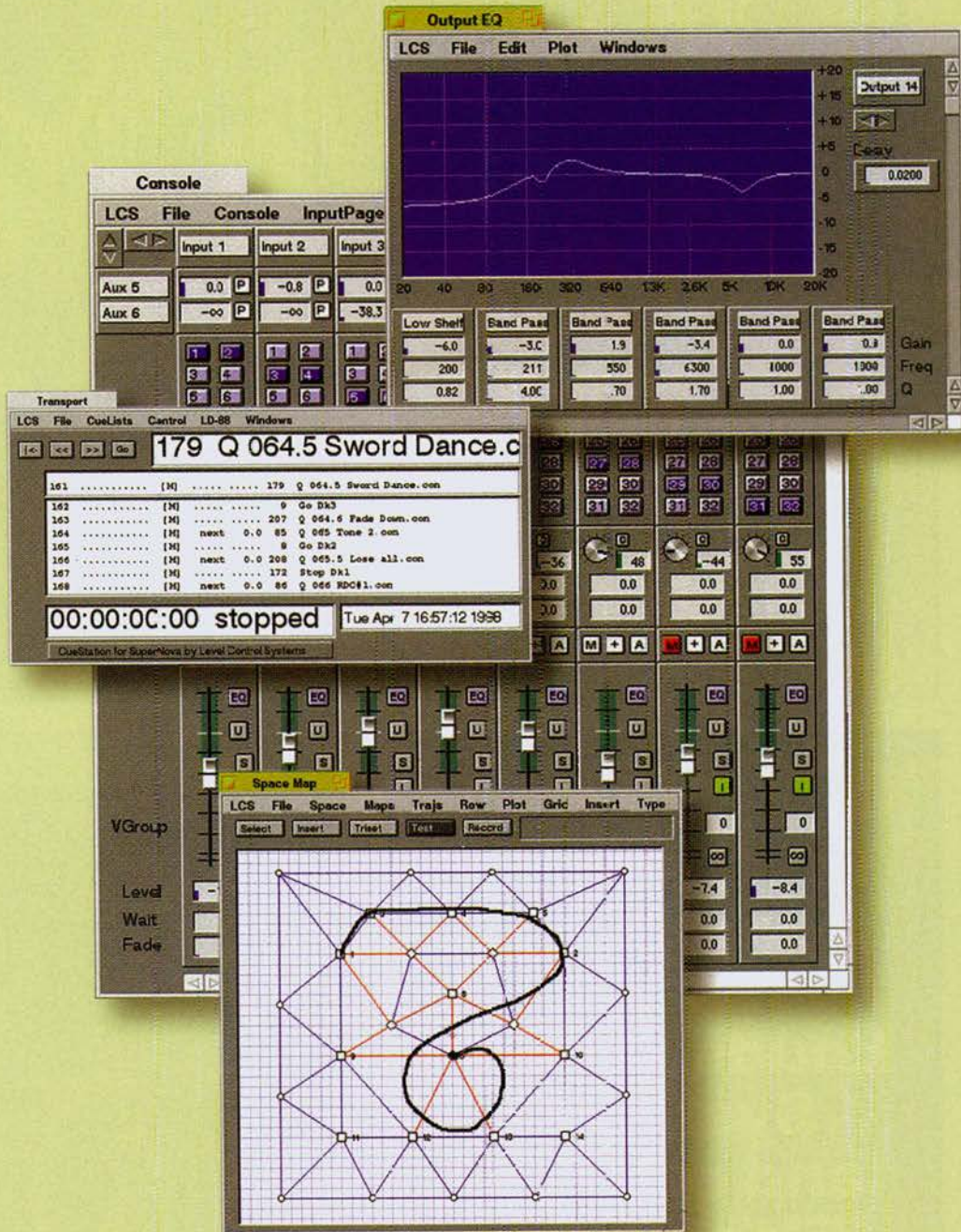
Gain Complete Control of Every Sound on the Map

LEVEL CONTROL SYSTEMS

CueStation is your window into the award winning SuperNova Series™ from LCS.

CueStation provides a rich user interface that lets you program complex automation effortlessly.

Because CueStation supports the SuperNova Series' Embedded Dynamic Automation, the computer may be turned off when programming is complete for maximum system security.



Richardson & Devine Pty Ltd

4 Gordon Street, Newstead, QLD, Australia 4006 • PO Box 595, Albion, QLD, Australia 4010
Ph: +61 7 3252 4433 • Fax: +61 7 3252 3205 • Email: lcs@richardsondevine.com.au

Write in Reader Service Number: 186

This will be the most imitated speaker on the market.

Again.

Eighteen years ago, Meyer Sound rocked this industry by introducing the most sophisticated loudspeaker yet--The UPA-1 featuring the first trapezoidal cabinet (US patent # 271,967) and the first professional loudspeaker with dedicated control electronics*. It was eventually imitated by almost every other loudspeaker manufacturer.

Today, the Self-Powered UPA-P radically improves upon its classic predecessor by perfecting every aspect of loudspeaker design: High SPL, low distortion, high efficiency, linear response, precise coverage, consistent performance, and unbeatable convenience.

The new UPA-P is a revolution. Only the progressive thinking and uncompromised engineering of Meyer Sound could produce a system this powerful, this flat, this compact.

Flat phase response +/- 35 degrees from 600Hz to 16 kHz. Great response for a studio monitor, unheard of in a high power PA product... until now.

An integrated, powerful 2-channel amplifier for over 1000W peak power (350 Watts/channel). No amp racks, no complex and costly wiring, less truck and storage space, faster installation time.

133 dB peak SPL at one meter.

A new constant directivity CD™ horn, the culmination of years of research in our own anechoic chamber, guarantees the most accurately defined high-frequency coverage (Pat. pend.)

Only 77lbs total weight.

An Intelligent AC™ system that automatically adjusts to the operating AC line voltage from 80 to 265 VAC

CE and UL Approval.

Do the math. The Self-Powered Ultra Series is surprisingly affordable and costs substantially less than conventionally amplified systems.



UPA-1P

The Self-Powered Ultra Series

*You owe it to yourself
and your business to hear this system.*



Meyer Sound Australia - 4 Gordon Street, Newstead, QLD, Australia 4006 - PO Box 595, Albion, QLD, Australia 4010 -
Ph: +61 7 3252 4493 - Fax: +61 7 3252 3380 - Email: meyerus@powerup.com.au - Website: <http://www.meyersound.com>

*John Meyer holds numerous patents including a low distortion driver/horn combination which is utilized in the UM-1P, and one for the perfectly aligned phase response through crossover (zero-pole crossover) utilized in both the UPA-P and UM-P.

Write in Reader Service Number: 185

TIGER'S TECHNOLOGY ATTRACTS MUSIC CLIENTS

from page 3

It is a story about how Tiger uses Sonic Studio for hard disk multitrack recording. Sonic is most often thought of as a mastering product, not a multitrack recording product. Yet, Tiger use a full blown 32 in, 32 out capable Sonic Solutions system.

Human Nature producer Andrew Klippel tells how the project came together.

"I did most of the album recording - the music - at home in LA, over a reasonably long time. We did demo's around the 'states, even in London. I brought the project here on (Tascam) DA 88 tapes with time code, and we put it all on Sonic". Then the vocals were added, and the track takes selected for the forthcoming album.

Resident Engineer David Hemming was a key reason for Klippel to choose Tiger. They had worked together previously, and Hemming convinced Klippel that the Sonic system in Tiger was extremely viable. "Sonic sounds warmer than ProTools" says Hemming.

The real story about Tiger is how damn fast hard disk recording on Sonic (or a system of this kind) makes a project.

Sonic is based on an Apple Mac, so you have a computer monitor showing your track waveforms. You can save multiple takes, time and time again, and grab any of them to replay at any point. What makes Sonic unique is that it is networked around the three studios within Tiger. This way, any room can work on any part of any project.

Andrew Klippel, David Hemming and Greg Devine



The day I'm there, Klippel and Hemming are working on a Secret Project, based upon three impossibly pure (in appearance and voice, at least) young female singers. Sigh. One, Danielle Barnes, is in the studio doing vocal takes, time and time again. Every take is saved by Hemming, as Klippel gives Barnes direction as to how to do the next take. Sonic allows them to compare takes, without rewinding or downloading. It's all immediate. The system at Tiger uses five 4GB hard disk drives, plus they have an extra one for holding video.

When a project is done at Tiger, they back it up or archive it onto Exabyte tapes. If it needs to travel, like to Klippel in LA, it can go on Exabyte tape or be downloaded to DA-88 tapes. Klippel took the Human Nature album back as 16 DA 88 tracks, and will have the final product mixed in New York.

TIGER AND THE SHIELDS

Tiger's main room is big enough to record a 22 piece orchestra. The control room is also spacious, with a DDA console and a raised customer lounge at the back. It looks just like a studio should, and has some funky acoustic treatments.

This came about when owner Greg Devine first moved into the current North Sydney building. He engaged the extremely clever and sometimes

absent Richard Priddle as his acoustics consultant.

Priddle is famous for his work, and for sometimes waiting until the last possible minute to finish it. He has perhaps done more for the world of studio acoustics than almost anyone else in recent years. Devine got very nervous during the building of Tiger, when Priddle finally announced he had the solution for the final finishes in the studios and control rooms - and he would need just 12 hours to complete the work.

As Devine tells it, "I thought we weren't going to make it. The place was ready to open. A truck pulls up at 4pm, and Priddle and four men unload 80 plywood shields". How would you feel?

The shields are, in final solution, just the most insanely great acoustics treatment. They are simply shlocked onto ceiling battens, and fixed to the wall - according to Priddle's placement knowledge. They have holes drilled in them in several different patterns.

"I call them ABFusers" Priddle told me later. "They absorb some, and diffuse some". That's the scientific description. "That room is awesome" he concludes.

Meantime, Devine is totally chuffed that his studio is doing some music work. It does music work all day, every day for advertising, of course. But to get some commercial music recording in there is really satisfying, and vindication of Devine's original decision to build the main studio and control room bigger than necessary.

From now he is planning the next iteration of Tiger, as he feels that high definition audio will produce the need for either a bigger and faster Sonic Solutions system, or something else altogether.

Tiger has a daily diet of film and video projects, small and large, plain vanilla and in surround sound formats.

Nowadays it also handles music acts.

How times change! -JG

News

Kehoe for GAS

Good Audio Sense audio production studios have appointed Tom Kehoe as General Manager of their South Melbourne facility.

Tom's experience in the organisational aspects of the audio production industry began some twenty-five years ago by establishing a transport and audio equipment hire business and tour managing many top name Australian entertainment groups.

Continued success in these areas provided the opportunity for Tom to take up the positions of Production Manager for the John Farnham Band on its many Australian tours and International Tour Management Services for The Little River Band for six years, touring the USA, New Zealand, Australia, Europe, Asia and Japan.

Subsequent years saw Tom engaged as Music Production Manager of Metropolis Audio and General Manager of Grotham Audio, two of Australia's most respected state of the art recording facilities. Throughout this period, he also managed the professional affairs of some of Australia's leading recording engineers and producers.

Good Audio Sense MD, Rodney Lowe says, "Tom's experience in studio and production management, coupled with his personnel skills are exactly what I need to allow me to continue producing full-time in the studio and have the day to day business management of Good Audio Sense not only in good hands, but handled with experience and enthusiasm".

GAS: +61 3 9699-6575

JR refurbish

John Reynolds Recording Studio in Adelaide has refurbished this winter, new ceilings and walls have been added, with the control room redesigned to accommodate new monitors and additional outboard effects. Located over the top of the large music store, the studio is celebrating its tenth year.

Call +61 8 8410-6488



SPEAKER TYPE	FREQUENCY RESPONSE	POWER RMS	PROGRAM POWER	SENSITIVITY (1W/1M)	NOMINAL IMPEDANCE
DS 15	45 Hz - 20 kHz	300 W	600 W	100 dB SPL	8 Ω
SUB 18	35 Hz - 500Hz	500 W	1000 W	100 dB SPL	8 Ω

All enclosure material is Polypropylene

The Sub 18 combined with the DS 15 enclosure makes for an EXPLOSIVE 800 W (RMS) SYSTEM COMBINATION

SPEAKER TYPE	FREQUENCY RESPONSE	POWER RMS	PROGRAM POWER	SENSITIVITY (1W/1M)	NOMINAL IMPEDANCE
PF-215	40 Hz - 20 kHz	500 W	1000 W	102 dB	4 Ω
PF-015	55 Hz - 20 kHz	300 W	600 W	100 dB	8 Ω
PF-012	60 Hz - 20 kHz	250 W	500 W	99 dB	8 Ω
PF-112	60 Hz - 20 kHz	250 W	500 W	99 dB	8 Ω
SUB-15	40 Hz - 1.8 kHz	300 W	600 W	100 dB	8 Ω

All enclosure material is Polypropylene

D.A.S.

... a touch of excellence



DS-15A

SPEAKER TYPE	FREQUENCY RESPONSE	POWER RMS	INPUT IMPEDANCE
15" & Horn	50 Hz - 20 kHz (Max. SPL @ 1M 121 dB)	Rated RMS Low Freq. Amp: 150 W RMS High Freq. Amp: 50 W RMS	Line - 20 KΩ Mic - 2 KΩ

Enclosure material is Polypropylene



SPEAKER TYPE	FREQUENCY RESPONSE	POWER RMS	PROGRAM POWER	SENSITIVITY (1W/1M)	NOMINAL IMPEDANCE
FACTOR 5	70 Hz - 20 kHz	80 W	160 W	90 dB SPL	4 Ω
FACTOR 8	45 Hz - 20 kHz	100 W	200 W	91 dB SPL	8 Ω
FACTOR 12	35 Hz - 20 kHz	200 W	400 W	94 dB SPL	8 Ω

All enclosure material is Polypropylene

MAGNA
SYSTEMS AND ENGINEERING

Magna Systems & Engineering
A trading division of Silklore P/L, ACN 088 004 997
Unit 2/28 Smith St., Chatswood, NSW 2067
Phone: (02) 9417 1111 Fax: (02) 9417 2394

Write in Reader Service Number: 144

KORG D8 PACKS UNIQUE PUNCH

ROLAND, AKAI and FOSTEX are joined in the 'all in one' 8 track digital recorder box business by Korg's new D8.

Unlike the others, the D8 has some features which make it very particularly suited to musician use, according to Australian importer John McCubbery.

John McCubbery (right) is in charge of high-tech products at Music Link, a large operation which is based in Richmond, Victoria.



Korg invited John to participate in the design process of the D8, which incorporates 131 internal rhythm patterns, which can be used as a tempo guide during recording.

Looping specified portions of tracks is possible, and the whole emphasis is on providing a device on which a lot of songs can be recorded-fast.

This doesn't discount the depth of the D8's audio chops, the device operates

with 18 bit input and output converters.

Although it has just two inputs, eight tracks can be created and bounced with the latest functions just added to the DA.

8 tracks can be played back simultaneously, and if every track is used simultaneously, the 1.4Mb internal hard drive has 34 minutes maximum recording time.

This is abstract, as single track time is 4.5 hours - you use what you use. If you get our drift. A SCSI port allows external hard drives or even a Jaz drive to be hooked up for more space or for transport.

Price: A\$2,499 retail.

• From Music Link, call +61 3 9429-9299



Nightlife Video CD system

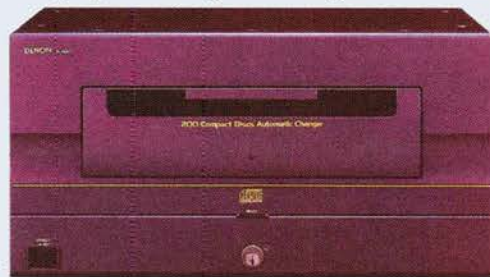
Nightlife, the Queensland based music video CD supplier introduce the Club 200 - a fully programmable music video CD playing system. It is a Denon DN1400, 200 stack CD changer (pictured) with two CD drives modified using one of Nightlife's video CD decoders. The player is connected to a standard PC with a software program that enables the operator to program music video.

Because the player has two lasers, there are no gaps in the music. While one video CD is playing the other is cueing. All the music video is safely

housed away inside the compact and sturdy box preventing handling, loss or damage.

The PC also has an inbuilt advertising billboards feature allowing the operator to create powerful advertising messages that can be automatically featured between video clips.

• For further details call Nightlife on 1 800 679 748 or go www.nightlife.com.au



New Amps from QSC and Mackie



QSC are introducing an entirely new amplifier range called PLX. Described as 'an evolution of the PowerLight revolution' PLX uses the same Power Wave power supply technology as the PowerLight range; and benefits from the same light weight, all models weigh just 9.5Kg

QSC say PowerWave is much more than just light weight; it's a way of providing ample current to the audio power circuitry by charging the supply rails 230,000 times a second through an ultra-low impedance circuit.

There are four models in the range: PLX1202 (400w/ch @ 4), PLX1602 (600w/ch), PLX2402 (800w/ch), and PLX3002 (1,050w/ch).

All are 2RU tall, 35.5cm deep and boast Speakon outputs, XLR and TRS inputs and user selectable clip limiters, low frequency filters, with stereo, parallel and bridge mono operation.

Retail prices (including tax) are PLX1202 A\$1,895, PLX1602 A\$2,595, PLX2402 A\$3,195 and PLX3002 A\$3,795.

• QSC dist. in Australia by Technical Audio Group, call +61 2 9810 5300.

Mackie Designs announces the newest member of the FR Series Power Amplifiers: the M2600.

Offering 2600 watts of peak power, it is supported by what Mackie says is one of the professional audio industry's only 5 year transferrable warranties.

Mackie have combined the talents of a veteran amp engineering team with a state-of-the-art manufacturing process to produce a high quality power amplifier for what every reader will agree is a low price.

The amp is able to run all night into 2 Ohm loads, say Mackie. It has Binding Posts and Speakon output connectors. It also comes with a 24 dB/Oct Linkwitz/Riley sub woofer crossover with 3 Selectable Frequencies. This is a neat feature. Variable Low-Cut Filters

Output power is quoted at 1300W + 1300W @ 2 ohms stereo, and 850W + 850W @ 4 ohms stereo. The M2600 has a Suggested Retail Price of A\$2995.

• Australian Audio Supplies, call +61 2 4388-4666



MixWizard series

The MixWizard series compact mixers are born of the same commitment to professional sound, features and build which inspires Allen & Heath's large format consoles.

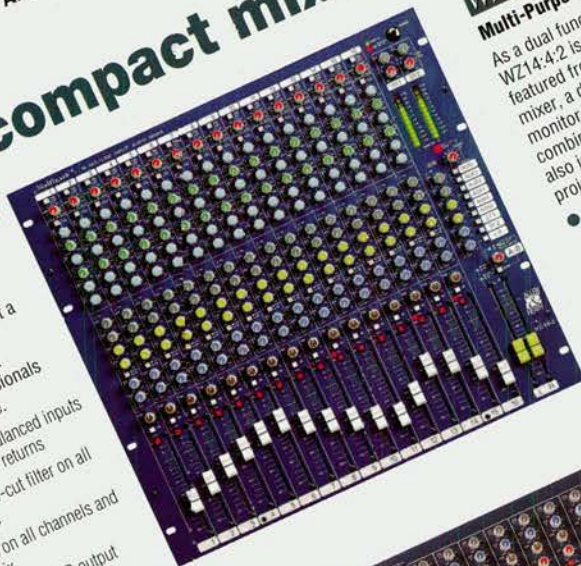
compact mixers have grown up

WZ16:2

General PA Mixer

WZ16:2's 16 identical mic/line inputs make it a superb all-rounder, producing excellent results for professionals and novices alike.

- 16 mic/line balanced inputs and 2 stereo returns
- 100Hz low-cut filter on all channels
- Inserts on all channels and L-R mix
- Unique extra AB output

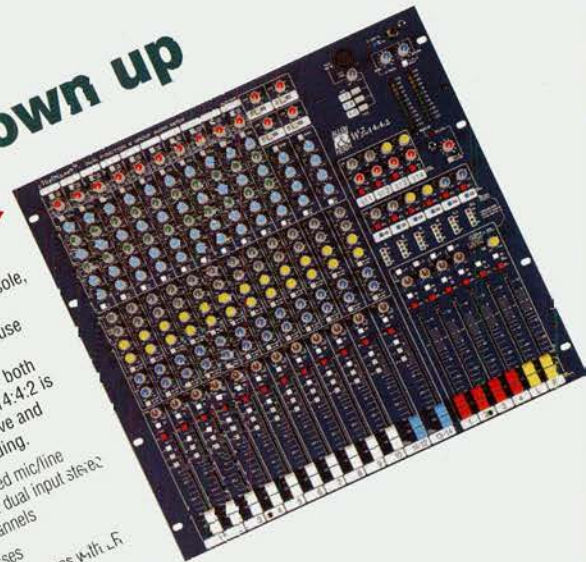


WZ14:4:2

Multi-Purpose Mixer

As a dual function console, WZ14:4:2 is a fully featured front-of-house mixer, a dedicated monitor mixer, or both combined - WZ14:4:2 is also ideal for live and project recording.

- 10 balanced mic/line inputs, 2 dual input stereo line busses
- 4 busses
- 4 stereo returns with L/R and aux routing
- Mode switching for FOH or monitor mixing



WZ20:8:2

8 Buss Recording Mixer

With its 8 busses and special Mixdown switch, WZ20:8:2 is perfect for producing top quality home, project and location recordings.

- 8 balanced mic/line and 6 stereo line inputs/tx returns
- 8 tape returns with aux routing
- 28 inputs on mixdown
- Unique Mixdown switch eliminates re-patching



All MixWizards have smooth quality 100mm faders, 4 band, 2 sweep EQ,

8 dedicated auxes on individual

controls and the QCC™

rotating connector for easy

desk or rack mounting.



Desk Mount



Rack Mount



T.A.G.

558 Darling Street,
BALMAIN NSW 2041

Ph: (02) 9810 5300

Fax: (02) 9810 5355

www.tag.au.com



TECHNICAL AUDIO GROUP

Write in Reader Service Number: 187

Please rush me information on

- WZ16:2 WZ14:4:2 WZ20:8:2

Name.....

Company.....

Address.....

Tel.....

or E-mail: sales@tag.au.com

Email.....

Postcode.....

Send to Technical Audio Group, 558 Darling Street, Balmain NSW 2041
or Phone (02) 9810 5300 or Fax (02) 9810 5355

The greatest game of all

How Total Concept Projects won the Commonwealth Games PA tender

As the Commonwealth Games play out in Kuala Lumpur this month, spare a thought for the audio in the 110,000 Stadium Ngarra at Bukit Jalil. It comprises a complex, distributed system, where many loudspeakers are located in the circular roof pointing back to groups of seats. Essentially there are three rings of speakers radiating out from the centre of the stadium.

The story is that the audio almost didn't happen at all, courtesy of the now famous economic hiccup of 1997 in the region. That the system does exist is tribute to the efforts of Sydney based firm, Total Concept Projects.

Back in November last year TCP were approached by the successful audio tenderer for project management assistance. It quickly became apparent that the contractor was in trouble - the equipment was on order, but necessary finance couldn't be raised, so delivery to site was not happening.

The original deadline was December 31st for commissioning the audio system.

TCP director Tony Musico (pictured, right) picks up the story:

"We helped them negotiate an extension until March. But the ringitt had slipped to 3 ringitt to the Australian dollar, from 1.83 when they signed the contract".

The builder saw no progress on site, after the initial wiring was done earlier. The contract was terminated on February 26th, and TCP were asked to requote. They signed a contract with the builder on March 4th, the builder then undertook to provide a letter of credit (guarantee), which was in place by March 22nd.

SUPPLIER GAMES

TCP ran into a problem with a supplier, who represented the originally specified loudspeaker brand. According to Tony Musico, this supplier who is located in Asia, went back on an agreement to supply the goods at the originally quoted price.

"He was trying to squeeze us out of the job, and my suspicions were confirmed when he offered me half a million ringitt to walk away from the contract".

An angry Tony then contacted an alternative distributor, who declined to supply the speakers. It appeared that the manufacturer was holding the order on behalf of the Asian distributor, who was still certain he would make the sale - either to TCP (at a higher cost), or to another party supposedly waiting in the wings to take over the contract.

ENTER E.V.

Tony went about changing the specification. Readers will recall that the Sydney Olympic Stadium audio tender was won by PA People, who managed to convince the builders, architects and consultants that they could change the specification without impeding system performance.

Tony went to the consultants and asked them if they could handle an alternative brand of loudspeaker- ElectroVoice. "They were reluctant, and we had to fly a guy out from Stuttgart. But they said that whatever we put in, we were responsible for the performance. I thought, 'I can run with that', and the builder agreed".

TCP went to EVI/Telex Australia, who came up with similar matches for the original specification. The EV factory came to the party and offered to drop everything in order to make the shipment in an impossibly tight time frame. "It's interesting to see just what can actually be done", says an impressed Tony.

TCP engineer Gary Rutter built a CAD model of the stadium on his PC, using CAD22 software. This enabled him to position all the alternative speakers, and ascertain performance in advance of work on site. This took about three weeks to do.

Increasingly large audio tenders require that contractors 'do the numbers' - either to validate a variation on what is specified, or to completely validate the actual system tendered where the consultant hasn't been engaged to do this.

In either case, the actual work required can amount to several hundred hours, and often without actually winning the job!

But back to our story - there was still the question of amplifiers, which needed to be Crown.



WAVECOM JR.

**Wireless Audio Video Everywhere
COMMunicator**

H & C Audio unveils the first high quality inexpensive 2.4 GHz digital wireless transmitter receiver system. Send VIDEO, DATA, AUDIO or SECURITY signals for under \$650 inc. tax. Perfect for live sound or general contracting.

Contact H & C Audio (03) 9876 2333, Fax (03) 9876 2033 Web Site: www.ozemail.com.au/~hcaudio





CROWN AMPLIFICATION

The specification had every amplifier with a DSP card, so that remote control could be maintained. This is essential where the distance from the ground to the speakers is so severe. "It could take 20 minutes to get from the control room up to the catwalk" says Tony.

The design means that all processing is done at the amp, meaning any equalisation, time delay, limiting or even gain is done on a digital card at the amplifier input. This way, digital control signal is run separate to the actual audio program from the control room. The audio output is sent digitally, as the distances are too great for analogue signals.

Crown IQ is a proprietary system, which was specified to do the job at Kuala Lumpur. Tony says it is the best option, although there are other ways to do the job - notably using Feavey's Mevia Matrix and a Cobranet type product, like QSC's RAVE.

But again, sourcing the product presented a challenge. The distributor for the region had actually already purchased the 170 crown amplifiers and IQ DSP cards required for the job. But the price to TCP appeared to have risen from what was quoted originally.

Tony decided the local distributor was far too certain of the sale, so he set about trying to source the 170 Crown amplifiers elsewhere. He also let it be known that he could switch amplifier brands, although to do so was considerably trickier than switching speaker types. He also communicated directly with the Crown factory, who became aware that things were not terribly smooth.

Finally the original local Crown distributor agreed on a cash price with Tony, "by then

he knew we were serious". They exchanged a case stuffed with over one million ringitt in cash for the amplifiers at KL airport.

RACING THE CLOCK

By this time Tony had

moved his family to Kuala Lumpur, where they today reside in an apartment at the huge, enormous Sunway Resort. This is the place with the world's largest wave pool.

TCP were on a total contract

worth 7.39 Malaysian ringitt, which was pegged to the Australian dollar by a rise and fall clause. Payments were forthcoming locally, so the contract was self funding. In any case, TCP had support from the Export Finance Insurance Corporation scheme in Australia.

Time was the enemy.

Conditions on site were harsh, the Kuala Lumpur climate is hot and humid. The scale of the arena was such that workers were only capable of several journeys from one end of the place to the other. "If you forgot a screwdriver it could be a 20 minute walk each way to get it!"

In a 2 week job, local riggers mounted and positioned all the

loudspeakers up on the walkways, under the supervision of an Australian rigger. All mounting brackets were made to Australian standards. Each speaker was near to a rack of Crown amplifiers, the remote control feature meaning that this was possible.

The final audio system features three rings of loudspeakers, right around the arena. They are various EV and Altec models, and an additional emergency evacuation PA made up of 64 EV horns was specified by TCP.

As Connections went to press, Tony Musico and Gary Rutter were in KL commissioning the A\$3.5m system.

-Julius Grafton

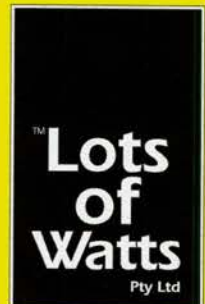
Lots of sales

More important: 18 good people too!

- Trade sales with showroom
- All major brands represented
- We install systems for clubs and theatres
- We do big audio: Turbo arena system with Midas
- Lots of Moving Lights and Outdoor lighting
- Driveway hire, wholesale trade hire

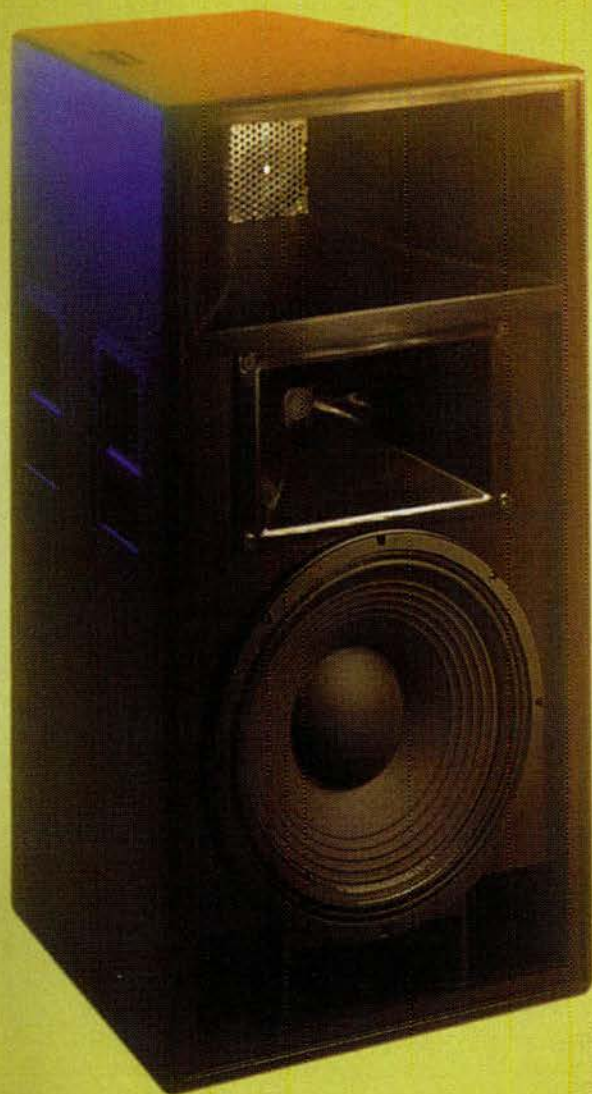
1 Mary Pde, Rydalmere NSW 2116
Phone +61 2 9638-0302, fax 9638-0331
sales@lotsofwatts.com.au
hire@lotsofwatts.com.au

The company everyone else uses

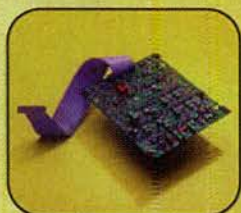


Typical

The **NEW KF400a** powered loudspeaker:
A natural extension of EAW's design philosophy



- > **VA™ Technology** The world standard for arrayability and performance – applies advanced horn-loading concept to true three-way loudspeaker design. The cone-loaded midrange horn's flare follows a complex mathematical function, not straight lines.
- > **New Phase Plug** The first example of EAW's next generation of phase plug designs. Coherent summation of the wavefront in the horn throat enhances both the smooth sound character and arrayability of the system.
- > **Close Coupled Power™** CCP™ precisely matches the amplifier design to the specific system's driver/horn/enclosure characteristics to provide substantial headroom with total reliability.
- > **State-of-the-art Protection Systems** Real-time current/voltage monitors apply complex compressor/limiters and soft clipping circuitry for virtually transparent protection that does not change the tonal quality, even when the system is driven to the highest output levels.



Separating the power unit (center) from the control module (left) makes the CCP module upgradeable for such advances as remote monitoring. Variable intensity LEDs on the rear panel indicate the presence and level of applied protection systems.

- > **Ideal for Distributed Designs** No more amplifier/processor racks or their problems. Loop-through audio chain allows for the immediate creation of arrays from a single audio feed.
- > **Simplified Set-Up** Place loudspeaker systems to meet your SPL and coverage requirements, deliver audio and AC feeds, and enjoy the results.
- > **Serviceability** Access many elements of the Close Coupled Power Module simply by removing the back panel. When necessary the CCPM can be removed as a self-contained unit.

In many ways, the KF400a powered loudspeaker system is nothing new. It's another example of EAW's commitment to total system engineering.

This is not "an amp in a box." The KF400a's Close Coupled Power Module is custom engineered to optimize these specific drivers and horns in this specific enclosure designed for use in a specific range of applications.

Which is the same philosophy that went into creating our Close Coupled Processors. And our passive filter networks. And every loudspeaker system we've ever made.

Because it's the system that makes sound. And now EAW – pro audio's premier system integrator – has put the power into the system.



Free Interactive
Multimedia catalog
on CD-ROM
Fully navigable
Recommended products
Nominal data

Call or e-mail us at
litperson@eaw.com
to receive yours.

The Laws of Physics / The Art of Listening



Distributed in Australia by: **Production Audio Services**

Melbourne: 6-8 Elizabeth Street, Richmond VIC 3121 Tel: (03) 9415 1585 Fax: (03) 9415 1595

Sydney: 323 Pacific Highway, Crows Nest NSW 2055 Tel: (02) 9954 5100 Fax: (02) 9954 4927

EAW Website: www.eaw.com **Production Audio Services Website:** www.productionaudio.com.au

Write in Reader Service Number: 123



ARX JOINS THE FIGHT FOR JUSTICE

The largest single sale of AFW-1s to date was made by ARX Dealer and Project Installation Contractor Sontec Victoria Pty Ltd.

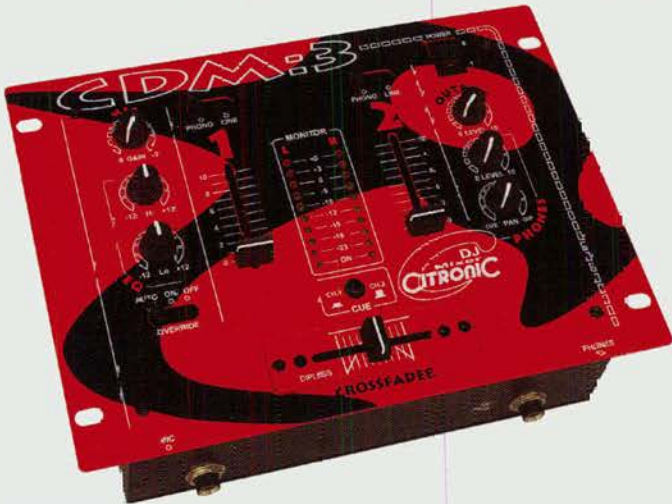
Sontec Victoria have supplied 44 units of the ARX AFWA Anti-Feedback Workstation to the Victorian Justice Department for the new prestigious Commonwealth Law Courts Project in Central Melbourne.

Sales Manager Hilary Evans indicated that the AFW-1 was chosen for its ease of use and low noise after being compared to all similar units available on the market.

• Pictured in front of the wall of AFWs are Sontec's David 'Sudsy' Sudholz and ARX's Tim Rand

CDM-3 is a new mixer from Citronic, the respected UK manufacturer. It's got the usual stuff - 2 channels, 4 inputs, 1 mic input with EQ, booth output, headphone mix and 3 band EQ. The crossfader is replaceable and it retails at A\$323.

• ULA, call 1-800-648-111 or www.ula.com.au



LATE LIGHTING NEWS/CHANGES

• OUR STORY about **The Empire nightclub** noted that Labsystems installed 100 chrome Kujo par cans - they were actually Pro Dynamite 64 cans.

• Mike Bird at **Lighting Workshop Perth** notes with some

regret that Brian J Anslow has left to pursue his own interests. They wish him well.

• **Alex Cross** of Lighting Across The Board has ceased operating as an importer of lighting equipment. He will continue in special event production.

ACTIVE-LOUDSPEAKERS

dB TECHNOLOGIES



The new dB EXE range of Polypropylene speaker cabinets utilise Bi-Amp technology to achieve optimum sonic results. With this applied philosophy and technology dB have created a series of cost-effective loudspeakers with exceptional performance.



These value for money speaker cabinets weighing less than 20kg are fully processor controlled for maximum performance and incorporate a Soft-Limiter Function that detects and corrects any overload of the system, preventing possible distortion.

dB TECHNOLOGIES MANUFACTURE A FULL RANGE OF SPEAKER ENCLOSURES, RADIO MICROPHONES, IN-EAR MONITORS, MIXING CONSOLES AND POWER AMPLIFIERS.

EXPERIENCE THE dB RANGE AT THE FOLLOWING DEALERS:

NSW: Anything Audio, Anthony's Music, Downtown Music, Eagle Music, Guitar Factory Parramatta, Muso's Corner, Turrumurra Music, Wollongong Music **ACT:** Better Music, Pro Audio VIC: Crabburn Music, Billy Hydes Guitar Centre, Music Junction (Blackburn), Music Box, Underground Music, Easden's Music (Bendigo) **QLD:** Guitar Garage, Mick James, Music Plus **TAS:** McCann's **WA:** Music Park **SA:** John Reynolds Music.

Proudly distributed by CMI Professional Products Group, (03) 9315 2244

CONTACT CLEANERS ARE NOT CREATED EQUAL!

**Conditioner
and Preservative**

ProGold™

- > Improves Conductivity
- > Maintains Optimum Signal Quality
- > Seals & Protects Surfaces
- > Reduces Wear & Abrasion
- > Forms Protective Anti-tarnishing Layer
- > Reduces RFI & Intermittent Connections



Due to its unique properties **ProGold** deoxidises and cleans surface contamination, and penetrates plated surfaces to molecularly bond to base metals - **NO OTHER PRODUCT DOES THIS!**

ProGold increases the performance and reliability of all electrical equipment. It improves conductivity for greater definition and dynamics, reduced noise and interference, and lowers distortion.

CAIG Products... used by those who demand the best! Ampex, Boeing, Capitol Records, General Electric, Dolby Laboratories, Nakamichi, Tektronix, Xerox... & many more!

DISTRIBUTOR and AGENT ENQUIRIES WELCOME!!



Distributed in Australia by **caprina**
20 Amelia St Waterloo NSW 2017
Tel: (02) 9318-1077 Fax: (02) 9699-9325
www.caprina.com.au/caig.htm

Write in Reader Service Number: 145

Industry News

PHILIPS GLASS BARRIER INTERCOM

Contractors and installers know that people who work behind security glass or glass partitions have trouble conducting a simple conversation.

Philips offer the new Bi-Way intercom system to provide natural voice reproduction and less chance of misunderstanding. Conversation is transmitted by a duplex channel, the voice determines the direction of the transmission. The duplex controller switches the speech direc-

tion to permit natural two-way conversation even in conditions of varying noise levels on either side of the glass.

The Bi-Way starter kit provides the basic equipment necessary. In special applications there are optional accessories available to ensure that all requirements are met.

• **Contact Philips Communication and Security Systems, +61 2 9805-4143.**



JOE MEEK offer a compressor limiter with a difference. The SC-3 has 20 bit analogue to digital, and digital to analogue converters on board, to enable use as a 'way in' to a digital device, as a 'way out', or just as a clean and pure compressor limiter. It's got all the fruit for the comp/limiter role, the attack ranges from 0.5ms to 10ms, it has fast and slow release, and a five position rotary switch to change the shape of the compression curve.

• **A\$3,499, from Shrape International, +61 2 9939-4004.**



New Baby for DPA Mic's

DPA Microphones introduce the 4065 a light weight Headband Microphone designed for both studio and live use.

Special attention has been paid to the humidity problems, that often occur in theatrical applications. A double vent protection system and a drop stopper on the tube, make the Headband Microphone less prone to failure through humidity.

It uses a prepolarized omnidirectional cartridge element with a 5.4mm vertical diaphragm which is acoustically identical with the cartridge used in the 4061. The super light weight band is pre-bent to achieve a

tight fixed position on any head shape. It can be easily re-shaped.

The sensitivity is 6mV/Pa to match the level of the human voice to the general input sensitivity of most wireless transmitters. The noise floor of the 4065 is 26dB(A) re. 20uPa and, if powered correctly, the microphone will be able to handle sound pressure levels up to 144dB SPL before clipping occurs.

A wide range of connection adapters makes it possible to use 4065 with most of the professional wireless systems available plus 48V phantom.

• **Info: Studio Supplies, +61 2 9957 5389.**

It was too small to photograph

AON
AON RISK SERVICES
AUSTRALIA'S LEADING ENTERTAINMENT INSURANCE BROKERS PRESENTS

For free quotations and advice call **Ken Killen or Ian Stack**
1800 806 584

ENTERTAINMENT PROTECTION PLUS

Providing Comprehensive & Competitive terms on all classes of Insurances for:

- Musicians
- Studios
- AV & Sound & Lighting
- Theatrical Groups & Productions
- Film & Video
- Special Events
- Tours
- Concerts
- Prize Insurance

AON
AON RISK SERVICES
AUSTRALIA LTD
ACN 000 434 720

Level 27, 201 Kent St, Sydney 2000
Phone: (02) 9253 7000
Fax: (02) 9253 7267
Toll free: 1800 806 584
Mobile: Ken Killen 0418 448 641
Ian Stack 0416 035 690

Write in Reader Service Number: 100

TWO YEARS DOWN THE TRACK AND THE SR24•4 IS STILL THE MOST INNOVATIVE, RELIABLE, HIGH QUALITY MIXER IN ITS PRICE RANGE



January 19th, 1996...
 Anaheim Hilton Ballroom.
 The SR24•4 edges out some very impressive competition to receive Music & Sound Retailer magazine's Most Innovative Mixing Console Award. We're especially proud of receiving this honor since final voting is conducted among thousands of audio professionals across America.

Maybe the soundwoman for the evening's ceremony was one of them. Because she was using an SR24•4.

What does this mean to you? First, the SR24•4 is a unique mixer. In terms of design, performance and value, it blows far more expensive mixers into the weeds.

Second, the SR Series doesn't just appear in ads. Thousands of them work for a living every day in clubs, theaters, rehearsal spaces, recording studios and hotel ballrooms.

Call (02) 4388 4666 for a colour brochure and contractor's specs.

Then join the live sound professionals who have discovered that the tremendously affordable price of a Mackie is the best award of all.

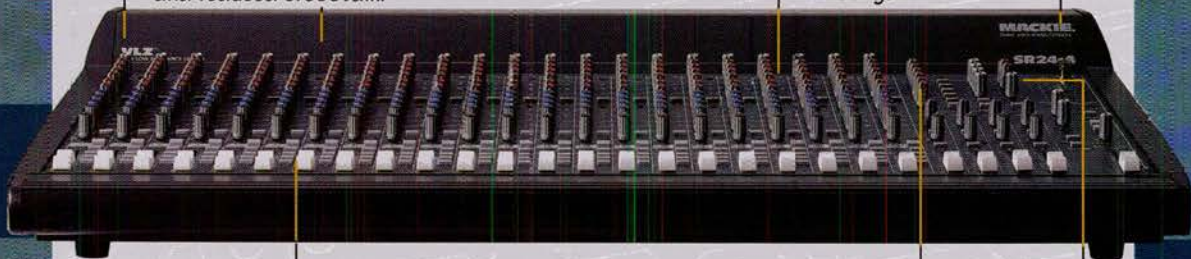
SOLID STEEL CHASSIS. Underneath: our thick, thru-hole-plated fiber-glass horizontal circuit boards, attached to the chassis with brass stand-offs. Along with our impact-absorbing knob design, sealed rotary controls and ultra-tight fader lip seals, this "expect-the-worst" design approach makes the SR32•4 and SR24•4 extremely durable and trouble-free.

VIZ CIRCUITRY for low noise and reduced crosstalk.



HIGH-HEADROOM MIC PREAMPS. 28 on the SR32•4 & 20 on the SR24•4, with globally-switchable phantom power. The same discrete, ultra-low noise (-129.5dBm E.I.N.) circuit design that's won over pros who have used our B•Bus or compact mixers.

INPUT TRIM CONTROLS on the channel strip. +10 to +60dB gain at mic inputs, "Virtual Pad" on line inputs: -10 to +40dB gain.



MONO MIC/LINE CHANNEL STRIPS. 28 on the SR32•4, 20 on the SR24•4.

STEREO LINE CHANNEL STRIPS. 2 on both the SR32•4 and SR24•4

SIX AUX SENDS PER CHANNEL. Auxes 1 & 2 are pre-fader; Auxes 3 & 4 are switchable pre/post; Auxes 5 & 6 are post-fader. 15dB extra gain above Unity on all sends.

3-BAND SWEEP EQ ON MIC/LINE CHS.

80Hz & 12kHz shelving, swept midrange with wide 1.5-octave bell & 100Hz to 8kHz range.

LOW CUT FILTER. 18dB/oct. @ 75Hz on mono channels.

4-BAND FIXED EQ ON STEREO CH. STRIPS.

80Hz & 12kHz shelving, 3kHz peak Hi Mid EQ, 800Hz Low Mid EQ.

-20dB SIGNAL PRESENT & OL LEDs on all channels.

AFL/PFL SOLO with LED indicator.

BUS ASSIGN switches.

60mm LOG-TAPER FADERS deliver smooth, accurate gain control throughout their travel. Mackie's exclusive design features a new ultra-long-wearing wiper material derived from automotive sensor technology and tight, zero-memory lip seals to prevent contamination.



"AIR" ultra-high (12kHz) peaking EQ on bus submasters works wonders on vocals.

6 AUX SEND MASTERS, each w/individual solo switches.

EFX RETURN TO MONITOR level controls for Aux Sends 1 & 2.

STEREO AUX RETURNS with global solo. Aux Return 4 can also be assigned to subs 1-2 or 3-4.

TAPE RETURN level control.

SOLO SECTION has level control, AFL/PFL switch plus separate Aux & Sub LED indicators.

TALKBACK SECTION with level control, LED, separate Main Mix & Aux 1-2 assign switches. XLR mic preamp input on console back panel.

TAPE RETURN TO CTRL RM/PHONES & Ctrl Rm/Phones level control.

TAPE RETURN TO MAIN MIX switch disables other inputs to Main Mix so you can play CDs or tapes during intermission without disturbing channel & submaster settings.



Connections

AV PRESENTATION NEWS

Staging Seeks Partner

SYDNEY: Staging Connections are poised to introduce a new partner, following the imminent departure of Village Roadshow Ltd. Village announced several months ago that they intend selling non core businesses, and recently quit a major stake in GUVT (Greater Union Village Technology). That company are now known as GUET (Greater Union Entertainment Technology).

Staging Connections is the largest audio visual presentation company in Australia, with revenues of over \$60m and more than 400 staff. It is a group of separate companies

which each operate in a region, with local ownership in partnership with the main national company.

The largest shareholder is Gary Hackett, who is the managing director of Staging Connections Australia Pty Ltd. At presstime Mr Hackett denied that a sale of half the group to African Media Entertainment was imminent. "I am unaware of any due diligence being undertaken by African Media Entertainment or any other company at this time" he told Connections.

Village Roadshow currently own 33% of the Staging Connections Group.



Melbourne Scores Giant Screen

By Mandy Jones

A huge full colour video screen has been installed in the heart of the Melbourne city shopping district. The fully digital LED screen measures 10m x 8.1m and is said to be the biggest outdoor screen 'of its kind' in the world.

Created by Alt.Media, part of the Victor Smorgon Group of Companies, the screen is the first in a planned network of giant outdoor screens which will be located in major cities around the world. Network programming will include news and weather updates, entertainment, and broadcasts of special events. Naturally advertising will feature heavily.

Stacey Gavril, Sales Director for Alt.Media describes the system as a "giant video juke box". It is able to switch between sources so that it can take direct feeds from the internet, video, satellite, as well as free-to-air and cable channels.

The entire system is designed by Alt.Media including the control and programming software

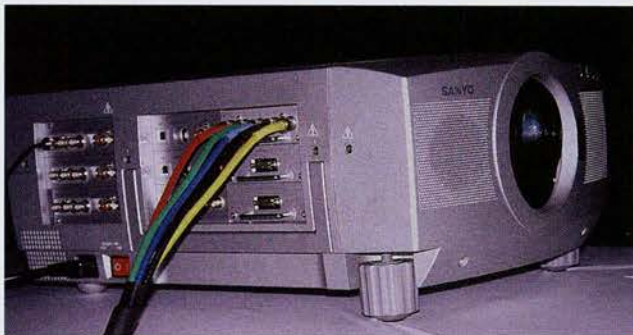
and the hardware. The screen itself is only 200mm deep, and is made up of sections of LED panels each with their own microprocessing units.

Not wanting to give too much away about the system's specifications, Gavril explained the images are stored as highly compressed digitised AVI files which are relayed to the screen from hard drive and uncompressed in real time to achieve the highest quality image.

"It's the only system of this type that is totally digital. It's a digital feed in and digital feed out so there is no pixel depreciation at all, unlike other systems."

Gavril says the screen quality is Broadcast standard and has a viewing angle close to 160°.

"The minimum viewing distance is 25 metres although it's amazingly clear directly under it. And it can be viewed quite clearly up to 200 metres away."



AVD FIRST WITH SANYO PLC 9000

Audio Visual Dynamics, a major Melbourne AV Hire and Staging firm, has purchased the new SANYO PLC 9000 LCD Data/ Video projectors.

This new projector from Sanyo produces 1500 ANSI LUMENS of light from a small ultra lightweight projector. It was a star attraction at the recent InfoCOMM trade show in Dallas.

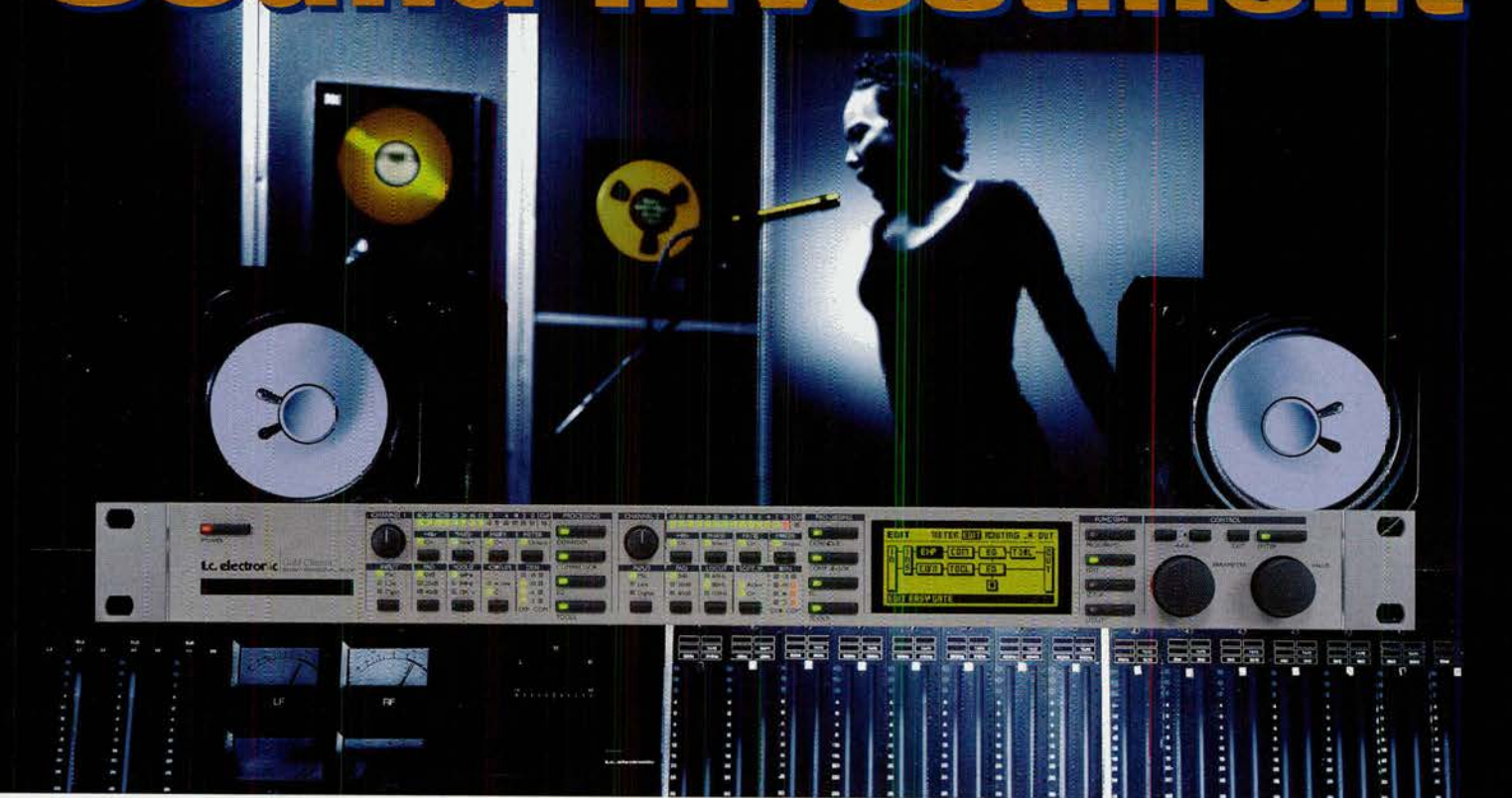
The SANYO PLC 9000 can

be set for both rear and forward projection and can also be flown from brackets. The PLC 9000's are great when projecting an image onto screens up to 16 foot wide in either data or video format. They can handle resolution up to 1024 x 800.

Rental rates are from just \$650 per day - the Sanyo projectors are a great economic alternative to older projectors.

• **AVD: +61 3 9699 3788**

Pure Gold Sound Investment



**THE ULTIMATE
SOLUTION TO
DIRECT-TO-DIGITAL
RECORDING**



t.c. electronic
ULTIMATE SOUND MACHINES

**HIGH-END
TWO-CHANNEL MIC. PREAMP**

**CUTTING-EDGE
24 BIT AD/DA CONVERSION**

**POWERFUL
43/96 KHZ DIGITAL PROCESSING**

INPUT

- ◆ STEREO/DUAL Mono MIC PREAMP
- ◆ TRUE 48V PHANTOM POWER
- ◆ 24 BIT AD CONVERTERS
- ◆ LO CUT FILTER
- ◆ SOFT LIMITER
- ◆ AES/EBU
- ◆ S/PDIF
- ◆ ADAT™

PROCESSING

- ◆ 48/96 K-HZ INTERNAL DYNAMICS PROCESSING
- ◆ EXPANDER/GATE
- ◆ COMPRESSORS
- ◆ EQS
- ◆ DE-ESSER/DYNAMIC EQ
- ◆ DRG™ DIGITAL RADIANCE GENERATOR
- ◆ MICROPHONE TIME ALIGNMENT DELAY
- ◆ M/S ENCODING/DECODING

OUTPUT

- ◆ 24 BIT DA CONVERTERS
- ◆ AES/EBU
- ◆ S/PDIF
- ◆ ADAT
- ◆ ANALOG XLR
- ◆ SIMULTANEOUS ANALOG AND DIGITAL OUTPUTS

RECALL THE MAGIC: VERSATILE FACTORY PRESETS AND CUSTOM USER BANKS ENABLE YOU TO SAVE THE EXACT SETTINGS FROM YOUR FAVORITE RECORDINGS AND RECALL THEM AT WILL, SAVING YOU HOURS OF WORK IN THE STUDIO

FOR INFORMATION ON THE FULL RANGE OF TC ELECTRONIC PRODUCTS PLEASE CONTACT:

AMBER TECHNOLOGY PTY. LIMITED ACN 003 231 187

SYDNEY TEL: (02) 9975-1211 FAX: (02) 9975-1338
 MELBOURNE TEL: (03) 9699-1955 FAX: (03) 9699-1944
 BRISBANE TEL: (07) 3831-8444 FAX: (07) 3831-8455

Amber
TECHNOLOGY

Write in Reader Service Number: 130

Digital Video Player connects to internet

FLORIDA: Imagine updating the video in a department store's clothing department from half-way around the world. Alcorn McBride's Digital Video Machine 2 makes that possible, say the firm.

The DVM2 is a professional video player that offers all the advantages of Laser Disc and DVD players, but with near-instantaneous access times and zero maintenance. It stores over an hour of high quality digital video on an internal hard disk using MPEG-2 video compression. Video is loaded into the DVM2 using Ethernet. That means that the DVM2 can be connected to any company's local area network, or even updated across the Internet.

For example, new advertising can be inserted into a video display in a retail store as easily as browsing the web.

puts for most applications – the NTSC/PAL composite output operates simultaneously with RGB or S-Video outputs. Audio playback is Dolby AC-3 compatible, with up to 6 channels of surround sound. The DVM2 may be controlled using most laser disc player controllers – it even offers Sony and Pioneer compatible connectors. Videos can also be triggered by MIDI or contact closures.

The DVM2 sounds like the latest high-tech wonder from Japan, but it's not. It was created by Alcorn McBride, an Orlando, Florida based company which specializes in products for the theme park industry.

For over ten years Alcorn McBride has been the standard for laser disc control and multi-track theater audio at the world's finest theme parks. Two

McBride engineers began developing a line of video players designed to withstand the rigors of the theme park environment. This effort culminated in the highly successful Digital Video Machine 1, which has been installed in theme parks, museums, shops and even rollers coasters(!) worldwide.

Now Alcorn McBride's engineers have turned their attention to the retailing industry, and high end video reproduction in general. The goal of the DVM2 design effort has been to move beyond DVDs (digital video discs) in both performance and features.

• The DVM-1 is currently available at A\$3,578 ex tax from EAV Technology, +61 3 9417-1835. DVM-2 is due to arrive shortly, price to be announced.

•www.alcorn.com

Gearhouse Event Solutions Centre for Melb

Following the success of the "Gearhouse Event Solutions Centre" in Sydney, Gearhouse is to open a similar centre in Melbourne.

The Event Solutions Centre, will house the Presentation Services, Themeing, Sales and Lighting operations of Gearhouse under one roof. The new complex in Salmon Street, Port Melbourne coincides with the launch of Gearhouse Themeing in Melbourne.

The Gearhouse Event Solutions Centre gives clients access to all the major components of staging an event under one roof, plus the added benefit of rehearsal spaces and video conferencing rooms.

The centre will open in mid September.



**Distributed by
a company
you should
get to know**



AV TECHNOLOGY

07 5531 3103

www.avtechnology.com.au

Dealers throughout
Australia and New Zealand



Full Automation
and Remote
Control Systems



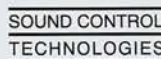
Audio and Video
Matrix Switchers



Computer & Video
Interfaces and
Switchers



Videoconferencing
Products



Audioconferencing
Products

**Products
you should
get to know**

Write in Reader Service Number: 139

Never use tape playback systems again.



Philips Solid State Audio and Video Systems – for crystal clear MPEG video and multichannel sound time, after time, after time...

In theme parks...



Museums & Exhibition centres...



Leisure centres...



Utilising a PCMCIA memory card, Philips solid state audio and video systems use MPEG technology to store thousands of public address messages, jingles, music and video clips - for programmed, on-demand or continuous playback.

Hardwearing, light, compact and rewritable these systems deliver sound and video wherever you need it, inside or out, 24 hours a day.

To find out more call Philips Mastering and Duplication on +61 3 9574 3634 or visit our website at www.mc-mpeg.philips.com

Write in Reader Service Number: 109

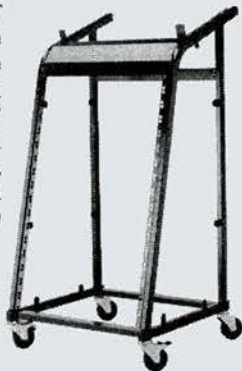


PHILIPS

Let's make things better.

K&M rolls out your studio solutions

Konig & Meyer offer a range of stands, racks & trolleys to solve all your studio problems. Like the 28205 rack trolley (right) with 17 rack units down the front & 7 on top. Or the 42020 rack wagon (below) with 9 rack units in front, 12 in the tilting tray & optional add-on brackets to add another 9 rack units above the tray.



And then there's mixer stands, keyboard stands, desktop racks, music stands, all with the same legendary design integrity & build quality you've come to expect from K&M's microphone, speaker & lighting stands. Call us now for the full story.

trc The Resource Corporation
6 King Street Blackburn Vic 3130
tel: (03) 9877 8233
fax: (03) 9877 8244
email: sales@trc.com.au

Write in Reader Service Number: 132

Since 1976

T-PAC

Sound & Light

The Right Equipment

The Right People

The Right Price

Sound & Lighting

Hire, Sales and

Installation

To Any Scale

Ring Around

But Save The Best Number Till Last

(02) 9799 7219

AV NEWS

CARIBINER GOES SHOPPING

By Cat Forcer

Corporate communication and event management company Caribiner has acquired **The Event Company** in Melbourne as well as the operations of **Stagecraft** in Brisbane and Melbourne.

Caribiner provides a range of communications services to corporate Australia with long term clients including McDonald's, Qantas Airways, Telecom New Zealand and Arnotts.

Caribiner Chief Executive, Paul Kenny said "The creative and client service skills of Doug Tremlett and Tim Browning at The Event Company are a natural fit with the services of Caribiner in Sydney and Wellington, New Zealand, and I'm confident that the renamed 'Caribiner The Event Company' will soon assume a pre-eminent position in Melbourne."

The current Melbourne Caribiner team joins The Event Company in its South Melbourne premises. Caribiner, a leader in Australian corporate communications, now has 130 staff in five locations.

The Stagecraft operations are

merging with the existing Caribiner staging division to form a new entity, Caribiner AV Services.

"We're delighted to bring the expertise of Stagecraft into the Caribiner family to build our infrastructure to meet the needs of our clients, here in Australia and overseas.

"Our team of Chris Green and Herbert Van Daalen in Brisbane, Lexine Houghton and Tim Mitchell in Melbourne and Steve Brlekovic in Sydney represent unparalleled experience in the staging of events at the highest level," said Mr Kenny.

Caribiner's services include design and production of management conferences, product launches, multi-media, video & film production, corporate change programs, award presentations, exhibition & display, event marketing and road shows.

Caribiner Australia is part of Caribiner International, a global corporate communications company, which is listed on the NY Stock Exchange.

CARIBINER: + 61 2 9417 1677

TELSTRA DELIVERS A PLUS

Competitor gets Video Replay Systems old phone number

SYDNEY: When Video Replay Systems moved into new premises last year, they ordered a redirection on their old phone number. Recently the redirection lapsed, and according to Video Replay Systems managing director Howard Christian, Telstra were to put the phone number into hibernation.

Three months ago a Video Replay Systems customer called the old number, as people do, only to find themselves talking to arch rival company Video Plus. The customer became confused, and re-established contact with Video Replay Systems - who were naturally shocked that their old number was now routed to their competition.

Howard Christian immedi-

ately contacted Telstra, demanding the number be disconnected.

Over at Video Plus the old Video Replay Systems number was still being dutifully answered at presstime - and the receptionist was quick to hand out the correct number.

Video Plus Sales Manager Keith Wootton was perplexed as to how they had ended up with their competitors phone number.

"We had some new lines installed a few months ago" he told Connections. "There has been some confusion with lines - we've been in touch with Telstra. It's very unbelievable!"

• **The new number for Video Replay Systems is +61 2 9698-5578.**

EXPERIENCE THE WARMTH

AKG Acoustics,
the leader in studio micro-
phones for over
50 years, proudly brings
you the latest in tube
microphone technology.

SOLIDTUBE

A full complement
of accessories is
included with every
SOLIDTUBE.



Proudly distributed by AWA audio products.
For more information contact
AWA on 1 800 642 922 or
your local AKG Dealer.



AWA audio products

Write in Reader Service Number: 137



Gore & Sex at Star City

The recent opening of the Rocky Horror Show at Sydney's Star City certainly kept Staging Connections busy and no doubt some what amused. For the Media Launch a month prior to the show opening, they were immersed in giant ultra violet lips and a lectern-surround of splayed female legs clad in fishnet stockings and stilettos!

This was followed by a semi-permanent installation in the Casino which will be in place for the duration of the stage play. Huge wrought iron gates, tortured willows, 'Enter at your own risk' signage, blood-splattered axes, more stilettos, red fur, wrought iron

candelabras with dripping red wax, cobwebs, more splayed legs and many metres of red feather boa - well you've got the picture.

The same theme was carried through to the Opening Night Party held in the Star City Ballroom. The entrance was a large pair of wrought iron gates and protruding from them were two arms holding flaming torches. The guests walked along a blood red carpet as a JEM Hydrosonic 2000 hazer created a low lying fog.

The entire ballroom was dressed in black whilst the large set (four x three ton truck loads) consisted of three dimensional black marble columns, vinyl walls and a wall of black marble which ran all the way up to the ceiling behind the stage. That would open to reveal a huge blood-red wall and Gothic-style proscenium through which actors and VIP's would enter. Large gargoyles and candelabras added to the atmosphere. More splayed legs.

So many legs - how come Connections wasn't invited?

The Enormous Horns played using a Meyer System of 4 x USW 1- and 6 x UPA 2P. Control was an Allen & Heath GL4000 desk.

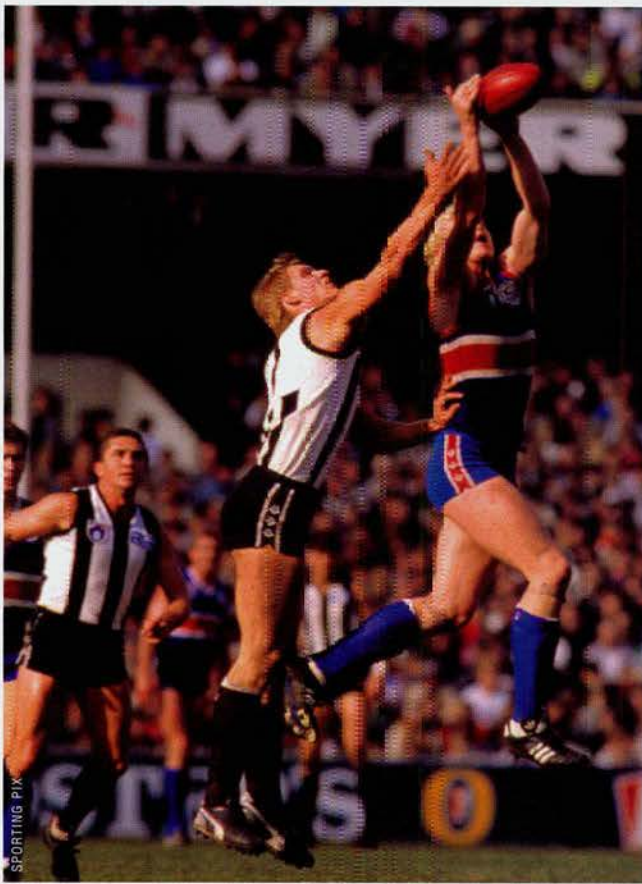
The foldback system comprised of a Mackie 24ch mixer, two Yamaha 2031 graphic EQ's and 10 Meyer UM-1P speakers.

Six Martin MAC500 and ten Roboscans were placed in the ceiling as well as sixty Par 64's. All of the props around the room were lit by 12 volt dichroic uplights, often creating slashes of red. Control was by a Jands Hog 600.

CREDITS

S.C. Event Manager/Designer *Justin Cowell*

Star City Special events co-ord *Michelle Dawson-Mays*. S.C. Manager at Star City *Megan Carrabott*. S.C. Lighting Director *Stuart Eakons*. Staging Connections Audio Director *Jerry Cole*.



From any angle everybody gets the best seat in the house with Screenco

A Screenco giant video screen offers spectators a dramatic close-up view of the action no matter where they sit.

Unlike many other screens, Screenco video screens provide great pictures even from side-on.

Fantastic day or night pictures from the world's largest and most experienced video screen operator and using the latest technologies.

Screenco can provide screens of any shape and size, even hundreds of square metres!

Screenco - an Aussie company with a world wide reputation.



SCRENCO PTY LTD

Tel: (02) 9438 4646

Fax: (02) 9436 4187

DCA/SCR/003 C

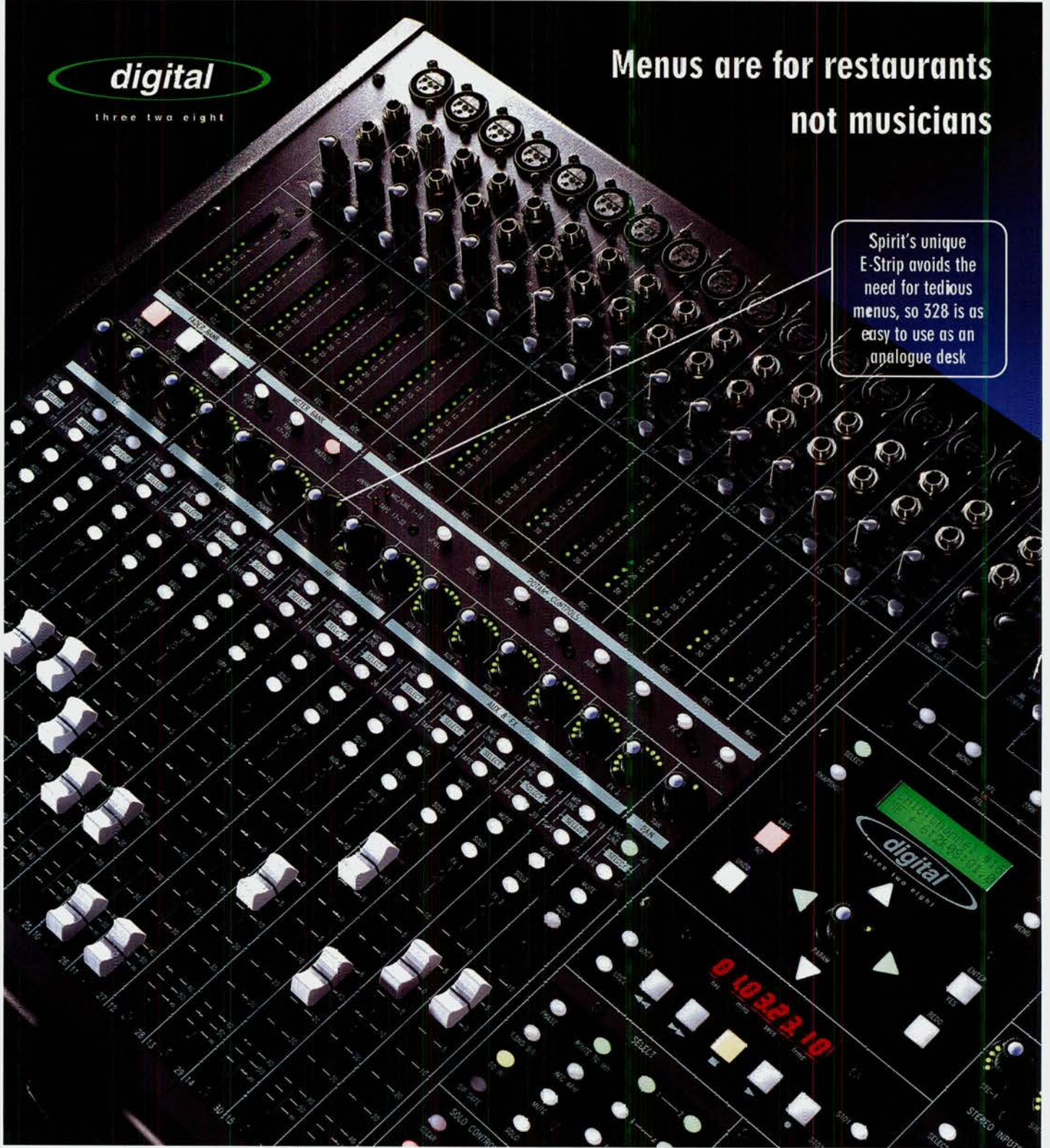
Write in Reader Service Number: 192

digital

three two eight

Menus are for restaurants not musicians

Spirit's unique E-Strip avoids the need for tedious menus, so 328 is as easy to use as an analogue desk



42 Channel Digital Mixer with the Human Touch



H A Harman International Company

MAIN FEATURES: Up to 42 Inputs at Mixdown - 8 Bus 16 Mic/Line Inputs with Inserts and HPFs 16 Digital Tape Returns with 2 x ADAT Optical and 2 x Tascam TDIF connectors as standard All inputs have access to 3-Band Parametric EQ, 4 external Auxes, 2 Lexicon Effects Sends and Pan via the E-Strip 8 pairs of Stereo Inputs and 2 Internal FX Returns 24 Bit A/D and D/A Converters with 128 x oversampling throughout Moving 100mm Faders throughout 2 x Lexicon Dual Programmable Effects Units 2 x Assignable Mono/Stereo Dynamics Processors with Compressors, Limiters, Gates & Duckers Snapshot Automation with recalling of all main console parameters for up to 100 "scenes" Dynamic Automation capability Undo/Redo, Copy & Paste functions Solo-in-Place, AFL & PFL Solos Full Metering and Monitoring of all Inputs, Processors, Auxes and Masters Full Machine Control capability with large Timecode display 2 Consoles cascadable for 84 inputs at mixdown and 32-track recording Third ADAT Optical Output for Groups or Aux Masters + 2 x AES/EBU and 2 x SPDIF gives 28 Digital Outs and 20 Digital Ins

OPTIONS: TDIF 8 Channel Analogue I/O Interface TDIF Mic Preamp Interface - 8 Mic Preamps with Insert, Gain, HPF and Direct Out TDIF AES/EBU Interface - 4 pairs AES/EBU I/Os for Hard Disk production systems





Melbourne Docklands Stadium - Corporate Launch

When you are selling a seat to a game of footy for \$30,000 you need to make the sales pitch pretty damn impressive. Perching on your soapbox and spruiking 'roll right up, roll right up, roll right up' just doesn't quite cut the mustard these days

So it came to Australian Business Theatre to take responsibility for the launch of the new Docklands Stadium currently under construction in the west end of Melbourne. This stadium will set new standards in sporting/entertainment viewing, offering a total entertainment complex with state-of-the-art facilities and everything that opens and closes, including the roof!

ABT were given the brief to create an entertainment package that would reflect the proposed venue - entertaining, exciting and powerful.

Some 500 heavyweights of the corporate world were gathered together at the Melbourne Town Hall and encouraged to dig deep to become long-term patrons of the 'world's best stadium'. A range of packages were on offer for corporate boxes down to 10-year rights to a seat for all sporting events. The packages (Platinum, Gold etc

etc) signified the assorted levels of luxury that will be lavished on the seat-holder and were also indicative of what the seats must be made of to justify the cost!

The stage set was made up of two 20' x 15' screens with a 48'x25' cyc in the middle which overlooked the MC, David Johnson. Video playback, computer-generated slides and image-mag. were shown on the screens and cyc, with the cyc being used as a reveal for the on-stage entertainment.

The entertainment on show was designed to reflect the multi-purpose nature of Docklands and included Scottish bagpipers, Maori Rugby players, AFL footballers, James Reyne and a host of dancers. All combined to create an atmosphere which the prospective patrons of Docklands will come to experience through attending the wide range of sporting and entertain-

ment activities planned for the stadium.

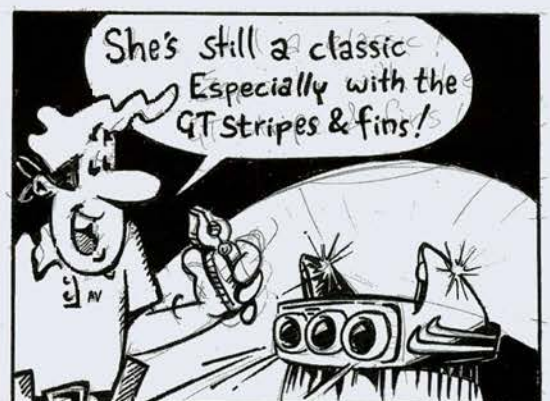
To mirror the total entertainment package on offer, ABT brought in a total staging package to ensure the very best of video, sound and lighting was on offer to the assembled VIP's.

Haycom Staging supplied vision, using the bright Hughes projectors and associated interfacing, converting and mixing gear. Three Hughes were front projected from 100' onto the screens and cyc and delivered what we have come to expect - sensationally vibrant, colourful and clear images that looked identical to the original images produced by ABT - something that can never be taken for granted, especially with big-screen shows.

Sound was supplied by Mcleans which was, as usual, pure and complete - for those who know the Melbourne Town Hall this was no mean feat in this barn-like venue. The speaker system was designed to ensure the coverage was focused tightly within the audience area. The entire system was aligned to a fixed point on the stage to create a sound image that was perceived to be coming from

> please turn the page

AV MAN



WHO CARES WHAT YOU THINK?

WE DO

Why? Because there is nothing that compares to the new RCF ART Series 500A Loudspeaker. And it is because we do care what you think that we produced the 500A - *for you*. Now that you can listen to it with your own ears, we want to know what you think. This is what some people are saying.



500 watts
2" horn
15" heavy duty speaker
powered or non-powered models

Listen to the ART Series 500A today at your RCF Dealer
We can't wait to hear what you think



A rock-solid reputation for reliability has made RCF the first choice for leading concert companies the world over - now you have the choice

Adelaide Adelaide Sound Hire: 08 8331 9605 **Brisbane** JS: 07 3852 2646 **Canberra** Better Music: 02 6282 3199 **Launceston** Frontline: 03 6331 4122
Melbourne Audio Oz: 03 9696 5690 - Hi-Tek Video Audio: 03 9442 1411 - Disco Factory: 05 9729 9987 Powa Audio: 03 9729 9022 - Extreme Entertainment: 03 9311 4777 - LAVA: 03 9669 4877
Perth Kosmic Music: 08 9542 3844 **Sydney** DMC: 02 9319 7177 - Anything Audio: 02 9818 8000 **Wollongong** Events: 02 4229 6010



Serge - Audio Oz

"...I was expecting great things from RCF's 500A, but I wasn't expecting them to be as loud and clear as this. Unbelievable product, they'll be tearing out the door..."



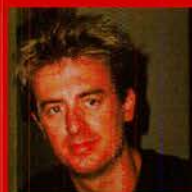
Brian Walton - Disco Factory/Lightsounds

"...There is *nothing* that comes even close to matching the performance of the ART 500A from RCF. They've got it made..."



Peter Morris - Adelaide Sound Hire

"...The ART 500A is without peer, it's the loudest 'plastic box speaker' I have ever encountered. Combined with excellent fidelity, this box offers performance and features normally associated with more expensive pro-speakers. Its performance is outstanding..."



Bruce Johnson - Big Beat Prod.

"...The most useful thing you can do with a piece of plastic. Just made for hire..."



John Boshua - Powa Audio

"...I borrowed one, I bought eight, and now I've sold stacks. Everyone's happy..."



Adam - LAVA

"...Just when I thought I'd heard it all, along comes the 500A. This thing *really* pumps it out... Seriously..."



Drew Muirhead - DMC

"...You said they were going to be loud, but *that* loud! I hope they come with a warning, because they sure need one. They're awesome..."





SAILS IN THE SAND

Showcorp do The Car Gig on Hamilton Island

The destination was Hamilton Island for the new Hyundai Sonata reveal and Conference. The reveal concept was by Colin Baldwin, chief of ShowCorp Production Services, in collaboration with Peter Milne, was to launch the new vehicle in a most spectacular manner and in a way that the Hyundai dealer network would not have witnessed previously.

The Car Launch is a major event for dealers.

The Stage

Wild Gravity's self climbing Total Fabrications stage system was employed for the lifting of the car from behind a sand dune facade and also for the rigging of the giant lycra sails.

The beach site was excavated and levelled prior to the trussing system being positioned where 6 up-right truss towers were used as sail and scrim rigging points.

The Lighting

For the reveal stage 12 Martin Mac 500 moving heads, 12 1.2kw zoomspots with colour scrollers & 6 Dataflash strobes were used and controlled through Showcorp's new Martin Pro 1 Case console.

Inside the Marquee 24 Par 64 plus 4 650w PC spots were rigged for the special guest artists Jack Jones & Rick Price who performed an acoustic set after the reveal.

The Sound

Showcorp's new Meyer Ultra Series self-powered PA system was split into two areas; two PA stacks at the reveal site and two PA stacks for the entertainment. However, both systems were configured together to form a surround sound system. A new Yamaha GA Series 32 channel mixing console and new Meyer Ultra Monitors were also used for the first time.

The Projection System

The Electric Canvas provided the ETC Pigi large format moving slide projector system, which projected lifestyle and sneak preview images of the new car onto the giant sails before the sails dropped behind the sand dune as the car rose up. Once the car was lifted into position the Pigi projected brand logos onto a scrim suspended from two towers behind the car.

The Control System

A Sony four track mini disc was used to send SMPTE time code to the Pigi PC computer and the Martin Case lighting console. Peter Milne laid down the pyrotechnics cues on his Mac computer for playback during rehearsals and show, for cueing the pyro and the cars which drove around the marquee after the main reveal. Additional sound effects tracks were also played back live from the Macintosh computer in sync with the mini disc sound track.

The Fireworks

Bob Blore from Howard and Sons (Cairns) provided the pyro spectacular. The pyro brief was quite simple said Colin Baldwin. "An in your face frenzy of ground and aerial effects that culminate in a giant explosion of petrol and pyro from a small island just off the beach behind the reveal set". Just what we like here at Connections!

Docklands *from previous page*

the performance area rather than the flown speaker arrays - the effectiveness of this approach was particularly evident during James Reyne's performance. During the video playback rear speaker systems were used to create a pseudo surround sound effect which gave the audience the experience of being within a sporting arena.

Active took care of the lighting side of things, supplying coverage for the audience, the multitude of on-stage activities and atmospheric effects to highlight the majesty of the Melbourne Town Hall. Lighting gear used included 10 Stagescans, 72 parcans 22 raylights, 12 56's, 1.2K fresnels, Shakespeare profiles, Moefaze Diets and a couple of strobes. Utilising a Jands Hog 600 to control stage scans and a Jands Instinct 60 to control the generic lighting, the visual effects were brilliant.

The show went over in sensational fashion with the audience leaving in high spirits - if not lower bank balances.

The team approach taken by ABT worked a treat with experts from each discipline working together to create a spectacular success that was enjoyed by all, front and back-stage.

Docklands Crew

Event Producer: David Caiger
 Technical Director: Steve Nietz
 Stage Manager: Rosie Westbrook
 Production Manager: Daniel Tippett
 Vision Mixing: Mark Williams
 Hughes Projectionists: Mark Williams, Rod Marrison,
 Greg Byrne
 Sound Design: Richard Bilinski, Glenn Helmut
 FOH Engineer: Glenn Helmut
 System Engineer: Bill McCormick
 Lighting Design: Peter Lothian
 Lighting Crew: Weasel, Chad Spencer, Darren Burrows,
 Michael Bupalov, Simon Midgley, Peter Mills
 Choreography: Tony Didio
 Camera operator people: Channel 7
 Teleprompt: Judy Brien

Conclusion

Two reveal shows were performed, one to the cream of Australia's motoring journalists and the second to just under 300 Hyundai dealers and their partners.

24 hours later, the entire system (except trussing) was moved into the Convention centre where the Pigi system was used to project an array of special effect images onto the proscenium arch and scrim for a special presentation of The Rocky Horror Show choreographed by William Forsythe, for the Gala Dinner.

The client was, according to ShowCorp, 'blown away'!

SAILS IN THE SAND: Production Crew

Event Producer - Colin Baldwin,
Technical Director/Projecticnist - Peter Milne,
Production Assistants - Maggie McKinney & Wayne Torm,
Daydream Island Event Manager - Fiona Baldwin,
Stage Manager - Raymond Calcutt,
Lighting Director - Steven Wright,
Audio Engineer John Swiney,
A/V Technician & Multimedia Design - Damian Bailey,
Camera Operator & Candid Video Editor - Ben Thurum,
Lighting Rigger - Shaman Thompson,
Staging Carpenter - Paddy Teuma,
Pyrotechnics Crew Chief - Bob Blore,
Stage/Trussing System - Noel Anthony,
Local Crew - Jamie, Andrew & Matthew.

TP EVENTS

New division for Technical Products

Over the last decade, technical productions has earned a reputation within the special events industry, producing numerous events for corporate, government and social clients. The company was recently awarded MIAA NSW Award for Excellence 1997/98 as Special Event Organiser of the Year, and Contact 98 Special Events Award for Best Celebration / Commemorative Event Management.

The evolution of **tp events** signifies a refocussing of the company's Image to the corporate and cultural community.

Says Managing Director Danny Yezerski, 'tp events heralds the next generation in quality special event production. Our commitment is to provide our clients with the freshest and most Innovative event-related projects in the business.'

Call Danny Yezerski, *Brigid Paton or Ro Tynan at tp events on +61 2 9386 9494.*

Gearhouse Appoint Broadcast Team in Australia

Gearhouse Group has announced the appointment of the management team to head its new Broadcast operation.

Gearhouse Broadcast has been appointed Host Facilitator of Broadcast Services to the Commonwealth Games in Malaysia. The contract involves the supply of broadcast equipment and services to provide feeds to the international broadcasters covering the games.

Steven Chadwick, has been appointed General Manager in charge of the companies involvement with the games.

John "Gonzo" Glover, has been appointed Engineering Manager with the company. Gonzo as he is affectionately known throughout the industry joins Gearhouse from his own successful business Excess Energy.

Gearhouse will invest over \$A8 million in the start up of Gearhouse Broadcast in Australia.

Info: +61 2 9697 9922

the world's number one

the world's number one loudspeaker manufacturer

AC EURO
AHM
AMPEG
ANCHOR
APEX

ALPHA 100W

BETA 150W

GAMMA 200W

DELTA 300W

KAPPA 400W

GAMMA PRO 200W

KAPPA PRO 400W

SIGMA PRO 500W

OMEGA PRO 600W

EILOMAX PRO 1000W

AUDIO CENTRON
BAG END
BULLFROG
CG AUDIO
CGM MUSIC
COOPER
COURT
CRATE
DAVITT AND HANSE
DELTEC
DOD/DIGITECH
ELECTROVISION
ELITE
EVANS CUSTOM
AMPS.
FENDER
FRAZIER
GALLIEN KRUEGER
GEMINI
GENZ-BENZ
GRANIT
HARTKE
HK AUDIO
HUGHES AND
KETTNER
HZ INTERNATIONAL
KUSTOM MUSIC
LINE 6
LOBER & HICKEY
M & K
MAJ
MARSHALL
MATCHLESS
MCGREGOR
MICROMIX
MILLER & KRIESEL
MODULAR SOUND
MTS
MUSICIAN SYSTEM
OAP
PEAVEY
POLYTONE
P.R.O
PROMANN
PULSE
ROLAND
SHERMANN
SLM
SOLDANO
SONIC
SOUND TECH
SOUNDTUBE
SUNN
SWR
TECH 21
TORQUE
TRAYNOR
TUBE
WORKS
TX
VHT
WARWICK
WORK
YAMAHA
YORKVILLE

ADD YOUR NAME TO THE LIST

CMI
PROFESSIONAL PRODUCTS GROUP

Ph: (03) 9315 2244
www.cmi.com.au

EMINENCE
"Made in the USA"

Openings:

• The 865 seat **Optus Playhouse** at the Queensland Performing Arts Complex was officially opened on Friday 14th August. The playhouse was the last stage of the complex to be completed and the word is that the venue is already heavily booked for 1999 with only two available days left on the calendar!

• Singer **Julie Anthony** is the star of an upcoming Sydney Theatre Company show to be directed by Wayne Harrison. In the spirit of the musical *The Boy from Oz*, *Lush* is an autobiographical account of Anthony's life. Written and conceived by Harrison, Anthony and designer John Senczuk, it previews on September 18th. The musical director is Michael Harvey with choreography by Tony Bartuccio and lighting by Gavan Swift.

• As part of the Olympics arts festival "A Sea Change" (you must have heard of it!), **Sidetrack Performance Group** are staging the multimedia, multi-venue, multi-artform event *Marrickville Eyes*: "an insiders view of Marickville - Australia's cradle of multiculturalism" which includes street theatre, a photographic exhibition, installations and radio broadcasts. Production credits include Concept and Director Don Mamouny, Sound Artist Rik Rue, Photographic Installations by Effy Alexakis, Choreographer Kylie Tonnelato and Musical Director Anna Pimakhova. *Marrickville Eyes* begins on September 12th.

• And some highlights from the winners list in the 1999 **Opera**

Australia design commission sweepstakes are:

Nigel Levings for lighting of *Billy Budd*, *Don Carlo*, *Vozzeck* and *Summer of the Seventeenth Doll*.

Stephen Wickham for lighting *Roméo and Juliette* and *La Bohème*

Brian Thompson for set designs of *Billy Budd* and *Summer of the Seventeenth Doll*.

On Tour

• **Black Swan Theatre's** acclaimed musical production *Corrugation Road* is currently on a national tour. Production credits include Lighting design by Mark Howett, with Linda Haywood as tour electrician, Set design by Steve Nolan, sound co-ordinator is Tom Cowcill, head mechanist is Matt Norman, stage manager is Cait Ryan and production manager is Ken Wilby.

Equipment News

• **Skypack Lighting** in Brisbane have recently added more Martin robotic luminaires to bring their hire stock of robotic fixtures to one hundred and thirty-three and their Martin inventory to 10 x Mac 1200s, 8 x Mac 600s, 8 x Mac 500s and one of the very flexible CasePro 1 controllers.

• Perth's **A.A.A. Productions** have already found a fair bit of work for their new ElectroVoice X-Array speaker system having used it on Niel Finn's standing-room-only date at His Majesty's Theatre, Paul Kelly at the Perth Concert Hall (see article elsewhere in this issue)

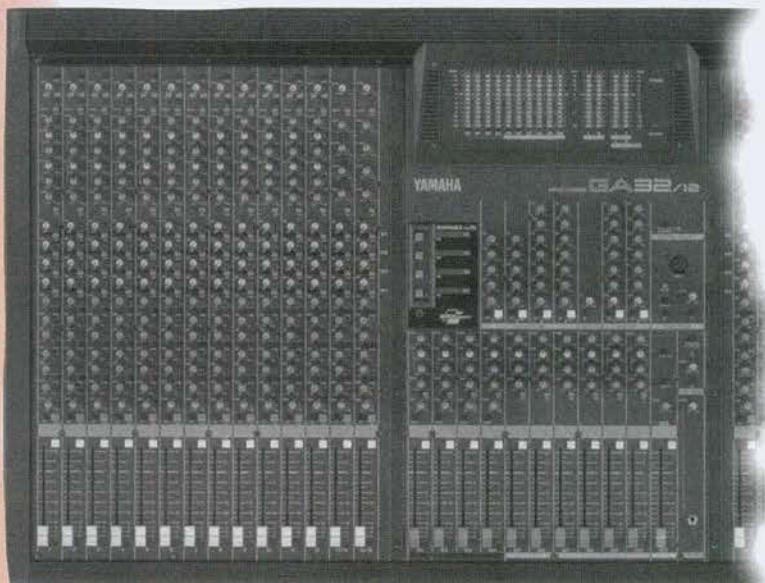
GA Series Mixers - The New Concept In Live Mixing

The GA mixer stands for Group / Aux Diversity, or put another way, YOU can decide how many groups or auxiliaries are required for the job on hand. The GA mixer is a 12 bus design that allows 4 busses to "float" between auxiliaries or groups as required.

A GA Mixer may be configured 4 Group, 6 Aux + Stereo OR 10 Aux + Stereo or anything in between - You decide!!!

GA SERIES MIXER FEATURE

- ◆ Patented ultra quiet Yamaha mic pre-amps (XLR Balanced) with 48V phantom power
- ◆ 4 Band EQ with TWO swept mid bands
- ◆ Channels feature pad, phase, high pass filter, PFL & peak indicator
- ◆ Groups feature 3 band EQ (mid swept) & AFL
- ◆ 4 stereo returns are provided plus tape in
- ◆ Comprehensive mix matrix
- ◆ Centre master section with talkback, metering & group /aux assignment
- ◆ 2 stereo channels included
- ◆ 24 or 32 channels configurations



24 channel \$4,995
32 channel \$5,995



For more details contact Yamaha Music on 1800 805 413



- A further note on renting NT Parliament House for your next production; **Audio Technology** of Darwin proudly supplied JB VaryScan 575w HMI robotics for the venue. These were supplied custom powdercoated in white for the project by Universa. Lighting and Audio. One can't help wondering what on earth they do with the robotics during the parliamentary sessions.

Money Talk:

- In keeping with Tasmania's long history of using forced-labour to construct public buildings, the **Gaiety Theatre** in Zeehan is to be restored by unemployed youths as part of the government's Work for the Dole scheme. An initial sum of \$50,000 has been allocated by the Federal government for restoration work, with a further \$20,000 to be contributed by the Heritage Authority. The first step of the plan is to re-plaster and paint the facade. It is anticipated that the Gaiety will return to being both a live theatre and a cinema.

- The Canberra based **Skylark Theatre** which went into voluntary liquidation earlier this year is now being investigated by the Australian Federal Police fraud squad. It seems that the puppet theatre has liabilities of \$579,675 and assets of only \$55,821. The debt is made up of \$461,819 to unsecured creditors and \$78,693 to former employees.

- A report from consultant KPMG's **Centre for Consumer Behaviour** has forecast that attendances at ballet, theatre and opera are likely to decline significantly over the next five years. Studies reveal that there is a rise in "broad entertainment consumption" but the "high arts" are struggling to fill houses. This is probably no surprise to those companies who are currently feeling the economic pinch. Some good news though, the Howard government has decided that the **GST** will not be applied to grants given to arts organisations and individual artists, though corporate sponsorship of the arts will attract the tax unless it can be viewed as a legitimate business expense such as marketing. Theatre ticket prices are also predicted to rise by 7.5 per cent as a result of the proposed GST.

Web Update

- Charlie Richmond, spiritual father of MIDI Show Control, has started a **Show Control mailing list** to discuss all manner of things relating to show control in all of its forms. Discussions have been very informative and lively in the first few weeks of the list's existence. The URL to subscribe or search the discussion archives is <<http://www.talklist.com/forms/show-control/>>. Well worth joining if you are even slightly interested in linking up the various elements of production.

- On the subject of Show Control: John Huntington's **Show Control Page** at URL <<http://ourworld.compuServe.com:80/homepages/JHuntington/>> is an excellent place to find references to a whole lot of Show Control information. Huntington is the author of what appears to be the only reference on Show Control Technology: the excellent *Control Systems for Live Entertainment* which although quite pricey at \$86 is well worth owning. You can, of course, buy the book from the Connections shop. (Call 1 800 635-514 to order)

- Perhaps one of the most interesting of Internet mailing groups is the venerable **Stagecraft mailing list** which currently operates under the stewardship of Steve Jones at Middle Tennessee State University. To quote the charter: "The stagecraft mailing list is for the discussion of all aspects of stage work, including (but not limited to) design, construction, operation and maintenance of costumes, lighting, props, scenery, sound and special effects, as well as company management, hall management, hall design, and show production. Subscribers include theatre professionals and vendors, teachers and students, community theatre volunteers and others who are interested in the subject". The URL for subscription forms and the searchable archive is www.theprices.net/lists/stagecraft/

SALES MANAGER PROFESSIONAL AUDIO PRODUCTS

Take cutting edge professional audio products to the world

Lake DSP is the world leader in real-time spatial audio technology and is commercialising a range of innovative products for film, video and music post-production. We are also releasing new products for animating sounds in large sound reinforcement installations.

We require a self-motivated and experienced sales professional who wants to take on a challenging and demanding role in a company that is one of Australia's rising technology stars.

Extensive international travel to Europe, Japan and the USA is guaranteed.



Make applications in writing to:

The General Manager
Lake DSP Pty Ltd
PO Box 736 Broadway 2007 or
Fax: (02) 9211 0790

S m a l l W o n d e r

The miraculous DPA 4060 Miniature Microphone tops the bill in wireless systems for theatre and television. Not only does the 4060 offer outstanding audio performance under difficult conditions, it is also extremely robust in operation. Unique connection adapters ensure compatibility with a wide variety of VHF and UHF systems. A range of sensitivities encompasses the vast majority of applications where high quality audio, near invisibility and lightness is required. Developed from many years of professional audio experience, the 4060 is just

one of the high quality products from the renowned 4000 series

- available now from DPA Microphones.

AVAILABLE FROM :

VIC: SYSTEM SALES 03 9529 2633 • SOUNDCORP 03 9416 1066
NSW: STUDIO SUPPLIES 02 9957 5389 • CODA AUDIO SERVICES 02 9557 2111
AUDIO & RECORDING 02 9316 9935 • AUDIO SOUND CENTRE 02 9901 4455
WA: SINCLAIR COMMUNICATIONS 08 9271 4993
SA: GIBET ADELAIDE 08 8340 1999
QLD: PRODUCTION SHOP 07 3216 1340

STUDIO
SUPPLIES
PTY. LTD.

5 Myrtle Street,
Crows Nest,
NSW 2065
Tel: 02 9957-5389
Fax: 02 9922-2043
Email: info@stosup.com.au
ozemail.com.au

ACN 0031846503



Series 4000 Microphones
from DPA



Write in Reader Service Number: 171

LETTERS

*#//@%XX -?!

Rigging Safety

Re: the the letter from Chris McKenzie about rigging at ENTECH, (*Connex August*). Chris is correct that climbing harnesses are not legally approved: however everyone wears these type of harnesses. I have never had a situation were a climbing harness, properly adjusted, has allowed a person to fall out of it. To properly adjust a climbing harness, it should be the correct size for you so that the waist band fits snugly around your waist, not your hips, and the leg loops are long enough so as not to pull the waist band down when walking or climbing.

Chris' second point regarding chain motors is also correct, the manufacturers all state on the

labels and in the manuals that chain hoists should NOT be used to suspend loads above persons, and should be used with a secondary redundancy system.

Our industry in most cases ignore this warning due to the costs and time involved of installing all the secondaries, however in Melbourne at the Exhibition Centre it is a house rule that all hoists motors and blocks have secondaries, and that rigging must be steel from the roof point of attachment to the wrap around the truss, therefore spansets can only be used when bypassed by a steel safety.

It is soon going to be essential that our industry have a code of practice for rigging to give the HSO inspectors some guidelines.

**Tiny Good, ShowTech
Rigging Australia, Melb.**

Electrohome: Errors

In response the July '98 issue: Michael Hassett's "The Projection Smorgasboard" contained several errors about Electrohome Projectors.

Mr. Hassett asserts that the Roadie 'suffers from the same scaling problem as all TI DLP devices' and cannot 'have a video and data image fitting the same size screen'. Both of these assertions are incorrect.

While it is indeed true as Mr. Hassett suggests, that our first Vista Series projectors when introduced in 1996, used software for resizing images that was based on discrete resizing factors rather than dynamic resizing, all Vistas launched afterward used dynamic scaling including the new Roadie.

As for the suggested scaling problem, perhaps Mr. Hassett was unaware that he was viewing an accurately reproduced 1280x1024 SXGA (with a 5:4 aspect ratio) image on a native

1024x768 XGA (with a 4:3 aspect ratio) projector. And while many vendors at INFOCOMM were resizing and therefore distorting the same image to fill the 4:3 screen and increase apparent brightness, we at Electrohome chose to display accurately the SXGA image in the correct aspect ratio.

Finally, we would like to thank Mr. Hassett for recognizing the design and quality of the Roadie in rating it 10-out-of-10. Quality always shows through.

**Zoran Veselic, Vista Series
Product Manager,
Electrohome Projection
Systems, Ontario Canada.**

LETTERS INVITED:

Keep it brief and send it to: mail@conpub.com.au or PO Box 439 EPPING NSW 2121 or fax +61 2 9876-5715. We MUST have your name and return contact information, even if you wish your name left off the published letter.

Duncan Fry and: The Solo

Bands - ya gotta love em. Some of them take themselves so seriously - It's not entertainment, it's art.

Others are far more pragmatic, seeing a pub gig as a means to an end, a way to keep a room full of drunks happy for three hours.

So, it's often the job of the crew to bring the band back to earth, for a reality check. And at the same time, a good old fashioned dose of what we intellectuals call taking the piss!

It was yet another gig in Shepparton for Jim and I. Surprisingly the band and crew all had hotel rooms, this being one of the rare times we weren't expected to drive back to Melbourne after the gig. So, after a nourishing meal of fish and chips we were sitting in the lead guitarist's room nattering away while he tuned and strummed his guitar.

Jim had always fancied himself as a guitarist - in fact he now regularly performs in a one man trio up on the Gold Coast, and so in a lull in the conversation he turned to the lead guitarist.

"Terry," he asked, "Do you think you could show me how to play The Solo?"

"Sure mate, no problems," said

Terry, who had not quite divined the grammatical exactness of Jim's question.

"Which solo?"

"THE solo," chortled Jim "...you know, the one you play in every song!"

Terry leapt to his feet, mightily offended

"No, Jim, no, what are you talking about - they're all different. How can you say that?"

And he started to rant about how no-one understood him, he had the hardest job in the band, they didn't appreciate him, all the work he did.

Then he calmed down, looking worried and said

"Do you really think they sound all the same?"

Actually they did, but we grinned and said "Nah - just kidding"

I mean, it's good to have some fun at the bands expense, but you have to know when to stop or you'll do yourself out of a job!

The audience at the gig appeared to consist solely of desperates of both sexes from the fruit canning works.

A guy from the canning plant leaned on the mixing desk in front

of me.

"Hey mate," he dribbled, "This is the thing what controls the lights, isn't it, eh?"

I studied his two hands. Each was approximately the size of a leg of lamb able to feed a family of seven, and one of them had 'HATE' tattooed on the four knuckles. I looked at the other. Rightfully it should have had 'LOVE' tattooed in the same place, but he had lost a complete finger and knuckle in some ghastly canning accident. Not to be outdone, however, he had 'LUV' tattooed on the remaining three knuckles!

"Yes mate, this is the lighting desk," I replied. Of course it was the sound desk, but who was going to argue with him?"

"So how do you get the green colour," he asked, a look of rat cunning on his face.

"Well, you have to use a bit of the yellow and a bit of the blue," I replied, pointing to the corresponding knobs. "They mix together

and make green!"

He nodded his head.

In front of us a very, very drunk girl was slowly but determinedly making her way towards us.

When she got to about six feet from the mixer she fell face downwards on the floor. Two guys helped her to her feet, and in doing so, managed to peel off her T-shirt.

Topless, she put her arm around one of them, smiled a big beery smile, and then threw up all over him!

"Yuck - shit", he yelled, immediately letting go of her, and she dropped insensible to the floor.

I turned to the singer's girlfriend as said, just for fun:

"Hey, your sister's certainly having a good time tonight, isn't she?"

We hadn't done badly for one night; offending the lead guitarist and upsetting the lead singer's girlfriend. I knew they wouldn't sack me though - I was too cheap.

MISSING THIS MONTH: The HOW TO DO IT pages from Duncan Fry and Tom Misner will resume next month. We were overloaded with material on Training Courses (see next page), and figured you wouldn't mind waiting till next month to resume the series.



dmc are laser, lighting and sound specialists with a primary focus on installations for hotels and nightclubs.

Names like Electro-Voice, JBL, Clay Paky, Martin, Abstract Technics and Denon, that are synonymous with success, feature in all our installations.

dmc provide hire, lease and purchase options on all installations.

In addition to regular servicing of facilities, our technicians are contactable via our unique 24 hour pager service and mobile phone seven days a week!

Our extensive "dry-hire" and production department can deliver the goods - from a garage party/21st birthday to corporate functions and special events.

dmc has a talented and experienced design team second to none!

CHECK OUT OUR NEW RETAIL SHOWROOM!

dmc Lighting and Sound ACN 062 713 044
613A Elizabeth St Surry Hills NSW 2010 Australia
Tel: (02) 9319 7177 Fax: (02) 9310 2685

BUY A MACKIE™

AMP or MIXER

and receive a set of headphones

FREE.

Mackie Mixers & Amps
CAD Mics & Mach Speakers
all available at Daylight

6 MONTHS INTEREST FREE T.A.P.

DAYLIGHT LIGHTING & AUDIO
4 Bridge Road Glebe NSW 2037
(02) 9660 7755

Write in Reader Service Number: 136

Exceptionally Good Speakers!

Just ask major US and European Loudspeaker Manufacturers

Everywhere you look inside speaker cabinets these days, chances are you'll find B&C SPEAKERS.

B&C make drivers that are used by most of the world's largest speaker system manufacturers

Drivers with all the quality and performance you'd expect from a major player in world manufacturing

B&C are not just good speakers - they're exceptionally good speakers. You've probably heard them in imported speaker cabinets and been impressed with their power, accuracy and transparent sound

And now they're available in Australia, distributed by Australia's leading Pro

Audio manufacturer

There's a model to suit every application, from superb 18" bass drivers to transparent sounding compression drivers like the DE75P pictured here

So, whether you're looking for replacement drivers to upgrade your system, or looking for new drivers for your next speaker project, think B&C SPEAKERS - we'll have just the speaker you need, and the spare parts to back it up.

Call, write or fax us for a catalogue and pricing.

Audio Distribution

A division of ARX Systems P/L
Phone (03) 9 555 7859
Fax (03) 9555 6747

DE 75P



2" high frequency compression driver, titanium diaphragm, mylar suspension, 3" flat aluminium wire voice coil, low distortion, high sensitivity over a wide frequency range



Vic/Tas/SA: Tony Hosking 03 9877 8233; NSW/Qld: Iain Everington 041 118 3158; WA: Ian Ross 089 354 3185
Audio Distribution, 33 Advantage Road, Highett, Victoria 3190, Australia. Phone 03 9555 7859 Fax 03 9555 6747

Write in Reader Service Number: 124

TECHNICAL TRAINING FEATURE

Seeking some training?

Editor Julius Grafton suggests some homework first

Choosing training is enormously tricky. Almost without exception you are risking money and career time. How should you evaluate a course? I would try to rate a potential course by asking some basic questions.

First, is it right for your level of expertise? In most cases a course provider will simply tell you, if you let them. It may be useful to ask how the course is pitched first, before you reveal your level of expertise.

You could also call the Operations Manager or Technical Manager of several places you aspire to work and ask them which, if any, courses they recognise. Be businesslike.

The more involved and expensive the course, the more questions you could expect to be answered. I'd like to talk with several recent graduates, to see how they feel - ask for some contacts.

It is also reasonable to ask about the credentials of the course presenters, perhaps even get a copy of their CV. Some courses may be unable to confirm the actual presenter, but they should be able to narrow down to a few people.

One little thing regarding the presenters. Don't be too set on one particular person teaching you. My dearest oldest daughter just returned from New York where she did a six week, full time course. The guy whose name is on the course failed to make *any* of the lessons!

I cannot recommend ANY technical course, as I have not done any myself recently.

I talk to people who like / dislike some courses, but of course two people can have different opinions. The key is to see what their original expectations were in the first place.

Today there is a tremendous push on technical training done in house, so my earlier comments about calling some of the companies to see what they expect is important.

I know for a fact that some of the companies rely on incidental training to filter applicants, so they look for HSC as a minimum (don't leave school) and then they like to see things like first aid tickets, car licenses, computer skills and second languages.

Be positive, keep your chin up.

SAE EXPANDS INTO USA

Established in Sydney in 1976, SAE has grown into a global operation which has training colleges around the world.

Billboard magazine has just profiled SAE and interviewed founder Tom Misner, as he prepares to open colleges in the US.

These will be located in New York and at Nashville.

At any time over 7,000 students are enrolled globally at SAE, which also operates in most states of Australia.

Tom Misner met initial resistance from some parts of the recording industry in his early days, he has since proven the knockers wrong - perhaps several million times wrong!

January AV Courses offered by ICIA's Institute for Professional Development

Meeting the challenge of keeping up with the latest technologies, applications and industry trends. This is the charter of the the International Communications Industries Association (ICIA), who run a unique hands-on training curriculum each year.

The Institute for Professional Development will be held at the Sydney Gazebo Hotel, from January 18-22, 1999. It offers 3 courses for A/V, technical and sales personnel. The courses are each five days long so you choose one and get in-depth knowledge of the subject.

Course 1 deals with Video and Computer Interfacing for Large-Screen Display. It entails a com-

prehensive overview of computer systems and architecture. Learn about the variables involved in workstation and computer video signals (even NTSC and PAL video equipment). The course fully details the skills required to connect computers and video to large-screen displays. It is geared towards experienced technical and systems sales staff.

Gary Kaye, CTS is the Course Chairperson. He is the President of Kaye Consulting, from Chapel Hill, in North Carolina, USA

Course 2 is A/V Hire and Staging Fundamentals for Technicians.

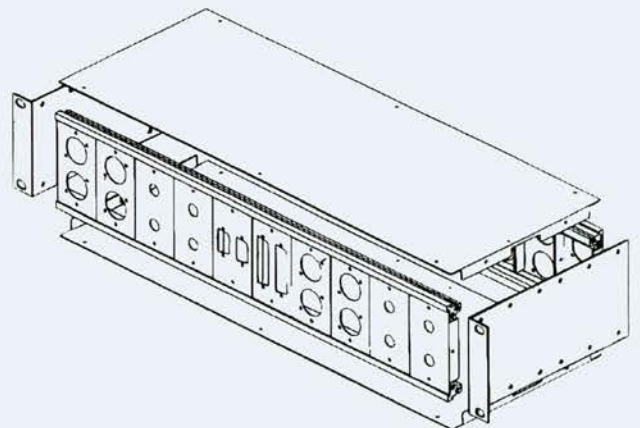
An introductory course, stu-

MODULAR STAGE BOXES

Need a custom stage box, rack panel, patch panel or distribution box, but just can't find one?

Then look no further than MSB, the modular system that allows the assembly of the most complex panels in minutes.

Oh, and you can leave the tool box at home as this is the only assembly tool you'll need.



For a free catalogue, please call...

Penn Fabrication Pty Ltd

Ph: (03)9646-7222

Fax: (03)9646-8222

Write in Reader Service Number: 142

dents explore the technical and business world of A/V hire. From an introduction to the hire industry to the equipment and the technology behind A/V gear, you get the information you need to pick the right equipment for the right application. The class emphasises customer satisfaction and professionalism. It is a course pitched at training new employees for the right start, or refreshing and updating existing staff's AV Hire knowledge.

Joel Rollins, CTS is the Course Chair. He is the General Manager of Riverview Systems Group, in San Jose, USA.

Course 3 is a little different. It is Professional Sales Skills for A/V Hire and Staging. Selling hire and staging jobs has its own unique challenges and skill requirements.

It is not the same as selling actual A/V equipment or computers- you need to know the business and you have to approach it as a professional. Building a long lasting relationship with the client is the key to long term success and this

course gives you the knowledge and skills to be successful. Hype and overselling do not work, building a strong relationship does. This course is appropriate both for new and experienced personnel.

Bill Sharer is the Course Chair, he is the Director of Marketing and Sales, from Production Management Group, in Danbury, CT, USA.

ICIA has a regional representative, Brett Bower, located in Sydney. He is assembling additional local faculty for each of these three courses.

Major audio visual rental companies have already registered block groups of staff, alongside individuals looking for pre employment training.

The ICIA's Institute for Professional Development is conducted each year, this is the third time it has been hosted in the region.

Fees are A\$1,150 for ICIA members or A\$1,950 for Non-members. To book your space or for further details, contact Brett Bower at ICIA, on +61 2 9531-6777.

Technical Training Institutions

Australian Capital Territory

NRS Training School

PO Box 350
JAMISON ACT 2614
11 Lawry Place
MACQUARIE ACT 2614
Phone: (02) 6251 6189
Fax: (02) 62516240
Email: Watts@dynamite.com.au
Contact: Manager Susan Watt
•Accredited Certificate Course in Media Production and Communications. Duration: 6 mths F/T
Cost: \$5,500.00
Commences: February, April and July each yr

Web site address: www.apa.edu.au
Contact: Carole H.

•Practical full-time courses in film and video production. Day and evening time-tables.
Non specialist curriculum up to Certificate IV level including, production, direction, film and video camera operations, lighting, sound, editing and post production, cinematography/videography, directing, and post production at diploma level. Duration: 18 mths to 2 yrs. When: February each yr
Costs: ranges between \$3,750.00-\$8,500.00, includes all film and video equipment, materials, and services.

Australian Theatre for Young People (ATYP)

The Wharf, Pier 4/5 Hickson Road
WALSH BAY NSW 2000. Phone: (02) 9251 3900
Fax: (02) 9251 3909
Contact: Tim Jones
•Workshops
Creating opportunities for young people to develop personally

NSW

Academy of Photogenic Arts

ARTARMON NSW 2064
PO Box 362
AVALON NSW 2107
Phone: (02) 9974 4480
Fax: (02) 9974 5484
Email: carole@apa.edu.au

NOW YOU CAN HAVE QUALITY COMPONENTS IN YOUR CABINETS... AT AN AFFORDABLE PRICE



SPEAKERS

P180/2241 300/600w 18"
P150/2226 300/600w 15"
P120/130LF 300/600w 12"
E15/200S 200w 15"

DRIVERS

PA-D72 100w 2" Driver
PA-D45 50w 1" Driver
PA-D34 30w 1" Driver

FLARES

PH-2380 90 x 60 degree, 50mm throat
PH-3223 90 x 55 degree, 50mm throat
PH-2370 90 x 40 degree, 25mm throat
PH-240 90 x 40 degree, 25mm throat

Pro user price *\$428 incl tax
Pro user price *\$333 incl tax
Pro user price *\$311 incl tax
Pro user price *\$150 incl tax

Pro user price *\$337 incl tax
Pro user price *\$227 incl tax
Pro user price *\$122 incl tax

Pro user price *\$141 incl tax
Pro user price *\$155 incl tax
Pro user price *\$118 incl tax
Pro user price *\$44 incl tax



Over 30 lines available including horn to driver screw to bolt-on adaptors
Wholesale/bulk discounts available

Economical Recone kits and replacement diagrams eg/P150/2226 15" recone kit, Pro user price *\$157 incl tax

P. AUDIO - THE FUTURE OF LOUDSPEAKER TECHNOLOGY

For further information contact Cannon Wholesale Pty Ltd
Unit 11a/3 - 9 Kenneth Road Manly Vale NSW 2093 Tel: (02) 9948 4440 Fax: (02) 9948 9336 Email: cannon@ptmE.com.au

*prices subject to change

Technical Training Institutions

through professional theatre training. Ages 3-25

•Courses available in *Design/Tech Theatre, Lighting, Acting for Camera, Stage Directing, Circus, Acting Intensive* and many more. Duration: 2-3 hours per week for 8 weeks. Cost: \$180.00-\$220.00

Next term starts Oct 19th.

Charles Sturt University, Wagga Performing Arts

PO Box 588
WAGGA WAGGA NSW 2678
Phone: (02) 6933 2472
Fax: (02) 6933 2741
Contact: Ray Goodlass
•Bachelor of Arts (Design for Theatre & Television)
Duration: 3 yrs F/T, 6 yrs P/T
Cost: Standard University Fees (eg HECS)

Derek Williams Music Studio

2/10 Marne Street,
PO Box 251,
VAUCLUSE NSW 2030
Phone: (02) 9388 7222
Mobile: 0417 202 778
Fax: (02) 9388 7200
Email:
dwmusic@rainbow.net.au
•Music Technology Course
Cost: \$180.00
•Cubase Explained (4 sessions)
Cost: 4 Sessions \$150.00, 3 Sessions \$130.00, 2 Sessions \$90.00, 1 Session \$50.00.

ICIA Institute for Professional Development

PO Box 405
MIRANDA NSW 2228
Phone: (02) 9531 6777
Fax: (02) 9531 6777
Email:
icia_sydney@msn.com
Web site address:
www.icia.org
Contact: Brett Bower
Three courses available
•Perfect Image
Deals with video and computer interfacing for large screen display.
•AV Hire and Staging
Fundamentals for Technicians
•Professional sales skills for AV Hire and Staging
Course held at Sydney Gazebo Hotel
When: January 18-22 1999
Duration: 5 days
Cost: \$1,150.00 per course (ICIA members)
\$1,950.00 for non-members

ICIA Academy Online

PO Box 405
MIRANDA NSW 2228
Phone: (02) 9531 6777
Fax: (02) 9531 6777

Email:

icia_sydney@msn.com
Web site address:
www.icia.org
Contact: Brett Bower
Academy online is a series of Adult educational CD Rom courses. Combining text and testing on the internet with video graphics and sound on CD-Rom. Just access the internet whenever convenient, put the CD-Rom in the disk drive and start learning immediately.

Courses include:
The essentials of the AV industry, AV from A-Z for sales professionals, Installation school on-line, Design school on-line
Cost: courses start at A\$175.00

Illawarra Institute of Tafe

PO Box 240,
GOULBURN NSW 2580
Phone: (02) 4823 1809
Fax: (02) 4823 1806
Contact: Dr Michael Barkl
•Diploma in Music (Contemporary)
Duration: 2 yrs Full-time
Cost: \$560.00 per yr
Applications: September, late applications: Oct-Nov-Dec

JMC Academy

41 Holt Street,
SURRY HILLS NSW 2010
Phone: (02) 9281 8899
Fax: (02) 9212 4801
Email: enquiries@jmc.net.au
Web site Address:
www.jmc.net.au
Contact: Rollie Pontigon,
Cedric Poon
•Bachelor of Professional Studies (Commercial Music Production & Management)
Duration: 3 yrs. Partial HECS funding available.
•Bachelor of Engineering Technology (Audio Technology). Duration: 3 yrs. Partial HECS Funding available.
•Bachelor of Music and Media, Duration: 3 1/2 yrs Partial HECS funding available.
•Certificate IV in Audio Engineering and Sound Production. Duration: 36Wks F/T, 72Wks P/T
•Certificate IV in Music Business Management
Duration: 25Wks F/T, 54Wks P/T
•Certificates III & IV in Multimedia and Information Technology. Duration: 25Wks and 41Wks F/T
•Certificate IV and Diploma of Music (Contemporary)
Duration: 1 yr and 2 yrs F/T

Macquarie University

NSW 2109
Media and Communication Studies
•Bachelor of Media
Pre-requisites: TER of 90+ or document achievements in media-related work for mature age students
Duration: 3 yrs
Applications: Through UAC

Metro Screen Ltd

PO Box 299
PADDINGTON NSW 2021
Phone: (02) 9361 5318
Fax: (02) 9361 5320
•Certificate II in Arts (Interactive Multimedia)
Duration: 16 weeks, 3 days per week
Cost: \$3,950.00
•Certificate II in Television and Video Production
Duration: 10 weeks, 4 days per week
Cost: \$3,750.00
•Short courses available in Camera, Directing, Scriptwriting, Production, Media 100, Web Page Design, Digital Imaging, Digital Compositing and Digital Video.
Courses are hands-on and practical and are delivered by experienced industry professionals.
Call Metro for a full brochure.

National Institute of Dramatic Arts (NIDA)

215 Anzac Parade
KENSINGTON NSW 2052
Phone: (02) 9697 7600
Fax: (02) 9662 7415
Contact: Course Co-ordinator
•Bachelor of Art in Stage Management
Provides training in all aspects of stage management, as well as grounding in theatrecrafts, sound and lighting, technical theatre, theatre administration and production management.
Duration: 3 yrs, F/T
•Bachelor of Art in Design
Duration: 3 yrs, F/T
•Associate Diploma of Dramatic Art in Theatre Crafts
Provides basic training in all aspects of a specific craft area: either costumes, scenery or properties.
Duration: 2 Yrs, F/T
•Graduate Diploma of Dramatic Art in Production Management
Aims to equip students with the necessary technical, administrative and managerial skills to gain employment as a production manager in a small theatre company and

thereafter to advance to positions of greater responsibility
Duration: 1 yr F/T
Fee: HECS + Admin/Course levy.
Application: Direct to NIDA.

NIDA Open Program Short Courses

- Full program details, Phone: (02) 9697 7626. Sydney Program, Youth Program, Consultancies and Personal Tutorials. Summer Program: Held through January each yr. Short courses on most aspects of technical theatre.
Duration: Normally 4 Sundays, 10am-4pm.
Fee: Around \$260 each

Northern Rivers

Conservatorium Arts Centre

Cnr Keen and Magellan Streets, PO Box 1111
LISMORE NSW 2480
Phone: (02) 6621 2266
Fax: (02) 6622 0244
Contact: Anne Ransley
•Accredited certificate courses in Music, Dance and Drama
•Diploma Music in Music (Includes Music Technology)
Duration: 1-2 yrs
Cost: \$3,000.00+ per yr

School of Audio Engineering

- SEE ALSO OTHER STATES -
HQ: 57 Wentworth Ave
SYDNEY NSW 2010
Phone: (02) 9211 3711
Fax: (02) 9211 3308
Web site address:
www.sae.edu
Contact: Jason De Wilde
•DJ and Sampling
DJ Techniques, sampling and MIDI, live sound basics. Certificate awarded on completion of course.
Duration: 1 mth
Cost: \$900.00
•Studio Sound Certificate
Live Sound Technology, home studio equipment uses and technology, VETAB approved.
Duration: 6 mths
Cost: \$2,510.00

•Audio Engineer Diploma
Music Technology with individual practical studio time, VETAB approved, Duration: 9 mths
Cost: \$6,700.00-\$7,500.00
•Multimedia Producer Diploma
Multimedia Programming and production. VETAB Approved
Duration: 9 mths
Cost: \$8,200.00
•Bachelor of Contemporary Music: Advanced Production and recording techniques,

with some communication and music law subjects.
Duration: Dep. on Subjects
Cost: \$9,690.00

•Bachelor of Recording Arts
Advanced production and recording techniques, acoustics with emphasis on both classical and commercial music production.
Duration: Depending on Subjects. Cost: \$9,690.00

University of Wollongong

Faculty of Creative Arts
WOLLONGONG NSW 2522
Phone: 1800 680 320 or (02) 4221 4621
Fax: (02) 4221 3301
Email:
olena_cullen@uow.edu.au
Theatre students have a choice in shaping their career in Theatre Performance OR Devised Theatre or both!
Theoretical and practical investigations into stage management, lighting and sound operation and design. Successful students graduate with a Bachelor degree in Theatre Performance.
Entry Requirements: Appropriate UAI or equivalent and successful audition. Application for Audition to Faculty by 30 Sept. Universities Admissions Centre (UAC) by 30 Sept.
Duration: 3 yrs full-time
Cost: HECS + Annual University fees of approximately \$350

Victoria

Abbey Sound

5 Heversham Drive,
SEAFORD VIC 3198
Phone: (03) 9786 4211
Fax: (03) 9786 4710
Contact: Ross Nichol
•Live Mixing Course
When: Twice a yr
Duration: 8 weeks
Cost: \$400.00

Box Hill Institute of Tafe

PO Box 2014
BOX HILL VIC 3128
Phone: (03) 9286 9609
Contact: Noel Browne
•Associate Diploma of Arts
Theatre Technology
Three streams offered: Stage Management, Staging and Electrics
Duration: 2 yrs F/T
Applications: Through VTAC and individual interview.

Holmesglen Institute of Tafe

Chadstone Campus
Batesford Road
CHADSTONE VIC 3148
Phone: (03) 9564 1602
Fax: (03) 9564 1606
Contact: Theatre Department,

How would you like to learn sound engineering ?



This way

or



the SAE way

www.sae.edu

Degree - Diploma - Certificate

- * individual studio time guaranteed
- * the industry standard education
- * international and local job placement
- * the first and largest audio college est. 1976
- * call for studio tour and colour brochure

Government approved in all States of Australia with full University articulation.



Call any of our colleges to obtain a free brochure and organise a full inspection of our facilities:

SYDNEY	55 Wentworth Ave. Surry Hills NSW 2010	Tel. (02) 9211 3711
MELBOURNE	14-16 Fitzroy St. St.Kilda VIC 3182	Tel. (03) 9534 4403
BRISBANE	22 Mainview Tce. Milton QLD 4064	Tel (07) 3367 0143
ADELAIDE	18-20 Deeds Rd. Camden Park SA 5038	Tel. (08) 8376 0991
PERTH	231 Adelaide Tce. Perth WA 6000	Tel. (09) 325 4533
HOBART	164 Elizabeth St. Hobart TAS 7000	Tel. (03) 6231 5446
AUCKLAND	18 Heather St. Parnell, Auckland NZ	Tel. (09) 373 4712

Steinberg

SAE Sydney is an appointed Steinberg Training Centre and is approved to provide training in Steinberg Products.

London-Paris-New York-Munich-Vienna-Zurich-Auckland-Amsterdam-Geneva-Berlin-Stockholm-Singapore

Write in Reader Service Number: 141

Technical Training Institutions

SHOOTING IN A CEMETERY

30 figures gathered around a grave site at Toowong cemetery lit by long eerie shafts of light, surrounded by swirling smoke.

Macabre? No, just a group of enthusiastic students from the Queensland School of Film and Television shooting a night scene for a short 35mm film.

The QSFT is the one of the few film schools in the world that has second year students working with 35mm, which is the professional format used on both TV commercials and feature films.

All the students are given responsibility for key crew roles, and each get a video copy of their work on completion.

NIDA Tech Course Detailed

By Kate Davy, head of Technical Production

The Technical Production Course at NIDA is essentially a Stage Management course with lighting and sound as the minors. This being said, many graduates have ended up in the Sound and Lighting fields.

The students have to be prepared for classwork from 9am - 1pm and then work on productions in the afternoons and evenings until 11pm.

Many people ask about the interview process - it is much less daunting than it is perceived. To apply, ring NIDA as soon as possible. You will receive an application form return it quickly. You will then receive a project. This is what takes the time, we give a choice of 4 plays to

read and select from. Then you have to make a 1:25 model and have it with you on the audition day. We ask for a written sound and lighting information and will ask how you would solve the trick or tricks in the play.

When you are coming to the interview we also ask people to think about plays they have seen, books they have read, and if they liked or disliked something.

Many working professionals supplement the full time teaching staff, & NIDA has support from Jands Production Services who supply Vari*Lites.

The TP Course has also taken a leap into Events Management this year.

General Administration
 •Advanced Certificate in Theatre Technology (Stage Management)
 Duration: 1 yr F/T
 Applications: Through VTAC, Interview, and Folio of Work (not compulsory).

Institute of Lens Art Australia (ILAA)
 PO Box 177
 KALORAMA VIC 3766
 Phone: (03) 9728 1150
 Fax: (03) 9728 1150
 Contact: John Wynn-Tweg
 Diploma Courses run between late Feb-Nov and mid-yr courses available.
 •Diploma of Screen Arts (Film Practice)
 Professional theory and practice for indep. producer/directors. Three 16mm are produced by each filmmaker. Major crew roles are learned on a mutual crewing basis leading to a further 5 16mm projects. Course concentrates on writing, directing, cinematography, sound, editing and production management.

Duration: 1 yr
 Cost: \$5,300.00
 •Diploma of Screen Arts (Video and Television method). Professional training for the new video and television maker. Course structure equivalent to Film Practice Diploma (Above)
 Duration: 1 yr
 Cost: \$4,800.00
 •Diploma of Photography (Art and Photojournalism) Thoroughly covers camera handling and shooting techniques in a wide range of situations where life must be captured as it happens. These skills are built upon a foundation of visual design and self-expression. Course centres around transparency and black-and-white printing techniques.
 Duration: 1 yr
 •Short courses. Day and Residential Workshops are available in specialist areas of Film, Video and Photography eg. Lighting, Editing, Visual Design. Please inquire for details

Link

Announcing new
LKS Connectors

- robust
- durable
- good looking
- easy coupling
- roomy backshell
- crimp or solder pins
- Socapex compatible
- waterproof

These new lighting connectors from Link offer rugged durability, ease of use and industry compatibility. And we have cables that live up to the standard of the connector. Call now to find out more...




trc The Resource Corporation
 6 King Street Blackburn Vic 3130
 tel: (03) 9877 8233
 fax: (03) 9877 8244
 email: sales@trc.com.au

ROADIES FRIEND

THE SMART LEAD TESTER!

FEATURES:

- Colour coded LEDs and easy-to-read front panel
- Tough impact resistant case
- Fast single step function
- Auto off when idle
- Recessed switches
- Low battery drain
- Compact design

DETECTS:

- Opens/Shorts
- Phasing
- Shorts to connector shell

For further information and your nearest stockist call
Hoad Electronics
 on (02) 9871 3686

SAVE TIME!



Technical Training Institutions

Northern Melbourne Institute of TAFE

Faculty of Arts and Social Sciences, 20 Otter Street, COLLINGWOOD VIC 3066
Phone: (03) 9269 1740
Fax: (03) 9269 1654

Contact: Performing Arts Dept

•Diploma of Arts (Small companies and Community Theatre)

Duration: 2 yrs F/T, 26 hours per week.

When: February-November
Cost: \$550.00 approx

•Certificate IV in Sound Production

Duration: 1 yr F/T, 18 hours per week.

When: February-November
Cost: \$550.00 approx

•Diploma of Video Production

When: February-November
Duration: 2 yrs F/T, 16 hours per week

Cost: \$550.00 approx

•Other courses include, Diploma of Music Business Management, Certificate in Audio Recording, Manage-

ment in the Music Industry (short course), Non Linear Editing (short course). Applications: Through VTAC. For Specific Inquiries, contact the Department

Open Channel

13 Victoria Street, FITZROY VIC 3065
Phone: (03) 9419 5111
Fax: (03) 9419 1404

Email: opechannel@openchannel.org.au

Contact: Admissions Officer

•Short courses offered include: Non Linear Editing on the Avid Media Composer 1000 system, Creative Editing, The Producer and Production Management, Producing and Interactive Multimedia, 16mm Film - Sound and Editing, and more.

•Full-time course also available in Video Production and other subject areas.

Open Channel also do a series of Workshops and Seminars.

S.A.L.T (Sound and Lighting Technology)

PO Box 210
UFTG VIC 3156
Phone: (03) 9754 5122
Fax: (03) 9764 8101

Contact: Ken Pell

•Workshop for Sound Volunteers and Musicians
Duration: Weekend Church Sound Seminar

Cost: By arrangement

School of Audio Engineering

14-16 Fitzroy Street, 2nd Floor, ST KILDA VIC 3182
Phone: (03) 9534 4403
Fax: (03) 9525 3542

Web site address:

www.sae.edu

Contact: Neil Goudge

See NSW Listing for courses

Queensland

Bond University

GOLD COAST QLD 4229
Phone: (07) 5595 1024
Fax: (07) 5595 1015

•Bachelor of Arts and Bachelor of Communications
Duration: 2 yrs F/T (6 semesters)

Applications: Direct to University, Office of Admission c/- above

Brisbane Institute of TAFE

Ithaca Campus, Locked Bag 10
KELVIN GROVE QLD 4059

Phone: 1300 301 107

Fax: (07) 3259 9291

Contact: Darryl Timms

•Rigger/Dogger 10 day program

Basic Level

Duration: exit at 5 days

Cost: \$700.00

Intermediate Level,

Duration: exit at 7 days

Cost: extra \$300.00

Advanced Level

Duration: 10 days

Cost: extra \$400.00

•Scaffolding 12 day program

Basic Level

Duration: exit at 4 days

Cost: \$500.00

Intermediate Level

Duration: exit at 9 days

Cost: extra \$500.00

Advanced Level

Duration: 12 days

Cost: extra \$400.00

•Elevating Work Platforms

Duration: 1 day

Cost: \$160.00

Applications: Contact the institute for dates & times.

Organisations with groups of students are advised to contact the institute to negotiate price, dates and location.

James Cook University

College of Music, Visual Arts and Theatre

TOWNSVILLE QLD 4810

Phone: (07) 4781 5259

Contact: Ian Cole

•Bachelor of Theatre

(Technical Production)

•An Honours yr is available.

Duration: 3 yrs F/T

Queensland Conservatorium

Griffith University

PO Box 3428

SOUTH BRISBANE QLD

4101. Phone: (07) 3875 6287

Fax: (07) 3875 6282

•Bachelor of Music - Music Technology

Duration: 3 yrs full-time

Apply for Audition form with the Conservatorium by first week of August each yr, in addition to lodging a QTAC application.

•Bachelor of Popular Music

Duration: 3 yrs F/T

Application: Lodge Applica-

The Leading International Professional Audiovisual & Presentations Training Program returns to Australia!

International Communications Industries Association®

ICIA's Institute for Professional Development

Where: Sydney Gazebo Hotel, Australia

When: January 18-22, 1999

Outline: The Institute offers 3 courses for A/V technical and sales personnel. Each course runs for five days giving students in-depth knowledge of each subject.

This school offers a perfect educational environment in which you can access cutting-edge technologies, interact with qualified instructors in the field and strengthen your industry knowledge.

Course 1: Video and Computer Interfacing for Large-Screen Display

Course 2: A/V Hire and Staging Fundamentals for Technicians

Course 3: Professional Sales Skills for A/V Hire and Staging

REGISTER TODAY!

For more information about the Sydney Institute and other ICIA courses,

CONTACT BRETT BOWER Phone/Fax: (02) 9531 6777 Email: icia_sydney@msn.com

Technical Training Institutions

tion for Audition form with the Conservatorium by 1 October 1998, in addition to lodging a QTAC application.

Queensland School of Film & Television

PO Box 380, FORTITUDE VALLEY QLD 4006

Phone: (07) 3257 1939

Fax: (07) 3257 1947

Australia's leading private film school. QSFT is one of the few film schools in the world which uses 35mm film as part of its diploma program. Lecturers have worked on many movies and TV shows such as "Mr Reliable", "Crocodile Hunter", "Ocean Girl", "Medivac", "Flipper", "Misery Guts".

•Diploma of Film and Television Production
Duration: 2 yrs

Application: Contact the school.

School of Audio Engineering

22 Mayneview Terrace, MILTON QLD 4064

Phone: (07) 3367 0143

Fax: (07) 3369 8108

Web site address:

www.sae.edu

Contact: Michael Quinn

See NSW Listing

Southbank Institute of TAFE Contemporary Music Centre

96 Ernest St

Locked Mail Bag 14

SOUTH BRISBANE QLD

4101, Phone: (07) 3244 5954

Fax: (07) 3846 5810

Faculty of Design, Arts and Media

•Certificate IV in Contemporary (Performance and Sound Engineering)

AUSTUDY and ABSTUDY approved course.

Duration: 12 mths F/T

Pre-Requisites: Entry

requirements for the sound engineering strand include: Successful completion yr 10 in a Queensland Secondary School (or equivalent) or entry as a mature age student.

Demonstrate an acceptable level of aural discrimination.

Applications: Persons wishing to apply for entry to this course should contact the Contemporary Music Centre for an Application Package.

Cost: Student Services fee of \$0.20 and Tuition charge of \$0.80 per student contact hour per subject. Full-time students are required to pay the following fees: A ceiling fee of \$770.00 is applicable

to students paying full fees in a 12 mth period.

•Certificate II in Arts - Performance Studies

Phone: (07) 3244 6317

Fax: (07) 3244 6401

Duration: 12 mths, F/T or P/T

When: Courses start January

and July. Application: Direct

to Southbank

Vandersound Audio

Engineering and Multimedia School, 202 Hein Road, BUCCAN QLD 4207

Ph: (07) 5546 8100, Fax:

(07) 5546 8866

email:

ericv@vandersound.com.au

Web site address:

www.vandersound.com.au

Contact: Eric Vandersande

•"One-on-One" courses available day, night & weekends all yr.

•Tafe courses available week nights all yr

•Audio Engineering Certificate 3

Duration: 6 weeks min Full-

time or 23 weeks min Part-

time. Cost: \$2,260 Full-time

or \$2,620 Part-time.

All courses below are 3 to a

class at Logan Tafe

•Audio Engineering Level 1

Duration: 3 weeks

Cost: \$205

•Audio Engineering Level 2

Duration: 5 weeks

Cost: \$341

•Interactive Multimedia Level

1, Duration: 3 weeks Cost:

\$205

•Interactive Multimedia Level

2, Duration: 5 weeks

Cost: \$341

•MIDI Sequencing & Hard

Disc Recording Level 1

Duration: 3 weeks

Cost: \$205

•MIDI Sequencing & Hard

Disc Recording Level 2

Duration: 5 weeks

Cost: \$341

•Interactive Multimedia

Certificate 3

Duration: 6 weeks minimum

Full-time or 23 weeks

minimum Part-time.

Cost: \$2,260 Full-time or

\$2,620 Part-time

•MIDI Sequencing & Hard

Disc Recording Level 3

South Australia

Adelaide Institute of Tafe Centre for Performing Arts

101 Grote Street,

ADELAIDE SA 5000

Phone: (08) 8231 5416

Fax: (08) 8231 8028

Contact: Maxine LeGuier

•Advanced Diploma of Arts

(Technical Production)

Comprising: Certificate 4,

Diploma and Advanced

Diploma Studies

Austudy/Abstudy Approved

Duration: 3 Yrs Full-time

Application: Applicants need

to provide a Health Certificate

and are required to have

accurate colour perception.

Selection Criteria via

Interview

Flinders University of South Australia

(Screen Studies Department)

GPO Box 2100

ADELAIDE SA 5001

Sturt Rd,

BEDFORD PARK SA 5042

Phone: (08) 8201 2578

Fax: (08) 8201 2556

Email:

wendy.hill@flinders.edu.au

Contact: Wendy Hill, 8.45am

- 3pm Mon to Fri

•Bachelor of Arts (Degree in

Screen Studies)

1st, 2nd, 3rd yr and honours

MA in Creative Screen

Production will be offered

from 1999.

Duration: 3 yrs full time

Cost: HECS

Application: SATAC

Regency Institute of TAFE

M.I.T.C. (Music Industry

Training Centre)

Salisbury Campus

Wiltshire St

SALISBURY SA 5108

Phone: (08) 8207 9821; Fax:

(08) 8207 9999

Email:

andrew.smiles@regency.tafe.sa.edu.au

Contact: Andrew Smiles

Offering training in Perform-

ance, Technical and Business

for Contemporary Music

Industry.

•Dip. Sound Production

Duration: 2 yrs F/T (Cert. IV

granted if early exit after 1 yr)

•Cert. IV Applied Design

(Interactive Multimedia)

"KISS a career in FILM
GOODBYE."

OR CALL THE FILM SCHOOL AT THE INSTITUTE OF LENS ARTS AUSTRALIA

Diploma and short courses that will give you industry level experience of independent filmmaking, writing, cinematography, sound, production coordination and post production. Direct 3 x 16mm films, crew on at least five others. How else can you get a 50 minute film showreel together in less than one year?? Call us!

ILAA INSTITUTE OF LENS ARTS AUSTRALIA (03) 9728 1150

PO Box 177, Kalorama Victoria 3766

Australia's Leading Private Film School



- Fully Accredited Two Year Diploma
- Internationally Recognised
- Directing and Producing Courses
- Practical, Hands-on Education
- Industry Lecturers
- 35mm Final Year Productions

Queensland School of Film and Television

Ph: (07) 3257 1939

Technical Training Institutions

Duration: 1 yr F/T

•Cert. III Commercial Music (Foundation Studies)

Duration: 18 weeks F/T (Feb & July intake)

•Cert. IV Commercial Music (Performance). Duration: 1 yr F/T, or P/T equiv.

•Dip. Commercial Music (Performance). Duration: 2 yrs F/T, or P/T equiv.

•Ad. Dip. Commercial Music (Performance) Duration: 1 yr F/T, or P/T equiv.

•Cert IV Music Industry Skills (Music Business)

Duration: 1 yr F/T or P/T equiv.

Applications for all courses from Oct for Feb intake.

(Apply from Feb for July intake for Cert III Commercial Music)

School of Audio Engineering

282 Gouger Street, ADELAIDE SA 5000

Phone: (08) 8376 0991

Fax: (08) 8376 1867

Web site address:

www.sae.edu

Contact: Michael Davidson

See NSW Listing

Vaughan Harvey Radio School

3rd Floor, Epworth Building, 33 Pirie Street, ADELAIDE SA 5000

Phone: (08) 8231 3087

Email: jvh@ozemail.com.au

Web site address: http://

www.ozemail.com.au/~jvh

Contact: Vaughan Harvey

•Radio course

The school offers unlimited use of fully equipped practice studio. Duration: 12 weeks

Part-time, during February, June and September.

Cost: \$650.00 (certificate)

Private tuition available at \$30.00/hour

University Radio 5UV

228 North Terrace,

ADELAIDE SA 5000

Phone: (08) 8303 5000

Fax: (08) 8303 4374

Email:

npage@radio5uv.adelaide.edu.au

Contact: Nicky Page

•Certificate II in Community

Radi. Cost: \$500.00 or

\$30.00 per module

•Customized Courses using

modules of Certificate II.

Course design and cost

negotiation.

•Certificate III in Australian Community Radio Training.

Duration: 270 hours

Also available as basic training for 5UV volunteers, 6 modules of Certificate II.

Duration: 30 hours

Cost: \$150.00

Western Australia

Film and Television Institute

PO Box 579

FREMANTLE WA 6959

Phone: (08) 9335 1055

Fax: (08) 9335 1283

Email: fti@fti.asn.au

Web site address:

www.imago.com.au/fti

•Short courses, production and research assistance, facilities and equipment hire for the film video and multimedia industries.

School of Audio Engineering

231 Adelaide Terrace,

PERTH WA 6000

Phone: (08) 9325 4533

Fax: (08) 9221 4401

Web site address:

www.sae.edu

Contact: Dean Pearson

See NSW Listing

South Metropolitan College of TAFE

12 Egmont Road,

HENDERSON WA 6166

Phone: (08) 9437 3100

Fax: (08) 9437 1657

Contact: Jack Hol

•Dogging course

•Basic Rigging

Pre-requisites: Dogging

•Intermediate Rigging

Pre-requisites: Dogging,

Basic Rigging

•Advanced Rigging

Pre-Requisites: Dogging,

Basic Rigging, Intermediate

Rigging

All of the above courses cover practical work.

Duration: All courses are

Self-paced

Cost: \$450.00 each or

\$1,200.00 for all four

courses, or \$950.00 for all

three rigging courses.

Western Australian

Academy of Performing Arts

Edith Cowan University

2 Bradford Street,

MT LAWLEY WA 6050

Phone: (08) 9370 6594

Fax: (08) 9370 6665

Web site address: http://

waapa.cowan.edu.au

Contact: James Hamilton,

Admissions Officer

•Advanced Diplomas of

Performing Arts

Seven courses in Lighting,

Sound, Venue Operations,

Stage Management, Sets,

Costume, Design

Duration: 3 yrs Full-time

Cost: Approx \$400.00 per

semester. Application: Direct

to Academy. Completion of

set project and interview

Tasmania

School of Audio Engineering

164 Elizabeth Street,

HOBART TAS 7000

Phone: (03) 6231 5446

Fax: (03) 6312 578

Web site address:

www.sae.edu

Contact: Dean Preston

See NSW Listing

NIDA

The National Institute
of Dramatic Art
Sydney, Australia

NIDA invites applications for full time training courses in:

ACTING • DESIGN • TECHNICAL PRODUCTION

Bachelor of Dramatic Art Degree three year courses

THEATRE CRAFTS

Diploma two year course

DIRECTING • VOICE STUDIES • MOVEMENT STUDIES PRODUCTION MANAGEMENT

Graduate Diploma one year courses

Auditions/interviews will be held in capital cities

in November 1998.

APPLICATIONS FOR 1999 COURSES CLOSE 1 OCTOBER 1998

For a Prospectus and Application Form contact:

The Admissions Officer, NIDA, Sydney NSW 2052, Australia

Telephone: (02) 9697 7600

Facsimile: (02) 9662 7415

E-Mail: nida@ibm.net

A CENTRE OF EXCELLENCE IN TRAINING FOR THEATRE, FILM AND TELEVISION

Technical Courses

Australia's most comprehensive and dynamic performing arts institution is still taking applications from students wishing to enrol in our three year diploma courses in:

Sound	Stage Management
Lighting	Design
Staging	Venue Operations
Costumes	

Production and Design students at the WA Academy of Performing Arts are able to see their work utilised in theatre, musical theatre, dance, classical, jazz and contemporary music performances.

For more information contact:

James Hamilton, Admissions Officer, (08) 9370 6594

Fax (08) 9370 6665, e-mail: j.hamilton@cowan.edu.au

Website: http://waapa.cowan.edu.au



WESTERN AUSTRALIAN
ACADEMY OF
PERFORMING ARTS
EDITH COWAN UNIVERSITY

Connections TRADER

Your **NATIONAL** selling machine!

STUDIOS:

Capture the Magic of a Live Performance in an acoustically Purpose Built studio on the World's leading hard disc recording system - "Pro Tools". Satellite Recording Studio. Perth (08) 9470 4003.

MEMBERSHIPS:

YOU can now buy shares in Love Records by becoming a member of the

SA Business Co-op. To find out more call (08) 8297 6519

FOR SALE:

1 Korg ex M1R Synth Module - \$1,250.00, 1 Yamaha TG77 Synth Module - \$1,250.00, 1 Sony 1000ES DAT Machine, excellent Condition, very reliable - \$1,250.00, 1 Lexicon LXP1 Reverb in 19 inch rack mount panel -

\$600.00, 1 pair Yamaha NS 10 Speakers - \$550.00, Empty half inch and 1 inch metal reels 10.5 inch diameter. Phone (03) 9587 7711
AAFTER a certain piece of gear or have some to sell. Call Neil at Cannon Sound on (02) 9948 4440.

APHEX Dual channel type C exiter \$350.00 (02) 9799 7219

ARX Crossovers stereo 2 way or mono 3 way ECI \$250.00 EC2 \$350.00 (02) 9799 7219

AUSTRALIAN Monitor 1K2. Immaculate Condition. Phone James (02) 9522 9865 or 018 289 159 \$1,300.00.

BOSE 302 Subs. Had corporate life only. \$1500 the pair. Cannon Sound (02) 9948 4440.

BSS FDS360 Crossovers (2) \$900 each. Cannon Sound (02)9948 4440

CLAIR Bros R3 Cabinets \$3000 the pair. Cannon Sound (02)9948 4440.

CLAY PAKY Piper colour changers, DMX controlled, 3 for \$1,000.00 (02) 9799 7219

COEMAR Pilota 250SN Followspots (need irises) \$350.00 (02) 9799 7219

CREST V1100 Amplifiers, new \$1,200.00 each (02) 9799 7219

Anaconda Audio Productions

SPECIALISING IN:

- * COMPACT HIGH END AUDIO
- * UHF/VHF WIRELESS MICROPHONES
- * PORTABLE MODULAR STAGING
- * PRODUCTION SERVICES
- * DESIGN & INSTALLATION
- * HIRE & SALES

PH/FAX: (02) 9415 6270
MOBILE: 0418 285 565

LIGHTING WORKSHOP Equipment For Sale

- 8 Clay Paky Golden Scan HPE1200's in roadcases \$9,000 ea.
- 18 Clay Paky Combi colour 300's \$1,600 ea.
- 16 Clay Paky PinScans \$1,100 ea.
- 6 Clay Paky Atlas \$1,600 ea.
- 5 Clay Paky Astro Raggi Powers \$2,500 ea.
- 8 Clay Paky Mini Scan 300's \$1,800 ea.
- 4 Studio Due Stratos \$4,000 ea.
- 1 MA Scan Commander \$9,500
- 1 Hot Technology Hot Tech 2000 \$1,500

Phone: (08) 9227 1221
Fax: (08) 9227 1242

B.S. Sound PA Hire

3k PA with separate F/B, LX & crew. Driveway Vocal PA Systems & LX, Mics & components also available.

Contact Mark Barry for free quote
(03) 9531 1403 or 041 999 3966

www.bssound.com.au
mark@bssound.com.au

events
THE SHOWBIZ SHOP

SOUND & LIGHTING

Hire, Design, Sales
Installations, Service

47 Auburn Street, Wollongong
Ph: (02) 4229 6010

Lighting by Design

Glass Gobo
Specialist

Full colour **Gobo's**

Greyscale glass,
Stainless Steel,
Exceptional service.



The only full colour manufacturer in southern hemisphere!
Tel: 041 879 77 62 Fax: 0755 292226
E-mail LBD@OntheNet.com.au

Graftons Lighting & Sound

Professional Equipment & Service
**Hire, Sales, Installs
Production & Design**

6/890 Bourke St, Waterloo NSW 2017
Tel: (02) 9698 7777 Fax: (02) 9698 9999
Email: graftons@idx.com.au



**STOP
that
noise!**

Hum Eliminator™

We've all heard that buzz, that noise, that AC hum pouring through audio equipment. The Hum Eliminator breaks the groundloops safely, while leaving all signal grounds intact. No dangerous ground lifting. Works with balanced & unbalanced signals. Made in the USA. Full 2 year warranty.

2 Channel MiniBox \$169
8 Channel Single Rack Unit \$499

Line Level Shifter™

Allows you to use equipment with different line level requirements. It converts back & forth between -10dBV and +4dBu. Contains EBTECH's Hum Eliminator technology.

2 Channel MiniBox \$199
8 Channel Single Rack Unit \$599

Australian Audio
SUPPLIES

Tel (043) 291 711 • Fax (043) 291 747

E
B
T
E
C
H

CROWN K2 Amplifiers, as new \$2,200.00 each (02) 9799 7219

CYBERLIGHTS x 2 New Globes, Excellent condition. \$8,975.00ono (02) 6658 2240

DBX Compressors, 163A \$190.00, 163 \$100.00, 160X \$1,000.00 pair, 160A \$650.00, 166A \$600.00, 1066 \$900.00 (02) 9799 7219

DIAPHRAGMS to fit JBL 1" eg 2420, 2470, 2421, 2425, 2426 etc \$70 each. Cannon Sound (02) 9948 4440. Call for a free catalogue. Visit us on the web at www.cannonsound.ptmE.com.

DIAPHRAGMS to fit JBL 2" eg 2441 or 2445 etc \$100 each. Cannon Sound (02) 9948 4440.

DIAPHRAGMS to fit JBL 2416 ie EONs and MR Series \$100 each. Cannon Sound (02) 9948 4440.

DIAPHRAGMS to suit Altec 1+1/2" \$70 each. Cannon Sound (02) 9948 4440.

ETONE 1507 cabinets each 2 x 805 15" plus emilar horn \$1,700.00 pair (02) 9799 7219

EV EQ231 Stereo 31 Band Eq \$600. Cannon Sound (02) 9948 4440.

EV FM1202 12" + 1" Horn Wedges (4) \$1,300.00 pair (02) 9799 7219

EV Mongoose Speakers \$3500 the pair. Cannon Sound (02)9943 4440. Visit us on the web at www.cannonsound.ptmE.com.

EV SX200 12" horn cabinets \$1,250.00 pair, (02) 9799 7219

FINAL Clearance, Amps, Mikes, Speakers, Lighting, Cables, Rigging, over \$50,000.00 worth, must be sold, \$15,000.00 ono. Most as new. Fax: (08) 8953 5415 or Phone: 0417 815 673.

GIUITARISTS why be nailed to the stage, get mobile, get a wireless system. Anything Audio (02) 9818 8000 Rozelle
HEWLETT Packard Valve signal generator Sine

Wave only. 5Hz-600kHz \$90.00 Phone: 0500 509 509

HIGHEND Track-spots Mark II \$1,190.00 each. Electrolite CP10 DMX Controller \$1,190.00 Phone: (02) 9550 5335

IN Ear Monitor wire or wireless? Shure Thing come and see - come and try, Anything Audio (02) 9818 8000 Rozelle

JANDS 920 Bi-amped Amplifiers. Fully Serviced \$850 each. Cannon Sound (02)9948 4440.

JANDS AF42 bi-amped wedges \$1400 the pair (2). Cannon Sound (02) 9948 4440. Call for a free catalogue.

JANDS Digital Roadpack Dimmers 2.5K \$1200 each. Cannon Sound (02)9948 4440.

JANDS Multipack 5K Dimmers \$400 each. Cannon Sound (02)9948 4440.

JANDS Roadpack analogue dimmer racks \$750.00 each, Celco Digital to analogue adaptor, 36 channel \$300.00 (02) 9799 7219

JANDS SR3000 \$2,400.00, ATM1000B \$1,000.00, Peavey 16x6 \$1,000.00, E120 cones \$100.00, Multicore 28ch 45m+15m \$1,750.00 BSS 4 gate \$2,000.00, BSS320 X'overs \$1,000.00, ARX600 \$600.00, Wedges JBL \$750.00, Revolver/Court Subs unbated \$400.00, TAC28:8 \$6,000.00 (07) 3846 2879, (07) 3345 1297.

JBL 2241 4 Ohm speakers in very good condition (2) \$600 each. Cannon Sound (02) 9948 4440.

JBL M644 4 channel noise gate \$350.00 (02) 9799 7219

LE MATRE fogger, large and powerful \$350.00 (02) 9799 7219

MACKIE 24 Channel 8 buss Mixing console and power supply. In im-

maculate condition \$4,600.00 ono (02) 6559 8766

MARTIN RS1200 Mid bins loaded with ATC 12" speakers \$500 the pair. Cannon Sound (02) 9948 4440.

PEAVEY 16/8 Monitor Mixer in roadcase \$1400. Cannon Sound (02) 9948 4440.

PEAVEY consoles, Mk3 16 \$700.00, Mk 3 24 \$900.00, Mk 4 24 \$90.00 16/6 monitor \$1,000.00 12/6 \$700.00 (02) 9799 7219

PERREAUX 6000 Amp \$900. Cannon Sound (02)9948 4440. Call for a free catalogue.

PHONIC 24/4/2 in aluminium roadcase. This current series desk has been well cared for. \$1275. Cannon Sound (02) 9948 4440. Call for a free catalogue.

PTMMLX4 4 way crossovers with limiters \$350.00 (02) 9799 7219

RECORDING and PA equipment good condition and cheap. Phone for list (02) 6768 9161

ROCKARD Coatings. Give your PA system and roadcases a spruce up for summer. 4 litres \$72. 18 litres \$225. Incl. delivery anywhere in Australia. Cannon Sound (02) 9948 4440.

SABINE FBX900 feedback eliminators \$500.00 each (02) 9799 7219

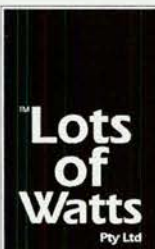
SOUNDCRAFT Spirit 8 24/8/2, flightcased, \$7,500.00 (02) 9799 7219

GT REPRODUCTIONS

19" CD/Mixer Console Cases. High Quality 12mm Customwood. All Australian Made, \$129 inc. P/P Cheque or Money Order to - PO Box 14, Surrey Hills VIC 3127, Phone Enq. (03) 9890 2570

Professional Audio and Lighting Sales, Service and Production

1 Mary Parade, Rydalmere NSW 2115
Ph: +61 2 9638-0302
Fax: +61 2 9638-0331



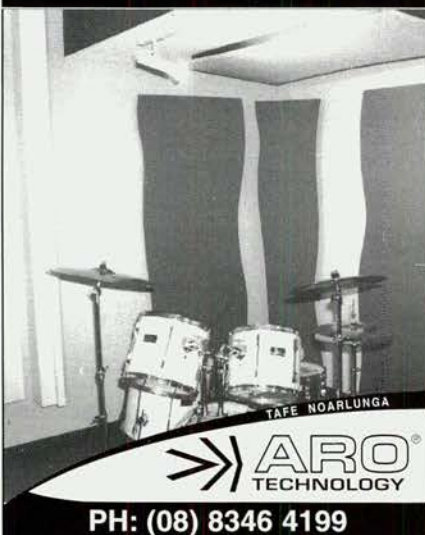
"Ever wonder why some bands become famous and some just don't cut it? Over the years we have a constant stream of musos calling up to thank us for setting them on the path to fame and fortune. The secret? Electric Sunshine. Brighter than the rest." Phone us before it melts! (02) 9550 6000 If it does melt down fax it (02) 9550 5500 OH NO! It's melted TOO! then: lights@electricsunshine.com.au. PHEW!

The gobo Factory

- * Quality custom-made steel & glass gobos
 - * Theme sets * Catalogues
 - * Competitive prices * 48 hour turnaround
- Ph: (03) 5439 3770 Fax: (03) 5439 3601
Email gobos@netcon.net.au

ACOUSTICS

• Manufacturers of high performance modular acoustic panels • Room design • Acoustic analysis



"YOUR COMPLETE STAGING SERVICE"

STAGING RENTALS (02) 9519 - 6300

- Concerts, Conferences, Catwalks.
- Productions, Exhibitions, Stages.
- Rental of Drapes, Risers, Flats.
- Delivery and Installation.

1 PYRMONT BRIDGE RD CAMPERDOWN NSW 2050
FAX (02) 9519 6489



HirePoint98 Hire Software

32bit Windows95 & NT software

For AV, Lighting & Audio Equipment rental & production, staging & business theatre.

It will exceed your expectations!
finalist - 1997 Small business show software awards.

Download a demo from the web now!
www.HireP.com

HirePoint Software
Phone (02) 9824 1105, Fax (02) 9824 0554



BASF National Tracking Guide

ARTIST	PRODUCER	ENGINEER	PROJECT	ARTIST	PRODUCER	ENGINEER	PROJECT
New South Wales							
A# Sharp Jeff Cripps (02) 9153 9988. 24 Track 1"				Paul Bryant Mastering Paul Bryant (02) 9748 0222. Mastering Suite			
Ray Beadle	Jeff Cripps	Jeff Cripps	CD	Nick Abbas	Jeff Cripps	Paul Bryant	CD Album
Hell Hounds	Jeff Cripps	Jeff Cripps	Demo	Craig Giles	Grant Luhrs	Paul Bryant	CD Album
Tamin	Jeff Cripps	Jeff Cripps	CD	Hellhounds	Jeff Cripps	Paul Bryant	CD Master
Earth Eater	Jeff Cripps	Jeff Cripps	CD	Gympie Muster	Various	Paul Bryant	CD Compilation
Dismembered	Jeff Cripps	Jeff Cripps	Demo	Rumblefish	Jeff Cripps	Paul Bryant	CD Master
Nick Abbas	Jeff Cripps	Jeff Cripps	Indian CD	Alison Hams	Bill Chambers	Paul Bryant	CD Master
Angelwood Studios Peter Sheedy (02) 6768 9161. 2" 24 Track Flying Feders, Neumanns and Valves				Q Recording Roy Mollace (02) 9212 4851. G + 4000 SSL 24 Track Analogue			
The Bentleys	Flash/Band	Flash Sheedy	CD Album	Spiderbait	Phil McKellar	Phil McKellar	Album
Melanie Little	Flash/Artist	Flash Sheedy	CD EP	R & R Recordings Stucio Robert Zimola (02) 9672 4494.			
Percy Hansen	Flash/Artist	Flash Sheedy	CD Album	Heffer	Band	Robert Zimola	Demos
Slick Nick	Flash/Artist	Flash Sheedy	CD Single	R.C.A.		Robert Zimola	Radio Ads
Jonny Green	Flash	Flash Sheedy	CD Album	Ged Zarb	Artist	Robert Zimola	Demos
Blues Cowboys	Flash	Flash Sheedy	CD Album	Blacktown TAFE	TAFE	Robert Zimola	Demos
Aphek Studio Greg Dixon (02) 9876 8170. 16 Tracks to 1" Analogue				Rathouse Studios Mark Macedone (02) 6962 2307. 24 Track Analogue and Digital			
Grout	Band	Greg Dixon	EP	Griffith Video World	Chris Campbell	Chris Campbell	Jingle
Red Herring	Band	Greg Dixon	Demo	Janine	Chris Campbell	Chris Campbell	Album Tracking
Tom Clewellyn	Tom	Greg Dixon	EP	EV3	Chris Campbell	C. Campbell/Mark Macedone	Album Tracking
Bad Mojo	Band	Greg Dixon	Demo	Undiscovered (Comp.)	C. Campbell	Chris Campbell/M. Macedone	Album Tracking
Tim & Andrew	Band	Greg Dixon	Demo	Roam Around Sound Angus Kingston (02) 9810 8121. 16 Track Mobile Studio			
Audio Loc Sound Design John Dennison (02) 941 3157. Film & TV Post				Three Squire	Jamie Carter	Jamie Carter	Album
Murder Call	West Street Productions	Tony Murtagh/Roland Morris	TV Series	Multicultural Womens Project	Mel Brue	Angus Kingston	Album
Heartbreak High	Gannon Television	Penn Robinson/Keith Newman	TV Series	Professor Groove	Band	Angus Kingston	Live Recording
Occasional Coarse Language	Very Chancy Material	Craig Butters/Tony Vaccher	Feature Film	Rockinghorse Zubin Henner (02) 6688 4005. 48 Channel Neve, Studer, Pro Tools 24			
Paperback Herd	Paperback Films	J. Cowper Anderson/T. Vaccher	Feature Film	Enry	Darpan/Jo-Soledad	Zubin Henner	Single
Audioscapes Jim Blackfoot (02) 9550 4235. 24 Track Multi Purpose Facility				Rollerball	Band	Anthony Lycenko	Demo
Monica Trapaga	Julian Gough	Jim Blackfoot	Video Music Tracks	Fishing Show	Hevenopt Productions	Michael Worthington	Audio Post Production
NSW AMES	Darrell Hilton	Jim Blackfoot	Instructional Video	Seven	Seven	Zubin Henner	Radio Edits
Julian Gough	Telstra	Jim Blackfoot	Ad	Eric Burdon		Zubin Henner	Remastering
Burbank Animation	Roz Phillips	Jim Blackfoot	Dialog Recording	Nature Of The String	Band	Zubin Henner	Demo
Burbank Animation	Roddy Lee	Jim Blackfoot	Post Sync. S-FX & Foley	Sony Studio Sarah (02) 9383 6461. 24 Track Recording Studio			
Alana DeRoma	Linda Nagle	Jim Blackfoot	Demo Tracks	Underground Lovers	Tim Whitten	Tim Whitten	Album Mix
Charing Cross Studio David Sykes (02) 9387 8362. Classic Neve Automation/Valve Outboard				Brown	Simon Tonx	Simon Tonx	Overdubs/Mix
Smudge	Band/Peter Jones	Peter Jones	Album Tracking/Mixing	Margaret Ulrich	Eddie Rayner	George Gorga	Album Mix
Sister Madly	Wayne Connelly/Band	Wayne Connelly	Album Track/Mix	Gaslight Radio	Tim Whitten	Tim Whitten	Album Mix
Flanders	Wayne Connelly	Wayne Connelly	Album Track/Mix	Obscure	Simon Tonx	Simon Tonx	Record/Mix CD
Penny Flanagan	Tom Powels	Tim Powels/Chris Campbell	Album Mixing	Marty Irwin	Adrian Bolland	Adrian Bolland	Mix Album
Morte Gratis	Paul McKercher	Paul McKercher	Album Mixing	Soundwarp Meredith Brooks (02) 9905 7144. Mastering			
Gerling	Steve Foster	Steve Foster	Album Track/Mix	Collison	Nathan/Adam	Meredith Brooks	Demos
Darling Harbour Studios Ike (02) 9211 1474. 24 Track MCI. 32 Channel SUI5 MCI				M.I.A.	Michael	Meredith Brooks	Album
Patricia Wade	Mr Riff	Ike	Demos	Night Zoo	Robert	Meredith Brooks	EP
Glory	Band	Ike	Demos	Giffaux	James	Meredith Brooks	Demo
Hematite	Band	Ike	EP	Dee Rogers	Stav/Julia	Meredith Brooks	Album
Ghost Writers	Rob Hirst	Ike	Tracking	Chameleon Rose	Chris	Meredith Brooks	EP
Chameleon Rose	Mr Riff	Ike	ReMix	Studios 301 F. Simpson (02) 9211 7301.			
XYZ	Band	Travis	Demos	Universe	Susan Rogers	Susan Rogers	Album Mixes
David Lawrence Music Production David Lawrence (02) 6559 8766. 24 Channel/Digital 8 Track				Hoodoo Gurus	Phillip McKellar	Phillip McKellar	Live Mixes
Mick Leigh	Mick Leigh	David Lawrence	Album	Spiderbait	Phillip McKellar	Phillip McKellar	Album Mixes
Festival Mastering Bianca Vukelic (02) 9395 8070. Mastering				Studios 301 Mastering Jacqui Espie (02) 9211 7301. CD Mastering Facility			
Gerling	Steve Foster	William Bowden	Album & Single	Powderfinger	Nick Didia	Don Bartley	Album
Jackson Code	Jason Kain	William Bowden	Album	Underground Lovers	Band	Don Bartley	Album
Lavish	Mark Thomas	William Bowden	Single	Mark Of Cain	Band	Steve Smart	Back Catalogue
Pollen	Cameron Allen	William Bowden	Album	Cold Chisel	Band	Don Bartley	Single
Purplene		William Bowden	EP	Gadflys	Mark Thomas	Steve Smart	Album
Kilter	Band	William Bowden	EP	Kate Ceberano		Don Bartley	Single
Festival Studio Bianca Vukelic (02) 9395 8070. Recording				Top Cat Recording Studio Brad Wann (02) 6628 0843. Automated 24 Track Analogue 1" - 16 Track Digital, Mastering and CD Burning			
silverchair	Nick Launay	Nick Launay/Matt Lovell	Album	Paul's Fish Cafe	Brad Wann/Graham Ward	Brad Wann	Album Tracking
Myriad	Mark Thomas	Mark Thomas/Matt Lovell	Album	Blues Vein	Band	Brad Wann	EP
JMF Sound Studio Fran Esther (02) 9790 4097. X850, 24 ADAT				The Laymo's	Band	Brad Wann	EP
Charles Copin	Artist	Ralph Esther	Demo	Geraldine Loong	Brad Wann/Horace Bevan	Brad Wann	Single
Jeff Galea	Artist	Ralph Esther/Mike Ward	Film Score	Brooke	Brad Wann	Brad Wann	EP
Guinn Regal	David McMillan	Ralph Esther	Album	Staranise	Band	Brad Wann	Album Tracking
Luv Yung	Artist	Ralph Esther	Album	Velvet Sound Recording Studios Dave McCunn (02) 9283 5968. 32 Ch. 24 Track 2 Inch Analogue			
ADTEC Communications	Mike Ward	Mike Ward	Music On Hold	Utopian Babies	Dave Wilkens	Craig Portells	Album Tracking
Robert Wolfe	Artist	Ralph Esther	Demo	Fountainshead	Richard Mohen	Adrian Grigorieff	Album Tracking
Lucinda Street Recordings Rick Mostyn (02) 4229 1169. Eight-Track Digital Mobile				Pacino	Murray Stuart	Tony Wall	EP
Vera Troitsky	Rick Mostyn	Various	CD	Minq	Band	Adrian Grigorieff	Album Mixing
Megaphon Guy Dickerson (02) 9550 6576. 24 Track Music				Montana	Paul Scott	Craig Portells	Mixing Singles
Tim Geyes	Mike Gupp	Guy Dickerson	Album	Holly	D. Henry Fenton	Craig Portells	Mixing Singles
Golden Rough	Band	Jason Blackwell	Album	Queensland			
Gaslight Radio		Tim Whitten	Album	Burbank Productions John Ryan (07) 3245 4314. 16 Track Studio			
Human Nature		Vince Pizzinga	B Sides	Wendy Bell	Artist	John Ryan	Album
Lime		Mark Thomas	Album	Michael King	John Ryan	John Ryan	Demos
Pennidredful		Lachlan Mitchell	Album	Hot Digetty	Steve Crick	John Ryan	Single
Nu-Town Studio Greg Hopping (02) 9516 3306. 16 Anna/32 Digital				Tony Martin	Tony Martin	John Ryan	CD-ROM
Navigator	Greg Hopping	Sofie Loizou	Album	Domenic Sound Shane Hughes (07) 3216 5187. 32 Track ADAT Digital			
Shiewy	Greg Hopping	Sofie Loizou	Album	Rhonda Tant	Shane Hughes	Shane Hughes	Debut EP
Lisa Wass	Greg Hopping	Sofie Loizou	Demos	Goran Sedlar	Shane Hughes	Shane Hughes	CDs/Cover Art
Ele	Greg Hopping	Sofie Loizou	Album	Elisabetta Cann	Shane Hughes	Shane Hughes	Performance Backing
Kelly Ophal	Greg Hopping	Sofie Loizou	Demos	David Kuzevich	Shane Hughes	Shane Hughes	EP
Paul Nee	Greg Hopping	Sofie Loizou	Demos	The Age	Shane Hughes	Shane Hughes	Debut Album
Paradise Studios Billy Field (02) 9357 1599. Custom Mixer, Studer A800, MCI JH114 and Valve Outboard				Seven Network	Shane Hughes	Shane Hughes	Jingle Production
Scott Kilminster	Artist	Michael Stavrou	EP Record/Mix	Looking For Cool Studios Mark Harrison (07) 3844 2199. Neve 36 Channel - 24 Track MTPGS			
Magic Lunchbox	Band/Kazas	Tom Kazas	EP Record/Mix	Chaise	Michael Flanders	Doug Brady	Album
Boy From Oz	Max Lambert	Simon Leadley	Soundtrack				
Sister Madley	Band/Conno ly	Wayne Connolly	Tracking				
John Wibberly	John Wibberly	Ted Howard/Glen Phimister	Album Tracking				
Mercy Bell	Band/Whitton	Tim Whitton	Tracking				



BASF YOUR MUSIC IS SAFE WITH US



BASF National Tracking Guide

ARTIST	PRODUCER	ENGINEER	PROJECT	ARTIST	PRODUCER	ENGINEER	PROJECT
OPM Studios Daniel (07) 3374 0066. 24 Tk. ADAT, Mackie Console				Petrophonic Productions Petros (03) 9553 0176. 16 Tk. Digital Multitrack/Midi Suite			
Brad Horwood Daniel/Artist Daniel Album				Itchy Fingers Petros Petros 50s Rock'n'Roll CD			
Mainstay Band/Daniel Daniel EP				Mark Joseph Petros Petros Solo CD			
Intercooler Band Daniel Demos				Jimi Christo Petros Petros Solo CD			
Zengari Band Daniel EP				Mari Hall Petros Petros Solo CD			
Rare Daniel Album				Peter Dene Petros Petros Kyb Programming			
Suite 16 Audio Productions Murray Lyons (07) 3369 8733. 24 Tk. Analogue, 8 Tk. Digital, Pro Tools				Black Cat Productions Petros Petros Music Editing			
Misery Guts Garry Smith David Champion TV Series				Sing Sing Phil/Kaj (03) 9428 4622.			
Sally Hollingdale Garry Smith David Champion Album				Powderfinger Nick Dedia Nick Dedia			
The Cannery Garry Smith David Champion TVC				David Faulkner David Faulkner Tony Espie			
Golden Casket Garry Smith David Champion TVC				Tim Rogers Artist/Jen Anderson Paul Mc Kercher			
Vandersound Studios Eric Vandersande (07) 5546 8100. ADAT/XT, HDR, O2R, Valve & MIDI				Primary Nick Launay Nick Launay			
Mystery Of Sixes Eric Vandersande Eric Vandersande EP Mix				Custard McGoo McGoo			
One Eyed Milkman E. Vandersande/A. Troughear E. Vandersande/A. Troughear Demo				Moler Band Paul Mc Kercher			
Greenroom Andrew Hines/Mark Alchin Mark Alchin/Andrew Hines Demo				Sing Sing South Kaj/Phil (03) 9428 4622.			
Defiled Band/E. Vandersande/A. Hines E. Vandersande/A. Hines EP Mix				Monique Brumby Polinski/Kalju Tonuma Polinski/Kalju Tonuma			
Tested Eric Vandersande/Peter Perini E. Vandersande/P. Perini EP Pre-Mastering				Gary Beers Band/Kalju Tonuma Kalju Tonuma			
Ian Robinson Eric Vandersande/Artist Eric Vandersande EP Mix				Primitive Ghost Ollie Olsen Kalju Tonuma			
South Australia							
Adelaide Tape Duplicators Al Sankauskas (09) 8212 7111. Mastering Suite, CD Manufacturer				Bazark Band Adam Rhodes			
Boss Trio Tim/Al Sankauskas Al Sankauskas CD Album				Diana Kiss Band Adam Rhodes			
So Watt Band/Al Sankauskas Al Sankauskas CD Album				Dave Granny Dave Granny Adam Rhodes			
Pam Claree Pete Miller/Cran/Al Sankauskas Al Sankauskas CD Album				Spring Studios Harry (03) 9529 7779. 16 Track ADAT/HD Editing 8 Track			
Spanked Chickens Adam/Al Sankauskas Al Sankauskas CD Album				Ron Kingston Harry Williamson Harry Williamson CD Album			
Scrubby Rubbable Andrew/Al Sankauskas Al Sankauskas CD Album				Gene Deluca Harry Williamson Harry Williamson CD Album			
Zdenek Brude Artist/Al Sankauskas Al Sankauskas CD Album				Various Various Harry Williamson Blues Compilation CD			
Disk-Edits Belinda Kent (08) 8340 1377. Master/CD Manufacturing				Jackie Doesit Harry Williamson Harry Williamson Demos			
Modern Recordings Mark Scruby Neville Clark Album				Maree Hallett Harry Williamson Harry Williamson Demos			
The Satellites Band/Jim Redgate Neville Clark Album				Studio 52 Paul Higgins (03) 9417 7707. Studio A: 32 Track, Studio B: 24 Track ADAT/XT			
Ease Band Neville Clark Album				The Music Men Trevor Carter Trevor Carter New Footy Album			
Each Beach Patch Theatre Co. Neville Clark Album				Camomile Trevor Carter Trevor Carter New CD Album			
Fruit Band/Budgen/Castel Neville Clark Album				Collard, Greens & Gravy Barry Hills Andrew Meakes Track			
Sam Lohs Artist/Catherine Oates Neville Clark Album				Stephen Crumb Andrew Meakes Andrew Meakes Album Project			
JR Recording Darren Conway (08) 8410 6488.				Witicism Andrew Meakes Andrew Meakes Demo			
Expressions E. Sikorski E. Sikorski Demo				Brain Dead Andrew Meakes Andrew Meakes Demo			
Downpour E. Sikorski E. Sikorski CD/Demo				True Form Music Services Neil Gray 0500 509 509. 24 Tk. Digital, 12 Tk. Analogue			
Driven E. Sikorski E. Sikorski CD				Venison Chilli Neil Gray/Band Neil Gray Demos			
Corrupt Fruit E. Sikorski E. Sikorski CD/Demo				Black Seed Ross O'Driscoll/Band Ross O'Driscoll Album Pre-Production			
Africanmambo E. Sikorski E. Sikorski Demo				Alchera Neil Gray/Band Neil Gray EP			
Ray Bailey (Riff Raff) E. Sikorski E. Sikorski CD/Demo				No Grace Neil Gray/Band Neil Gray Mixing			
Mixmasters Productions Mick Wordley (08) 8278 8506. 24 Track Analogue 2"				Snakehipps Neil Gray/Band Neil Gray Album			
Jeanette Wormald Mick Wordley Mick Wordley Album				Wombat Road Studio Barrie Clissold (03) 5145 4204. 32 Tk. Digital, 16 Tk. Analogue			
Travis Taylor Les Karski Mick Wordley Album				FUBAR Barrie Clissold/Band Barrie Clissold Demo Tracks			
No. 9 Band Steve Fieldhouse Steve Fieldhouse EP				Collene Honeyman D. Pruser Barrie Clissold Album Mixing			
Keep The Change Mick Wordley Mick Wordley EP				Pat Higgs Barrie Clissold Barrie Clissold Demo Tracks			
Anomolie Mick Wordley Mick Wordley EP				Flesh Puppets Barrie Clissold/Band Barrie Clissold Demo Album Tracks			
Nick Love Productions Nick Love (08) 8297 6519. Producer/Engineer				The Cutters N. Legge/D. McLeod Barrie Clissold Album Tracking			
Boom Box Nick Love Nick Love/Cran Wilton Demo				Stoneage Barrie Clissold/Band Barrie Clissold CD Mastering			
Revolver Nick Love Nick Love CD EP				Woodstock Studios Chris Tyshing (03) 9531 9011. 24 Track Analogue, 24 Track ADAT/36 Track ProTools			
Lessie Does Nick Love Nick Love CD EP				Even Tony Lash (Seattle) Tony Lash Album			
Pariah Nick Love Nick Love/Louis Panayiotou CD EP				Renee Geyer Joe Camilleri/Paul Kelly Chris Dickie Album			
A.S.D. Nick Love/Band Nick Love CD Album				Bob Dylan Tribute Brian Wise Mike Letho Radio Show Album			
Finelines Nick Love Nick Love/Louis Panayiotou CD Album				Richard Frankland Artist/Anthony Norris Anthony Norris Album			
SA Recording Avalon Sperring (08) 8281 9900. Yamaha O2R/ADAT 24 Track				Pound Systems Mark Holden Band/Anthony Norris Album			
Unstrung Band/Louis Panayiotou Louis Panayiotou Album				Greg Page Joe Camilleri Chris Dickie Album			
Captain Pjama Artist/Louis Panayiotou Louis Panayiotou Album				Western Australia			
Falsity Louis Panayiotou Louis Panayiotou Demo				Bonsai Recording Studio Tom Thorpe (08) 9246 4408. 24 Track Analogue, 32 Track Digital			
Nervengue Band/Louis Panayiotou Louis Panayiotou EP				Brett Greenfield Tom Thorpe Tom Thorpe Demo			
Leaving Eden Louis Panayiotou Louis Panayiotou Demo				The 2-ins Tom Thorpe Tom Thorpe Demo			
Milk Louis Panayiotou Louis Panayiotou Demo				Ian Kenny Tom Thorpe Tom Thorpe Demo			
"the fridge" Nigel Sweeting (08) 8231 3588. 16 Tracks Digital Non Linear Full Automation				John Meyer Tom Thorpe Tom Thorpe Album			
St Dominics School Danny/Nigel Nigel CD				Kay-Redman Tom Thorpe Tom Thorpe Jingles			
Samba Suave Band/Nigel Nigel Mastering				Pinnacle Recording Studio Anthony B. Kitson (08) 9382 1528. 24 Track 2", Hard Disk Recording			
Giraffe Band/Nigel Nigel Tracking				Detox Anthony B. Kitson Anthony B. Kitson Single			
Jejelah Band/Nigel Nigel Tracking				Tanya & George Anthony B. Kitson/Artist Anthony B. Kitson Tracking			
Bee McGee Bee Nigel Demo				Remedy Anthony B. Kitson Anthony B. Kitson Demos			
Nigel Davidson Nigel/Nigel Nigel Mixing				Jay Anthony B. Kitson Anthony B. Kitson Pre Production			
Victoria							
Crystal Mastering Joe Carra (03) 9326 2318. CD Mastering				Satellite Recording Studio Darren Halifax (08) 9470 4003. Protocols			
Horsehead Band John Ruberto Mastering				Daze Band Darren Halifax Demo			
Glimmer Band Joe Carra Mastering Album				Cochineal Band Darren Halifax Demo			
Turning Blue Band John Ruberto Mastering Album				Resolution John Edwards Darren Halifax Demo			
The Shine Band John Ruberto Mastering Album				Joel Smoker Lucky Oceans James Hewgill CD			
Purged Band John Ruberto Mastering Album				Mutt Band Darren Halifax CD			
Rick Charles Artist/Adam John Ruberto Mastering Album				Silver Hair Tom Baddeley Darren Halifax Demo			
Edensound Mastering Martin G. Robbie (03) 9682 9066. CD Mastering				Northern Territory			
James Reyne Artist Martin Pullan Single Master				Masters Studio & Production Lindsay Masters (08) 8932 1754. 8 Tk. Digital & MIDI			
The Black Sorrows Joe Camilleri Martin Pullan Album Master				Territory Boys Band/Lindsay Masters Lindsay Masters 2 Track CD			
N.I.L. Andy Baldwin Martin Pullan Single Master				P. Ciriotis Lindsay Masters Lindsay Masters Album			
Magic Dirt Band Martin Pullan US Album Master				D. Kostal Lindsay Masters Lindsay Masters Single			
Australian Crawl Martin Pullan Greatest Hits Remaster				YOUR BASF TRADE SALES OUTLETS:			
Mike Brady Artist/Doug Brady Martin Pullan Single Master				NSW: Audio Visual Designs (02) 9281-2444, Silver & Ballard (02) 9439-5355, Independent Tape			
Fortissimo Siiri/Andy (03) 9699 5811. 24 Track 2" Analog & Pro Tools				VIC: CATS (03) 9529-3177, Chapple Tape (03) 9580-6620, DEX Audio			
The Disappointments Andy Parsons/Band Andy Parsons Album				(03) 9372-2266, MTA & Assoc. (03) 9819-6455 SA: Adelaide Tape Duplicators (08) 8212-7111,			
Ros Girvan Andy Parsons/Artist Andy Parsons Album				Pro Media (08) 8276-6793 WA: Ausmag (09)314-1953, Pro Copy (09)375-3902 QLD: Musiclab			
The Daisy Dolls Andy Parsons Siiri Metsar/Andy Parsons Album				(07) 3862-1633, Tek (07) 3239-4000			
Metropolis Audio Fleur Colvin (03) 9696 2111. Music & Post				BASF YOUR MUSIC IS SAFE WITH US			
Cruel Sea Ern Rose Ern Rose/Brian McMahan OB Live 3RRR							
Thurmal Band/T. Faranda Tony Faranda/Hadyn Buxton Recording/Mixing							
Adam Thompson Artist/Tony Faranda Tony Faranda/Hadyn Buxton Record & Mix							

BUYER'S GUIDE

microphones

Prices INCLUDE sales tax and were correct on 15th August 1998. All care taken, no responsibility for errors. Four models only are shown in each category although these manufacturers have many more. Indicative only.

STUDIO MICS

AKG

Australia Music Group (02) 9698 4444
C12VR \$7155.
C414BUL5 \$2255.
C3000 \$775.
Solid Tube \$1845.

AUDIO TECHNICA

Yamaha Music Australia (03) 9693 5164

AT4050 Multi-pattern Condenser/ Large diaphragm (Twin), super high SPL capable (140dB). Extended response with warmth & clarity, pad & roll-off, inc. shock mount 20-20kHz. \$1,395.

AT4033 Cardioid Condenser/Large diaphragm, high SPL capable (140dB). Extended response & wide range uniform polar pattern ensures a natural sound on & off axis, pad & roll-off, nc. shock mount 20-20kHz. \$895

AT4041 Cardioid Condenser/ Rugged construction, high SPL capable (145dB), bass roll-off & pad switch, Extended response & wide range uniform polar pattern ensures a natural sound on & off axis. 20-20kHz. \$495.

AT3525 Cardioid Condenser/Outstanding performance/price classic-look vocal/instrument mic, high SPL capable (146dB), 10db pad, bass roll-off switch, inc. shock mnt 30-20kHz. \$695.

AUDIX CORP.

Production Audio Services (03) 9415 1585

SCX-one true condenser studio microphones, available with hyper cardioid and mini capsules, frequency response 20-20k, miniature size, ideal for piano, acoustic guitar, voice narration and drum overheads. From \$1553.

D4 originally designed for live use, D4 is very popular in the studio for kids drum, floor toms and timpani. Hypercardioid dynamic, 38Hz-19kHz, extended low frequency performance. \$595.

BENSON AUDIO LABS

Bridge System (03) 9330 9133

PC20 omnidirectional, externally polarised condenser, phantom powered, 20Hz-20kHz, -58 dBm sensitivity, 158mm length, gold plated pins, mylar and vapor deposited gold diaphragm, studio absolute accurate reproduction. Solid turned brass construction. \$2899.

PC21 cardioid (unidirectional) version of PC20 - interchangeable capsule. \$2899.

PC22 hypercardioid version of PC20 - interchangeable capsule. \$2899.

BEYERDYNAMIC

Synchrotech Systems (02) 9879 0800

MLE 90 for vocals, instruments, studio and home recording. Suitable for very high SPL's (up to 154 dB). Phantom powering 12-48 volts. Cardioid polar pattern. \$1333.29

MLE 91 for vocals, instruments, studio and stage use. Suitable for very high SPL's (up to 139 dB). clear and neutral voice reproduction. Cardioid polar pattern. \$1069.73.

MLE 93 for vocals, instruments, studio

recordings. Excellent base response. Slimline design. Phantom powering 12-48 volts. Cardioid polar pattern. \$992.21.

MLE 94 for vocals, instruments, studio and home recording. Excellent base response. Slimline design. Battery or phantom power. On/off battery switch. \$1147.25.

CAD EQUITEX

Australian Audio Supplies (02) 4388 4666

E100 Single capsule condenser microphone, cardioid pattern, servoed op amps, on board NiCad power design, 80Hz HPF, 20dB Pad, transformerless, internal dual H frame shock mount, wide bandwidth and low distortion. Handles 148dB. \$895.

E200 Incomparable low end and pristine highs coupled with remarkable transparency are achieved by servoed op amps and on board NiCad supported power design, cardioid, omni and figure 8 patterns, 80Hz HPF, 20dB Pad, transformerless. Handles 148dB. \$1495.

E300 Multi-patterned side address condenser microphone, combines vintage capsule design with advanced head-amp electronics, supplied with SM-1 swivel mount, transformerless balanced output, large diameter dual diaphragm, 80Hz HPF, 20dB Pad, handles 148dB. \$2295.

VX2 Dual valve condenser microphone, cardioid, omni and figure 8 patterns, external power supply, optional 24-Bit digital interface with 32 to 96kHz sampling rates and 120dB dynamic range. \$3995.

DPA MICROPHONES

Studio Supplies (02) 9357 5389

4006 omnidirectional condenser mic, 20Hz-20kHz freq.resp., high sensitivity and a low noise-floor. \$3048.98.

4007 high-SPL, omnidirectional condenser mic, 20Hz-40kHz +/- 2 dB freq.resp., dynamic range of 124 dB from noise floor to 1% THD and can handle up to 155 dB SPL peak before clipping occurs. \$3125.

4011 condenser mic, 40Hz-20kHz +/- 2 dB freq.resp., high SPL handling capability of 158 dB SPL. \$3579.35.

EARTHWORKS

Australian Audio Supplies (02) 4388 4666

TCK30 Totally accurate Omni Directional Microphone, optimised to deliver clean impulse response and is time coherent on the microsecond level, very small, carefully crafted stainless steel body. \$1295 (\$2695 Matched Pair).

TCK40 Totally accurate Omni Directional Microphone, utilises a very small, very accurate omnidirectional element, carefully crafted stainless body, Innovative

EV ND857B



design delivers Time Coherent response from 9Hz to 40kHz+. \$1695 (\$3495 Matched Pair).

ELECTRO VOICE

EVI Audio Australia (02) 9648 3455

RE 200 cardioid true condenser microphone. Large, ultra thin gold laminate diaphragm with high sensitivity and low noise. Ideal for instruments in critical recording or live sound applications. Requires 12 to 52V dc. Supplied in pouch with pop filter and clip. \$595.

RE 500 cardioid true condenser microphone. Large, ultra thin gold laminate diaphragm with high sensitivity and low noise. Ideal for vocals in critical recording or live sound applications. Requires 12 to 52V dc. Supplied in pouch with clip. \$715.

RE 1000 cardioid true condenser microphone. A transformerless version of the RE2000. Large, ultra thin gold laminate diaphragm with high sensitivity and low noise. Ideal for vocal or instrument in critical recording or live sound applications. Requires 12 to 52V dc. Supplied in hard case with clip. \$1649.

RE 2000 cardioid true condenser with transformer balanced output, on board heater for total performance consistency and ultra low noise. Supplied with power supply, shock mount and blast filter. \$2899.

MICROTECH GEFELL

Southbank Trading (02) 9696 5690

KEM970 incredible ultra reflectant resistant broadcast recording microphone. \$14,160.

UM900 worlds first ever phantom powered tube (valve) microphone. \$6999.

UMT800 5 pattern large capsule recording microphone. \$3443.

MT71.1S large diaphragm cardioid condenser microphone with M7 capsule. \$1570.

NEUMANN

Amber Technology (02) 9975 1211

KM184 miniature cardioid condenser combining Neumann KM84 capsule design with latest transformerless circuitry. 20 Hz-20kHz frequency response. Supplied with windshield and mount. \$1195.

TLM103 all new large diaphragm studio condenser with fixed cardioid pattern, transformerless design, super-low self noise (7dB-A). Supplied with case and mount. \$1695.

U87Ai studio condenser, large diaphragm with 3 x selectable patterns, LF roll-off and 10dB PAD. Max 127dB SPL, 20Hz-20kHz freq. response. \$3880.

M149 new generation vacuum tube microphone, 5 x switchable patterns / 9 x directional characteristics, 7-position Hi-pass filter. Includes mount, PWR supply and cable. \$6374.

PEARL

Audio Sound Centre (02) 9901 4455

TL44 mono/stereo condenser, rectangular dual membranes provides two discreet cardioid outputs *** omni, figure eight, 180 degrees coincident stereo. \$3775.

TL66 small cardioid or omni available in high or low sensitivity, 132 dB SPL, very accurate reproduction of percussion instruments. \$793.

PEAVEY

Australis Music Group (02) 9698 4444

PVMT9000 tube mic with io-freq roll off and attenuation pad. \$2495.

PVM480 electret condenser with exceptionally flat far field response. 40Hz-20kHz. Super cardioid pick up. \$349.

PUR1 electret condenser mic ideal for a reference mic. \$349.

SHURE

Jands Electronics (02) 9582 0909

VP88 Single-point MS stereo condenser. Unique in its ability to capture the realism of "being there" while withstanding daily use in rigorous production environments. Built-in stereo matrix decoder; Battery or Phantom Power; 40 to 20,000 Hz. \$2299.

SM81 Ruler-flat response; 10dB Attenuator and 3 Position Low-Cut Filter, excellent for use with most acoustic instruments. Cardioid Condenser; Phantom Power; 20 to 20,000 Hz. \$1049

MX393 O/C/S Surface-mount boundary type; ideal for TV settings, news conferences; dramatic productions; altars and stages. Available in either omnidirectional, Cardioid or supercardioid pickup patterns. Phantom Power; 20 to 20,000Hz. From \$649.

BG 4.1 Optimum choice for instrument recording. Low self-noise and flat frequency response keeps instruments sounding accurate and true. Cardioid condenser; On-Off Switch; AA battery or Phantom Power; 40 to 18,000 Hz. \$469.

SOUNDFIELD

Studio Connections (03) 9874 7222

SPS422 is a complete studio microphone system comprising a multi-capsule microphone with a 1U control room processor. Flat frequency response is 20Hz-20kHz. \$6995.

MKV offering truly coincident stereo and mono microphone patterns, this system comprises microphone, control unit, shock mount assembly, foam windshield and a 20 metre 12 pin microphone cable. Frequency range is 20Hz-20kHz. \$12,950.

Continued over page

BUYER'S GUIDE

microphones

STEDMAN

Studio Connections (03) 9874 7222
N90 a dynamic quality studio, vocal and instrument microphone which offers 35 to 19kHz frequency response and comes complete with shockmount and windscreen. \$799.
SC3 a versatile condenser microphone with unique 3 sonic modes designed to optimise both analog and digital recording techniques. Frequency response 25 - 20kHz. \$2335.

MINIATURE & HEADSET MICS

AEROMIC

Aeromic Microphones Australia (02) 9313 4995
AM10 omni directional headworn microphone for aerobic instructors! One piece sweat resistant frame in 2 fitting styles supplied with either an Hirose or Mini XLR connectors wired for Chiayo/Samson/Shure/RFX and other transmitters. \$450.
AM12H omni directional headworn microphone for professional voice users ie. platform speakers, product presenters, actors. Same details as above except it's not sweat resistant. \$395.
AM15 omni directional tie clip or hairline mic for professional voice users like the clergy and amateur dramatics productions. 100% serviceable will not die a 'sweat death' on stage. \$295.
AM22H cardioid response headworn mic for professional voice users as above. Suitable for outdoor work with windsock, slim profile electret type requires transmitter with 3 or 4 pin connectors. \$495.

AKG

Australia Music Group (02) 9698 4444
C417 lapel mic with omni directional pickup. Suited for theatre, TV and broadcast situations. \$219.
C419 micro mic with hypercardioid pattern designed for brass/wind instruments. Features a gooseneck with no marring clamp for easy placement. \$295.
C418 drum mic. \$285.
C420 headset mic. \$329.

ASTATIC

Horwood Australia (02) 9585 1011
CTM 910 low noise cardioid for lecterns, altars, conference rooms; miniature with high sensitivity and proximity effect. \$394.
827-13 mini gooseneck electret condenser with cardioid pattern; 80Hz-18kHz; controlled low frequency roll-off and smooth midrange response; available in two lengths. \$331.
215 new model miniature gooseneck with ring-style switch and hi-pass filter switch; self-contained low-noise electronics; 40Hz-20kHz; electret condenser; two versions. \$682.
CTM17 low-noise electret condenser with substantial isolation from mechanical podium and handling noises. \$414.

AUDIO TECHNICA

Yamaha Music Australia (03) 9693 5164
ATM75 Cardioid Condenser/Pivot mounted flexible boom descends from LH or RH side of headband. Belt mounted power module includes battery & windscreens. 60-15kHz. \$229.
ATM73A Hyper-Cardioid Condenser/

superior vocal performance, ideal for drummers & keyboardists. Flexible boom, Belt mounted power module includes battery & windscreens 60-15kHz. \$319.

Pro8HE Hyper-Cardioid Dynamic/ improved moisture protection ideal for musicians & aerobic instructors etc. Pivot mounted flexible boom descends from LH or RH side 200-18kHz. \$129.

AT853A Cardioid Condenser/ Ultra miniature with switchable bass roll-off/recording, broadcast & SR, designed especially as choir mic, inc. hanger and mount 30-20kHz. \$399.

AUDIX CORP.

Production Audio Services (03) 9415 1585
ML-10 inexpensive miniature omni directional Lavalier microphones. Complete with power supply, clips and windscreen. \$262.

BENSON AUDIO LABS

Bridge System (03) 9380 9133
HM10 cardioid (unidirectional), miniature electret condenser, phantom powered, 80Hz-15kHz, -58 dBm sensitivity, maximum SPL: 135 dB at 1% THD, live or studio, gold plated XLR connectors, headset mic. \$659.
B2 unidirectional, electret condenser, phantom powered, 40Hz-20kHz, -54 dBm sensitivity, 80mm length, gold plated XLR connectors, boundary mic for theatre, conference, TV, podium, security systems etc. \$659.
CM10 unidirectional, miniature electret condenser, phantom powered, 40Hz-20kHz, -54 dBm sensitivity, 10mm length, reproduction of vocal groups, live or studio, piano or stringed instruments, symphonic recording. \$629.

BEYERDYNAMIC

Synchrotech Systems (02) 9879 0800
MLE-7 an extremely small omni directional electret condenser clip on mic. Especially for musicals and broadcasting. Wide frequency response, removable wire mesh windscreen. \$547.27.
TGX 45 neck worn mic suitable for aerobic instructors, theatre and stage musicals. Lightweight adjustable neckband, cardioid polar pattern, high gain before feedback, angled microphone head. \$325.57.

COUNTRYMAN ASSOC.

Production Audio Services (03) 9415 1585
Isomax II miniature high quality condenser microphone available in Hyper, cardioid, Omni and Bi-directional; max SPL 150 dB; available in several colours; hard wired or for wireless. \$648.
B3 very small, omni electret microphone; water resistant; freq. response 10Hz-25kHz; up to 150 dB SPL; available in

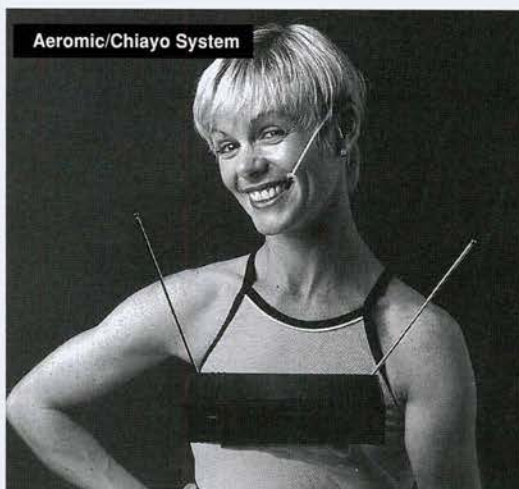
several colours; hard wired or for wireless. From \$485.

EMW very small, omni electret microphone features freq. response 20Hz-20kHz; low rubbing noise; supplied with several clips; available in several colours; hard wired or for wireless. From \$445.

Isomax Headset features simple low profile design, excellent sound quality; up to 150 dB max SPL; available in hard wired or wireless form. From \$699.

DPA MICROPHONES

Studio Supplies (02) 9957 5389
DPA4060 prepolarised omnidirectional miniature condenser mic, water resistant, 20Hz-20kHz freq.resp., noise floor of 23 dB(A), can handle levels up to 134 dB SPL. \$528.45.
DPA4061 prepolarised omnidirectional



miniature condenser mic, water resistant, 20Hz-20kHz freq.resp., noise floor of 26 dB(A), can handle levels up to 144 dB SPL. \$528.45.

DPA4062 prepolarised omnidirectional miniature condenser mic, water resistant, 20Hz-20kHz freq.resp., noise floor of 33 dB(A), can handle levels up to 154 dB SPL. \$792.68.

DPA4065 BL headband mounted prepolarised omnidirectional condenser mic, noise floor of 26 dB(A), can handle levels up to 144 dB SPL. \$834.40.

ECEN

ELSTA (02) 9568 2100
HM-11 Headset microphone for use with body pack wireless transmitters. Comes with 3.5mm jack plug, 1m lead, foam mic cover and is very lightweight. \$39.

ELECTRO VOICE

EVI Audio Australia (02) 9648 3455
HM 1X electret condenser headset microphone. Cardioid pattern. Compact with flexible microphone arm. Phantom powerable from 12 to 52V dc. Also available with radio version. \$615.
CO 2 ultra miniature electret lapel microphone. Omni directional. Supplied with heavy duty cable, clip and integrated pop filter. Phantom powerable from 12 to 52V dc. Also available in radio version. \$525.
CH 230X miniature electret condenser hanging microphone. Cardioid pattern.

Compact capsule on end of 7.5 metres of cable. Ideal for choir or drama work. Also available in black or white. Phantom powerable from 12 to 52V dc. \$595.
CT 30 compact electret condenser half cardioid boundary mount microphone. Built in equalisation counteracts 'baffle effect' delivering flat natural sound with excellent gain before feedback. Also available in white. Phantom powerable from 12-52V dc. \$595.

GEMINI

Disc World (03) 9735 0588
Gemini NX-210H true diversity, available in 8 channels, adjustable output level, volume control, auto mute circuit eliminates popping, audio frequency indicator. \$639.

LIGHTSPEED

Audic Telex (02) 9647 1411
TK170 Durable, slimline headworn microphone designed for aerobics and other demanding applications. Cardioid pattern, electret insert. \$475.

MICROTECH GEFELL

Southbank Trading (02) 9696 5690
M300 cardioid condenser miniature microphone. \$1162.
SMS2000 cardioid miniature microphone with screw on capsule options. \$1995.
M294 cardioid condenser with metal membrane and 5dB presence boost at 8K. \$1813.
M270 omnidirectional condenser. \$1558.

PEAVEY

Australis Music Group (02) 9698 4444
PVM357 miniature electret condenser mic with 5 band graphic EQ in preamp. VPTO 145 dB SPL cardioid pickup pattern. Comes with drum mounts and wind screen. \$599.
VCM2 back electret condenser for choir mic-ing. Cardioid pattern. Comes with hanging adaptor and power adaptor. \$369.
PM165 podium mic suited for speech response. Comes with a variety of mounting options. \$399.

PSC

Audic Sound Centre (02) 9901 4455
Millimic omni, miniature neck mic for wireless transmitters 20Hz-20kHz, supplied with mic clip assortment. \$397.
Headset mic ear mount headset frame with flexible mic on gooseneck with cable for wireless transmitters. \$427.
Millimic P/S as Millimic but with hard wired barrel power supply with internal lithium battery or accepts 48v P to XLR3M connector. \$757.

SANKEN

Audic Sound Centre (02) 9901 4455
COS-11 tiny, vertical diaphragm, new cable resists sweat 20Hz-20kHz, 95dB dynamic range, built-in 3 layer windscreen, suits wireless transmitters. \$488.
COS-11 BP as wireless version but hard wired to barrel power supply accepts 48vP or AA battery to XLR connector. \$852.

SHURE

Jands Electronics (02) 9582 0909
continued Page 54

The compressor that forgives, but never forgets...

dbx digital

IT FORGIVES

- New dbx technology, the TYPE IV™ Conversion System with TSE (tm) (Tape Saturation Emulation) gives you the pleasant overload characteristics of analog tape without the harsh distortion of most digital input systems. No more dancing around with the input levels to protect the integrity of your audio.

- Ultra-wide dynamic range 24 bit A to D converters with TYPE IV™ make your signal sound better than you ever thought possible. Capturing the full dynamic range of your analog signal and coupling it with the powerful dynamic range of this patent-pending dbx process, TYPE IV™ will make your digital signal sound like it came from the quietest high quality analog source you could imagine.

- With the extensive metering of the DDP, you can see EXACTLY what is going on with ALL parts of your signal: input, internal processing, and output, with peak and VU, as well as gain reduction for both sides of the stereo image.

- And speaking of stereo, you can work in stereo with dbx's True RMS Power Summing™ for phase-coherent tracking, or in dual mono mode, without the two channels interacting at all, making the DDP a great processing value.

IT NEVER FORGETS

- The DDP works right out of the box. It comes with 50 factory setups that are guaranteed to knock your socks off. There are presets for every application you can think of, and then some. dbx engineers are musicians and recording engineers. We know what a compressor is supposed to sound like, and we know it better than anyone else. We invented compression. We eat, sleep and breathe compression.

- Want to duplicate that perfect compressor set-up? Each processor in the chain has all the parameters you would expect. After you set the parameters the way you want them, save it as a processor preset, available to be recalled any time. These building blocks allow you to save entire setups just for the way you like to work. It doesn't matter that you are doing a live gig one night, then mixing the tracks in the studio the next night, the DDP will be there, just the way you left it.

- When you save a preset, you also save the information that makes it work behind the scenes, too. Digital output (optional), sample rate performance, MIDI setup, as well as any of the other utilities, like sidechain setup and monitor, EQ settings, and SysEx functions.

- When you make changes to any parameter, you can see where your adjustments are affecting the signal, simply by looking at the Hi-Res graphical display, which shows the processing curve in real time as you make your adjustments.

Check out the DDP at your local pro audio outlets, and experience DIGITAL performance you'll never forget.

E&OE

Gate

Start with the gate. Set parameters for threshold, ratio, attack, hold, release, and output gain. See the effect of your settings on the graphical display. As you adjust gain reduction and audio level meters, they all interact in real time with your manipulation of the parameters. Start with a threshold setting of 0dB. Click on the noise in between the vocal takes. You can save your final gate settings as a 'gate preset'. BUILDING BLOCKS AND recall it into any other setup you do.

Compressor

Then move to the compressor. The effects of the gate settings are still visible on the graphical display, so let that help you determine where to set your compressor threshold. The parameters you change here will also affect the curve on the graphical display in real time. Move through all the regular parameters: the threshold, ratio, attack, release and output gain. For vocals use a threshold of about +25dB, a ratio of about 3:1 or 4:1, and a slow attack and fast release for the most natural sounding effect. Your compressor settings can also be saved off as a building block to be called up into any other preset.

Limiter

On to the limiter. Changes you make to the limiter settings are also seen on the graphical display. Adjust the level up or down as you need. The flat top line of the display moves up and down as you adjust the level. You can also set the speed at which the limiter lets go of the signal as it goes below the threshold. This is only smooth limiting will prevent any 'pumping' algorithms, so rest assured that more over you set your threshold level, your legs will not be torn, and your signal will not get butchered as it goes across the threshold. And like the other parameters, your limiter settings can be named and saved for later recall.

De-esser

De-essing works the same way: see the effects of your settings displayed on the graph. Parameters here are the common ones: threshold in frequency, 800Hz to 8kHz, and amount in percent. Other available processing includes EQ: both in-path and sidechain, for special-effect types of processing. When you are editing any of the building blocks, it is visible on the display and the parameters are shown on the graph as it's always easy to know where you are. Parameters are easy to see in this page drives operating system. When it's as complex as this, it's nice to know somebody was thinking when it was put together.

and More

You can also work in stereo, or set up a completely different and independent processing chain for the other channel. Also, notice that the audio meters are capable of showing both peak and average levels for input and output. Optional digital output with the TYPE IV™ Conversion System with TSE™ (Tape Saturation Emulation) provides up to 24-bit output in either AES/EBU or S/PDIF formats with the trademark digital processing of TYPE IV™. The DDP also has full MIDI/automation capability, with separate midi in and thru jacks. Entire processing setups may also be saved into one of 50 user defined presets, or use one of the 50 factory setups.

BUYER'S GUIDE

microphones

MX183/184/185 Professional condenser lapel mic; MX183 - omnidirectional, MX184 - Supercardioid, MX185 - cardioid. Side exit cable minimises handling noise and is easy to conceal. Features include field replaceable capsules, metal 4-way tie bar, and snap fit windshield Phantom Power, 80 to 20,000 Hz. From \$539.

SM93 Sub-miniature omnidirectional condenser lapel mic. Includes tie bar, mounting block and windshield. Battery or Phantom Power, 50 to 20,000 Hz. \$469.

SM98A Miniature cardioid condenser for musical instrument applications; sound pressure levels up to 144 dB! Excellent for drums, horns, and other acoustic instruments; Supercardioid Polar Modifier included; Phantom Power; 40 to 20,000 Hz. \$679.

WH10 XLR Headworn dynamic; new lightweight, comfortable design with low visibility. XLR Connector. \$280.

TELEX

Audio Telex (02) 9647 1411

ELM Sub miniature electret for lapel or headset applications. One of the smallest mics on the market. Available in Uni or Omni patterns. From \$497.

VOCAL MICS

AKG

Australia Music Group (02) 9698 4444

C5900 hypercardioid pattern with 20Hz-20kHz freq. response. Suitable for live sound and vocal use. \$495.

D3800 \$349.

D880 \$149.

D770 \$139.

AMERICAN DJ

American Dj Supply Australia 1800 643 111

DJM-600 microphone. 600 ohm impedance, 75 dB sensitivity, 50Hz - 13kHz frequency response. Comes with 5m mic lead. \$79.

ASTATIC

Horwood Australia (02) 9585 1011

CTM-21 rugged mic with switch; perfect for hire and install; 100Hz-14kHz; cardioid pattern; dynamic moving-coil design. \$98.

CTM-27 rugged cardioid mic with switch; 60Hz-14kHz; hardened steel grille; vocal and instrument use; clean, transparent sound. \$177.

CTM-28 cardioid mic with switch; 50Hz-14kHz; features include steel grille and impact/noise reduction. \$187.

AUDIO TECHNICA

Yamaha Music Australia (03) 9693 5164

AT4055 Cardioid Condenser/ studio quality optimised for live sound, hi SPL/ low noise, extended bass response - uses AT4050 capsule 20-20kHz. \$795.

ATM89R Hyper-Cardioid Condenser/ professional Recording, broadcasting or sound reinforcement. Incorporates superior shock mounting 70-20kHz. \$399.

ATM31A Cardioid Condenser/ Recording or sound reinforcement uses. Incorporates superior pop filter 30-20kHz.

\$299.

ATM61HE Hyper-Cardioid Dynamic/ extended response & reduced off axis colouration. Low handling noise - rivals stage condensers 50-18kHz. \$269.

AUDIX CORP.

Production Audio Services (03) 9415 1585

OM2 New - latest in the Audix OM Series, OM2 features excellent sonic quality, dynamic hypercardioid capsule, 50-16kHz frequency response, heavy duty construction. \$275.

OM3 the Audix workhorse, OM3 is a hypercardioid dynamic vocal mic which features a frequency response of 50-18kHz frequency, 144 dB max SPL and excellent gain before feedback. \$379.

OM5 features hypercardioid dynamic performance, frequency response of 48Hz-19kHz off-axis rejection. \$589.

OM6 features extended low frequency response, hypercardioid dynamic, frequency response of 40Hz-19kHz, 144 max SPL and Audix's gain before feedback. \$669.

BENSON AUDIO LABS

Bridge System (03) 9380 9133

BA15 cardioid (unidirectional) pattern, moving coil dynamic type 55Hz-14kHz, -56 dBm sensitivity, 160mm length, vocal or speech smooth frequency response and uniform off axis rejection characteristics. \$149.

BA25 unidirectional, moving coil dynamic type 50Hz-15kHz, -54 dBm sensitivity, 182mm length, alnico magnet, lockable on/off switch, vocal excellent sensitivity to every acoustical nuance. \$189.

ND 90 hypercardioid, moving coil dynamic, neodymium, 50Hz-18kHz, -52 dBm sensitivity, 176.9mm length, ultra low mass diaphragm and voice coil assembly, internally shock mounted, superior coil. \$349.

RC22 unidirectional, electret condenser, phantom powered, 40Hz-20kHz, -58 dBm, S/N ratio greater than 50 dB, undistorted output at sound pressure levels in excess of 140 dB. \$599.

BEYERDYNAMIC

Synchrotech Systems (02) 9879 0800

MOL for universal applications such as vocals and instrumental recording; supercardioid polar pattern; excellent off-axis rejection; rugged metal construction; ergonomically designed barrel; internal rubber suspension; on/off switch. \$184.49.

TGX 20 for lead vocals and instrument cabinet miking; hypercardioid polar pattern with high SPL capability; neodymium magnet; vocal tailored frequency response with high gain before feedback. \$432.54.

M88 TG for brass instruments, vocals and kick drum; excellent off-axis rejection; rugged construction; extended low and high frequency response; high output for gain-before-feedback; high SPL capability. \$928.65.

MC 834 for vocals, piano, strings, brass, percussion, overheads, voice overs; wide frequency range, natural response;

Peavey PVM880



transformerless output; exceptional signal-to-noise ratio and high SPL capability. \$2151.86.

CAD EQUITEX

Australian Audio Supplies (02) 4388 4666

CAD 25 Dynamic, 4 stage windscreen, excellent bandwidth response, cardioid pattern, internally shock mounted for minimal handling noise. \$139.

CAD 90 Dynamic, 4 stage windscreen, excellent bandwidth response, cardioid pattern, internally shock mounted for minimal handling noise. \$349.

CAD 95 Condenser, 40-20KHz response, 3 stage windscreen, 9-52 volt operation, cardioid pattern, internal shock mount, exceptionally clear hi-frequency response. \$399.

ELECTRO VOICE

EVI Audio Australia (02) 9648 3455

N/D 157B cardioid low impedance vocal microphone with Neodymium capsule. Traditional rock'n'roll sound utilising EV's exclusive warm grip handle. Also available with On/Off switch. \$239.

N/D 267 cardioid low impedance vocal microphone with Neodymium capsule. Ideal general purpose vocal microphone utilising EV's exclusive warm grip handle. Also available with On/Off switch. Also available on Vega 2020 radio system. \$279.

N/D 767 supercardioid low impedance vocal microphone with Neodymium capsule. Also features roll off filter. Utilises EV's exclusive warm grip handle. Also available on Vega 2020 radio system. \$429.

N/D 967 cardioid low impedance vocal microphone with Neodymium capsule. Features 'Personality' with variable mid range presence rise. High gain before feedback. Utilises EV's exclusive warm grip handle. Also available with On/Off switch. Also available on Vega 2020 radio system. \$549.

MICROTECH GEFELL

Southbank Trading (02) 9696 5690

MD100 super high transient dynamic cardioid. \$672.

MD110 super fast transient dynamic cardioid. \$671.

MD120 super high transient dynamic cardioid. \$670.

M900 special "Voice-Over" microphone. \$1884.

NEUMANN

Amber Technology (02) 9975 1211

KMS140 cardioid condenser for stage vocal applications. Acoustically de-coupled transducer, high feedback rejection, wide natural sound with 20Hz-20kHz

freq. response. Hypercardioid KMS150 also available. \$1840.

NUMARK

Show Technology (02) 9898 1111

WS 111 wireless microphone, lightweight. Features include: a non diversity tabletop receiver; Quartz crystal oscillator; mute switch on microphone; 8 hour battery life and multiple frequencies. \$272.20.

WS 212 has a diversity rack mountable receiver; front panel volume adjustment; mute switch on microphone; 8 hour battery; 2 removable magnetic antenna and multiple frequencies. \$521.80.

WS 121 has two lightweight microphones and features: 2 mic channel non-diversity tabletop receiver; mute switch and 8 hour battery on mics; multiple frequencies and front panel volume control. \$521.80.

WS 221 a 19" rack mountable wireless system. Features include: 2 mic channel diversity rack mountable receiver; 1 rear output with front panel adjustment for each mic; 2 lightweight microphones with mute switches and 8 hour battery life; 2 removable magnetic antenna and multiple frequencies. \$646.60.

PEARL

Audio Sound Centre (02) 9901 4455

MD88 cardioid, dynamic hand held mic, -78dB sensitivity, 80Hz-12kHz, matt black finish, internal shockmount. \$530.

TLC90 internal shockmount, removable front for cleaning specially made for live performance. \$847.

PEAVEY

Audio Telex (02) 9647 1411

PVM22 Premium vocal microphone with diamond coated neodymium diaphragm. High gain and low handling noise make this a favourite with installers and hire companies. Cardioid pattern. \$251.

PVM530i Neodymium vocal microphone. Extended response. Hypercardioid pattern. Supplied in road case with cable and rubber clip. \$395.

PVi General purpose vocal mic with switch, clip and cable. Surprising performance for a mic in this price range. \$91.

PEAVEY

Australis Music Group (02) 9698 4444

PVM22 dynamic vocal mic with neodymium magnetics. Cardioid pickup. Comes with protective pouch and mic clip. 50Hz-16kHz. \$249.

PVM835 dynamic vocal mic featuring diamond coated diaphragm and neodymium magnetics. 45Hz-16kHz. \$469.

PVM880 dynamic vocal mic featuring

Continued Page 56

CONNECTIONS SHOP

MOBILE DJ HANDBOOK \$45

By Stacy Zemon. For both the newcomer and the experienced DJ, the book contains helpful tips, advice and ideas on how to develop and expand your business, covering marketing, bookings, buying equipment and music, and running parties and dances. 170 pgs, 1997.

THE AUDIO WORKSTATION HANDBOOK \$75

By Francis Rumsey. Contains vital information on MIDI control and computer standards, audio workstation principles, computer soundcards, storage devices, files transfer and networking, audio interfaces and digital video. 284 pgs, 1996.

MIDI SYSTEMS & CONTROL \$55

By Francis Rumsey, 2nd Edition. Covers MIDI control principles and how they can be implemented in practical systems. Deals with MIDI in studio, musical and lighting equipment, mixer automation plus information on the latest additions to the MIDI spec. 202 pgs, 1994.

PRACTICAL STUDIO TECHNIQUES \$40

By Tom Misner. Includes a bonus CD, a practical demonstration of a complete mixdown session including setting up effects, uses of the compressor, gating of source, various types of equalisation, selecting reverb settings & more. 102 pgs, 1994.

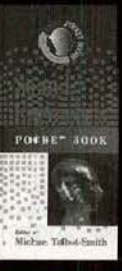
SOUND & MUSIC FOR THEATRE \$44

By Karo & LeBecht. Covers the complete process of sound design from original concept through to finished plan. Looks at development, research, cues, recording and various techniques. 190 pgs, 1992.

OTHER BOOK TITLES:

BASICS OF VIDEO LIGHTING Des Lyver/Graham Swainson	\$35.00
BASIC STAGE LIGHTING Marx Carpenter	\$17.00
CONCERT SOUND Edited by Jevd (Rudy) Trubitt	\$48.00
CONTROL SYSTEMS FOR LIVE ENTERTAINMENT	
John Huntington	\$86.00
ELECTRONIC PROJECTS FOR MUSICIANS Craig Anderton	\$39.00
ESTA ETHERNET GUIDE	\$35.00
HUMS & BUZZES EXPLAINED Laurie Methercote	\$9.00
LIGHTING THE STAGE Francis Reid	\$40.00
LIGHTING AND SOUND Neil Fraser	\$29.00
MAKING MUSIC WITH YOUR COMPUTER	
Edited by David (Rudy) Trubitt	\$39.00
MAKING THE ULTIMATE DEMO Edited by Michael Molencia	\$49.00
MIX TEST CD Deluxe Edition	\$70.00

NEW! SOUND ENGINEER'S POCKET BOOK \$50



Edited by Michael Talbot-Smith. A handy, compact source of essential data every sound technician should have. Covers the latest technology connected with sound: noise measurement, acoustics, microphones, loudspeakers, mixing equipment, CDs, DAT and MIDI, telephony, ISDN, digital interfacing, ultrasonics. 157 pgs, 1995.

STAGE LIGHTING HANDBOOK \$39

By Francis Reid, 5th Edition addresses recent advances in lighting technology. In 1974, Connections editor Julius Grafton read the first version of this book and successfully lit a professional stage play. Widely accepted as the standard work on the subject. 224 pgs, 1996.

PROFESSIONAL LX HANDBOOK \$105

By Verne & Sylvia E Carson. Details technical foundations, equipment and methods of lighting for film and video productions. Packed with practical insights, tips and troubleshooting techniques useful on the set. 224 pgs, 1991.

CONCERT LIGHTING \$70

By James Moody, 2nd Edition covers every aspect of rock & roll concert lighting equipment and techniques, including CAD, moving lights, hi-bred consoles rigging safety and special effects. 279 pgs, 1990. WAE \$94

MODULAR DIGITAL MULTITRACKS George Petersen	\$49.00
MUSIC & TECHNOLOGY F.P. Newquist	\$29.00
MUSIC PRODUCERS Edited by MIX Magazine	\$39.00
RECOMMENDED PRACTICE FOR DMX 512 Adam Bennette	\$19.00
SET LIGHTING TECHNICIAN'S HANDBOOK Harry C. Box	\$75.00
SOUND FOR PICTURE Edited by MIX Magazine	\$39.00
STAGECRAFT Trevor R. Griffiths	\$39.00
STAGE DESIGN & PROPERTIES Michael Holt	\$29.00
STAGE MAKEUP Herman Buchman	\$34.00
STAGE MANAGEMENT & THEATRE ADMINISTRATION	
Pauline Mearns/Terry Hawkins	\$25.00
TECH TERMS George Petersen/Steve Oppenheimer	\$15.00
THE BEST OF DUNCAN FRY	\$12.00
YAMAHA SOUND REINFORCEMENT HANDBOOK	
Gary Davis/Ralph Jones	\$65.00

STAGE LX CONTROLS \$89

By Ulf Sandstrom. Explains the general principles of modern computerised lighting consoles and the relevant control standards such as DMX512, MIDI and Ethernet. Covers the basic aspects of controlling moving lights and scrollers. 215 pgs, 1997.

PROJECTION FOR THE PERFORMING ARTS \$80

By Graham Walne. Gives a brief historical overview of early projection attempts, then looks at equipment and the planning and design of every kind of indoor and outdoor live performance. 139 pgs, 1995.

CONCERT TOUR PRODUCTION MANAGEMENT \$39

By John Vasz. Provides basic information needed to manage the production of a touring concert from start to finish. Discusses different types of venues, who's who on the road, crew management, riders, contracts, and even electrical formulae! 165 pgs, 1998.

MODERN RECORDING TECHNIQUES \$65

By Huber & Runstein. Addresses the area of project studio recording, the new base of home music production, using multitrack, Hard Disk and MIDI technologies. Descriptions of the toys, tools and practices of music recording and production. 4th ed. 500 pgs, 1995.

LIVE SOUND MIXING \$39

By Duncan Fry, 3rd Edition addresses the basics on how a PA system works, and details on troubleshooting when it doesn't. Covers EQ, processing, mixing, sound-checks, effects, monitors. 174 pgs, 1997.

EXTRA STUFF:

LEATHERMAN SUPERTOOL	\$149.00
LIGHTING STENCILS (Set of 2)	\$95.00
T-SHIRTS • Black cotton t-shirts all printed with yellow	
Connections logo on rear and white title on front, from Bongo Print	
Wrks. All XL size, one size fits all.	
Titles: I am NOT the DRUMMER	
NOTHING you DO will get you BACKSTAGE. (BUT TRY ANYWAY!)	
(Available in Short Sleeve only)	
Equipment Relocation ENGINEER (available in Short Sleeve only)	
Sensitive LIGHTING Person* *Oxymoron?	
LONG SLEEVE	\$19.00
SHORT SLEEVE	\$14.00
• "CREW" black cotton t-shirts printed with Connections logo on	
rear and title in blue (M or XL size, short sleeve only)	
	\$14.00

Call 1800 635 514 to order or Fax +61 2 9876-5715

We take: Diners, Amex, Visa or Mastercard. Other forms of payment: \$AUD only. • Freight: within Australia \$5 for any order; overseas: cheapest available air mail charged to your credit card only.
• Subscriber discount: Take 10% OFF the total of your order, THEN add on the freight cost (Current subscribers only). Take out a subscription when you order and get the 10% discount with the same call!

1200w profiles." Arthur ran the show off a Jands Hog 250 and an ESP 24 using Jands touring dimmers. His design concept was to create a shadow show, utilising the white cyc at the rear of the stage to project onto, "I wanted to do something abstract and ended up with about 100 cues in the board but you also need to be adaptable with Paul because he has such a huge songlist and changes the set every performance, so you can never really be sure what's coming up next."

Arthur positioned a lot of the equipment on the floor and in front and to the side of the band to create the images he was after. He chose a palette of saturated colours because they appeal to Kelly, "Paul is a real colour junkie so I went for a lot of heavy, solid colours which the moving lights were great for. As they all have such unique characteristics I was able to get lots of different textures and looks." Arthur likes the Robocolours for their output, colour options and for the fact that they require minimal programming time, "Time is always your worst enemy when you're touring and since

there was no rehearsal time before the start of the tour, anything that could cut down on programming time was appreciated."

Before the Australian tour began the band and crew spent three weeks in the USA doing a pub tour and from Arthur's comments it was obviously a relief for the crew to be back home, "We were doing pubs where there might have been a 40 can rig but only twelve of them would work and there was no technician on staff and no paperwork to give you any clues." After that experience "I'm sure a winter tour of some of Australia's finest venues was a dream!

● *Jacqueline Molloy*



Bruce Johnston

TOUR PERSONNEL

Production Manager/Monitors *Dave Allpress* Lighting Designer *Matt Arthur* FOH Mixer *Bruce Johnston* Guitar Technician *Craig Bird* Backline Technician *Greg Weaver* FOH Technician *David Waller* Lighting Technician/Merchandising *Ben Lyons* Audio Technicians/Drivers *Andrew Chapina & Darren Roynance*

DATE WITH DISASTER

Tape Cues. How not to do it....

By the Cassette Kid

I am still waiting for Connections to finally OUT the galah who fluffed the tape cue at the Sydney footy Grand Final some years back. You may recall, the entire cast of 42nd Street marched out and stood waiting waiting waiting until the three minute window passed. The tape ran a few times, but always in the middle, never from the start of the tune. They then trooped off the field en masse, not a dance step made. What a waste of makeup.

But while I wait for this great Date With Disaster, I also remember the Great Optus TV Set Disaster a few years later, also at a Sydney footy Grand Final. Who can forget the huge mock TV set, aloft in the breeze from a crane, which decided to break up, dropping pieces on the performers on the field? Is Grand Final entertainment a magnet for disasters?

My nearest similar FUBAR was much more humble, just a heat of the 2SM Rock Eisteddfod, in a nameless suburb of Sydney. Tuesday night, 14 different

Schools, 14 different acts. God knows where we put people, because every school had 40+ performers, teachers, hangers on, and a veritable cheer squad of parents and friends.

Act 12 was a wretched dance to some Joan Jet track, where the Year 12's threw each other around in leotards while the Year 8's pretended to be street kids. The segment notes read:

"..... lot of Fog, strobe, flash lights, cassette tape with cue."

Of course the cassette tape was of extremely dubious quality, with limited frequency response, and recorded on a combo hi-fi which had some crude automatic gain level control, so it gasped, hissed and pumped. The music was track five on the tape. Not only this, but the act required the music to be faded UP about six bars in, after one of the precious year 8's did a kind of artistic spoken intro.

After rehearsal the music teacher decided I should give her BACK the cassette, so they could rehearse some more, down in the carpark.

Of course you guessed it - the cassette comes back to me about a minute before the act are due on, and I forget all about the five bar fadeup because I'm distracted by the teacher. Crucially I haven't made a proper note on the segment list.

Running the tape, the Year 8 looks lost on stage. I remember the spoken intro. Down comes the tape level, fumble for the lapel mic receiver channel. Up goes the mic, the intro is already half spoken anyway, before you get to hear anything. Cut to the music channel - but I've somehow hit fast forward on the cassette deck instead of play! Duh! Backwards, forwards, stop, start..... an interesting act.

Of course you can well imagine how poorly this whole shemozzle was received by the particular school and their attending supporters. There is seldom anything as sad as a large group of school kids whose act has been ruined by someone.

Especially when that someone is you.



BIRKART CONCERT CARGO

Worldwide Concert Logistics • Sound & Lighting Forwarding • Carnet Specialists • Fair & Exhibition Forwarding
Trucking • Air Freight • Aircraft Charters



Let us perform for you

Birkart Concert Cargo specialises in all aspects of logistics for the concert and exhibition industry.

In Australia Birkart Concert Cargo now operate a large fleet of Air-ride Vans, Tautliners, and B-Double trucks, all with road case ramps.

Birkart Concert Cargo have over 60 offices worldwide.



ADELAIDE

Birkart Concert Cargo
35 Victoria Street
Victor Harbor 5211
South Australia
Tel: (08) 8552 3235
Fax: (08) 8552 3251
Mobile: 0418 360 739
Email: birkart@dove.net.au
A.C.N. 003 909 939

MELBOURNE

Birkart Concert Cargo
28 Carendon Street
3rd Floor, 'The Tea House'
Southbank 3006
Victoria, Australia
Tel: (03) 9696 2988
Fax: (03) 9696 7096
Mobile: 041 425 262
Email: birkart@iaccess.com.au
A.C.N. 003 909 939

SYDNEY

Birkart Concert Cargo
Level 2, Suite 4, Centrum Place
6-8 Crew Place
Roseberry 2018
NSW, Australia
Tel: (02) 9313 7299
Fax: (02) 9313 7300
Mobile: 0411 659 598
Email: BIRKART@MSN.COM
A.C.N. 003 909 939

Write in Reader Service Number: 167

CONQUERING THE BOUNDARIES OF

(EINSTEIN WOULD BE SMILING—IT WAS GONE WITH LIGHT ...)

SPACE TIME & ENERGY

INTRODUCING THE TECHNOBEAM™ AUTOMATED LUMINAIRE

NOW YOU DON'T HAVE TO
BE A ROCKET SCIENTIST
TO BRING INTELLIGENT LIGHTING
TO YOUR UNIVERSE

SPACE OF AGE

A galaxy of special effects integrated into a lightweight (19 kg), compact (86cm x 33cm x 41cm), luminaire.

- Hard or soft edge selectable light beam.
- Superb projection capabilities allow your custom image or message to appear on any space.
- Paint your desired environment with a vast palette of easily selectable dichroic color.
- Moving mirror allows remote positioning of light with pan and tilt of 180° x 75°.
- Remote focus, frost, prism, 7 rotating patterns plus open position, 5-position rotating effects wheel, variable speed strobe.
- Layered, multi-focus, 3D, liquid and textured effects to design your universe.

TIME TIME

Never before has it been so simple to produce an out-of-this-world stage show or corporate event, or to enhance any interior environment in a short amount of time.

- Control via DMX-512, Lightwave LCD controller, or 8-scene on-board memory.
- Laser aiming device (LAD) allows programming and pre-focusing in high ambient lighting.
- No dimmers needed—all intelligence is on board.
- Control via DMX-512, Lightwave LCD controller, or 8-scene on-board memory.
- Laser aiming device (LAD) allows programming and pre-focusing in high ambient lighting.
- No dimmers needed—all intelligence is on board.

ENERGY ENERGY

Space-age technology makes Technobeam the most energy efficient intelligent luminaire in the cosmos.

- Universally compliant to electrical codes and meets most "green" codes.
- Unprecedented 2500 hour life from 250 MSD lamp.
- Power factor correction, elliptical/spherical reflector system and lens enhancements provide profound lumens/watts ratio consuming only 1.6 amps @ 230v, 50Hz.
- Voltage selectable for any power source on this planet.
- E=MS². You'll find Technobeam's value/price ratio amazingly attractive.

TECHNOBEAM™

FROM LIGHTWAVE RESEARCH / HIGH END SYSTEMS

PLANET AUSTIN

BECAUSE QUALITY IS ALWAYS THE BEST INVESTMENT

ASK ABOUT TECHNORAY™
AND TECHNOPRO™
COMPANIONS TO TECHNOBEAM

<https://www.highend.com>

High End



SYSTEMS
LIGHTING-WORLD-WIDE

© HIGH END SYSTEMS, INC.:
221 West Braker Lane, Austin, Texas 78758 USA
Tel: 512.836-2242, Fax: 512.837-5290

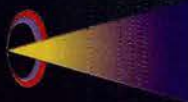
HIGH END SYSTEMS, WEST COAST:
3200 Haskell Avenue, Van Nuys, California, 91406 USA
Tel: 818.841-0550, Fax: 818.309-8975

HIGH END SYSTEMS SINGAPORE PTE. LTD.:
Gencoon 1, 1 Tankery Road 06-05, Singapore 347719
Tel: 65.748.8266, Fax: 65.743.9322

HIGH END SYSTEMS GmbH:
Tel: 49.8122.9903-0, Fax: 49.8122.9903-33

TECHSCOPE LIGHTING & AUDIO DISTRIBUTORS

82 Arthur Street, Fortitude Valley,
Brisbane, Queensland, 4006, Australia
Tel: 61 7 3358 5118, Fax: 61 7 3358 6032
Toll Free: 1 800 773 187
Email: tscape@mpx.com.au



TECHSCOPE
Lighting & Audio Distributors

Write in Reader Service Number: 107

LIGHTING

September 1996

MONTHLY

Edited by Catriona Forcer

LXbizzBITS

PRODUCTS

FUTURELIGHT CC200

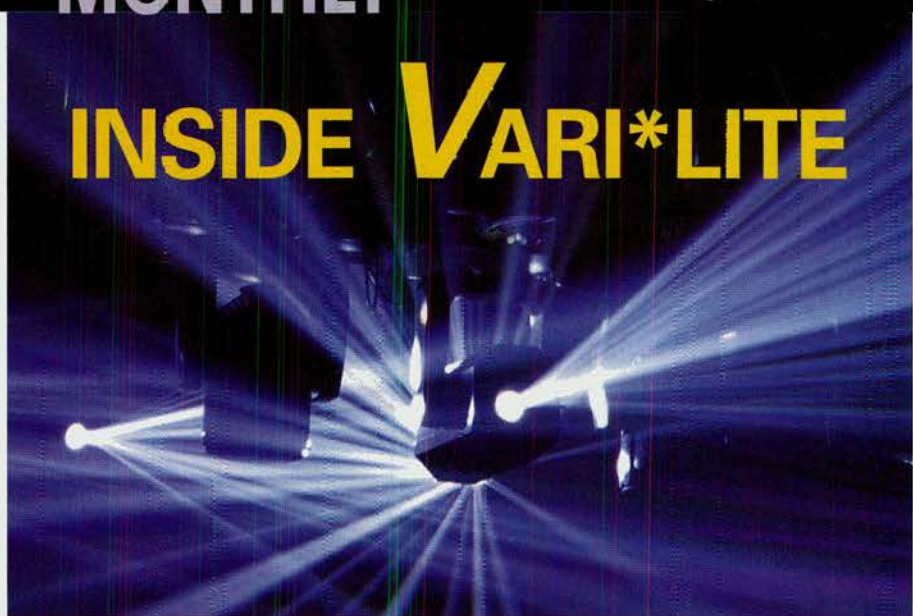
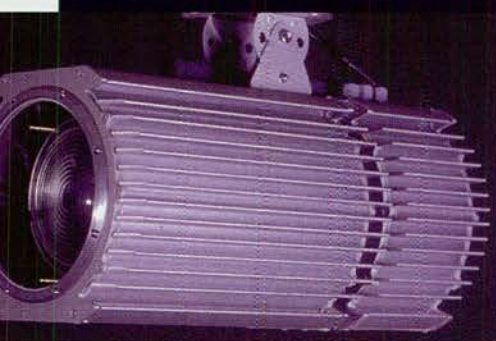
Futurelight's new CC200 Colour Changer gives a total of 72 colour combinations using eleven rich dichroic colours plus white. Other features include: separate effects wheel with 3200K and 5600K filters; CMY filters and UV filter; two "J"-type replaceable gobos; manual focus and zoom (110-200); high speed strobe effect; dual linear dimmer focused and frost beams; on-board controller or DMX512; and a long life MSD200 or MSD250 lamp.

Call Coemar De Sisti Australia +61 3 9467 8666.

MARTIN EXTERIOR 600

The Martin Exterior 600 is designed for outdoor applications utilising the quality of the Martin Mac 600 in a durable weatherproof housing with a convection cooling system. Coupled with a host of automatic features including hour, day and date settings as well as built-in light sensor which triggers operation after sundown, Martin claim the Exterior 600 can provide years of independent uninterrupted life.

As well as having the features of the MAC 600 colour wash, the Exterior 600 has a unique motorised zoom ranging from 18-45 degrees (and up to 65 degrees with frost). Call Martin Professional Lighting Australia +61 2 9898 1111.



Dallas HQ opens the doors after public float

By Julius Grafton

In the lighting industry the Vari*Lite Automated Lighting Company represents the leading edge. The firm embodies the most intelligent merger of technology with human resourcefulness. And the runs are on the board, with two Emmy awards and twenty five years in which the greatest of the great were happy users of a unique product. I visited Vari*Lite in Dallas and was graciously received, despite having written the occasional sharp comment about Vari*Lite in these pages

Dallas~ global HQ

Vari*Lite is out on Regal Row HQ is a rectangular nondescript warehouse type building, one of five nearby. I sign in and note the security is tight. There are no windows, and no photography allowed.

Inside it is all neat and orderly, first stop is the Patent wall, where PR manager Tom Littrell and communications executive Anne Valentino explain that VL has over 25 US

and 110 foreign patents. This is part of an aggressive intellectual property program, which is what you do if you seek to protect an investment.

Show shots line the hallway, indeed a staff member - Lee Lewis - has been taking great shots for years, which were recently incorporated into a book, proceeds to charity.

Coffee is produced, on cue.

We tour the make ready area, where VL2C's are all stacked atop their carpet covered road cases, awaiting testing. The VL2 has lived on in various guises for many years, with the latest variant incorporating a 600w HTI light source re-fitted into the original folded metal lantern case.

VL-7 debuts

In the demo theatre we see the new VL7, a large format spot luminaire using an Osram 600w HTI metal halide arc lamp. VL7 was in final prototype mode during our visit, and was demonstrated using an Artisan console

continued on next page

REVIEWS



Coemar CF1200
page 74



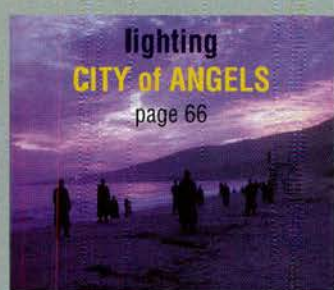
Jands Echelon 1K
page 70

INSIDE LIGHTING

BUYERS GUIDE
fresnel spots
floodlights
page 78



Clut FX
page 68



INSIDE VARI*LITE

continued from previous page

running Vari*Lite's proprietary control protocol. But VL7 will also run on DMX-512, like all recent completely new Vari*Lite products.

With a 6 position rotating gobo wheel, gobo morphing and provision for another 12 fixed colours or gobo's on a fixed wheel, VL7 does things GOBO that other manufacturers fixtures have been doing for years.

But the really impressive aspect of VL7 is the beam spread, or field angle. It is continuously variable from an impossibly tight 5°, through to a wide-ish 40°. That this is done in a fixture just 610mm from rear of housing to front of lens is very impressive.

Equally impressive is the CVF colour mixing system, the exact mechanical details of which are classified in-

formation. It provides continuously variable full spectrum crossfading of colour with seemingly every hue and tint available with the possible exception of ultra violet - which can be put into the fixed gobo wheel and called up anyway.

Likewise innovative is the mechanical dimming system, programmable in range from just 0.5 of a second to one hour. We discuss this, and Tom Littrell describes the system as similar to that used in the VL2C - which dims like 'it sucks the light out of the air', a subjective judgement backed up by others.

VL7 does the job in a compact body, just slightly larger in truss spacing than a VL2. The arc lamp ballast is external, so one control cable carries high tension current for the lamp, low voltage power for the moving yoke and internal motors, and control signal.

Ordinarily a ballast needs to be close by, but the VL system allows cable lengths of up to 500 feet, or 120 metres. The ballast is incorporated into a modular rack, each VL7 has a module in a rack called a 'SixPack', with four SixPack chassis and 3 phase power all contained in a modular rack.

Of course other Vari*Lite models have different power requirements, so there are modules for them too - such as the C3 dimmer module, for VL5 luminaires which use a conventional (non ballast) lamp.

Systems approach

The way Vari*Lite integrates is what puts it apart from other manufacturers, says Tom Littrell. Looking at a system schematic this is certainly possible.

The ArtisanPlus control console connects to a Vari*Lite system with cables and hardware all constructed by Vari*Lite. It's certainly true that no other manufacturer has a

complete system solution, and that every rental company embarking on assembling a moving light system must do a lot of work to integrate all the parts into a reliable, efficient system.

Vari*Lite's range now spans the VL2C spot, VL4 wash, VL5 and VL5 Arc wash, VL6 spot, and now VL7 spot. The addition of the VL7 could stop some lighting designers adding Golden Scans and Cyberlights to their designs, we imagine.

How it all reaches the stage

Vari*Lite only rent, they do not sell, their systems. This is contentious perhaps, but Howard Hughes made his pile in Texas with an oil rig drill bit that was only avail-

able for hire.

Several years ago the firm made a concession to this policy by allowing controlled rental-purchase of VL '300 series' systems for certain users, typically big circus tours and Vegas hotel cabaret rooms. The deal provides a lump sum payment for a five or ten year lease, with nominal payments for one year extensions after. There are 50 such 'sales-type leases' currently.

At this stage, I am joined by Loren Haas, the Executive Vice President of World Wide Sales for Vari-Lite Production Services. A nonsensical kind of guy, he is clearly accustomed to high level and tough negotiations with high level and tough people.

There are three kinds of Vari*Lite outlets. Wholly owned offices, now renamed Vari-Lite Production Services, are across the USA and Europe and also in Hong Kong and Tokyo. Distributors and Dealers (a dealer only has access to part of the range) are scattered across the rest of the globe.

Interestingly in the south east Asian region, a Jands subsidiary holds the franchise - despite only operating an office in Melbourne, and being headquartered in Sydney. A Jands office in Singapore was closed last year.

The Float: opening up the sealed world of Vari*Lite!

In October last year Vari*Lite was floated, meaning shares were listed and sold to the public in the USA. This required a prospectus detailing much of the companies operation, and also requires regular disclosure of trading and matters that affect trade.

The reason anyone floats a private company is to raise cash, now and in the future,

continued over



VL7

LXbizzBITS

PRODUCTS

UV/FX

The current tour by Chicago uses a new lightweight scenic effects system from UV/FX Scenic Productions. The 40' x 80' back-drop and the front scrims which weigh only 96 lbs were designed and painted by UV/FX in their invisible dual image style. It allows the stage to have one look under normal lighting, another look under show lighting and a completely different look under UV lighting. Lighting designer Ian Peacock used 16 High End Cyberlights to give the drop and front scrims a series of colour washes and moving patterns giving the stage more dimension and colour changing possibilities.

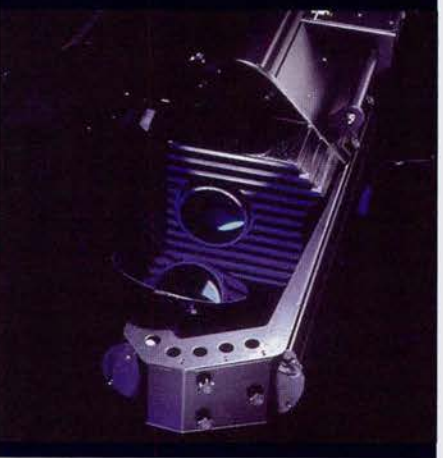
Call UV/FX +1 310 392 6817.



MARTIN PAL 1200 E

The Martin PAL 1200 E is a new version of the Pal 1200 automated framing spot. It replaces the Pal 1200's magnetic ballast with an electronic ballast to produce a smoother more constant light stream. The PAL 1200 E produces flicker-free images making it ideal for television studios and theatres - anywhere high speed digital cameras are used. It is also lighter than the PAL 1200, weighing 12 kilos less, and has an increased lamp life.

Call Martin Professional Lighting Australia +61 2 9898 1111.



Mirror, mirror on the wall...



INTRODUCING
THE NEW
918

who's the brightest of them all?

Let the truth be told!

The new Martin Roboscan Pro 918 Scanner is simply the brightest scanner in its class on the market today.

Utilizing the features of the highly successful MAC 500 moving head, Martin has developed a powerful 575 watt scanner with all the

quality and reliability you expect from Martin products. There is a reason why Martin is the industry leader in intelligent lighting.

Ask the important questions.
Get the important answers.
The new Roboscan Pro 918.


Martin

Martin Professional Lighting Australia: A division of Show Technology Australia Pty Ltd, 13-15 Bridge Street, RYDALMERE NSW 2116
Postal Address: PO Box 480, RYDALMERE NSW 1701

Phone: +61 2 9898 1111 • Fax: +61 2 9898 1222 • Internet: www.martin.dk • Website: <http://www.showtech.com.au>
Write in Reader Service Number: 152

INSIDE VARI*LITE

continued from previous page

by selling off shares. The Vari*Lite float sold about 20% of the firm, for about US\$20 million. It went well, the shares were listed at US\$12 each thereafter - but have since fallen somewhat at press time, a disappointment given the relatively robust state of Wall Street.

Partially this can be attributed to disappointing sales for the second quarter of the financial year, which didn't compare favourably with the previous year and resulted in a small loss on revenue down by almost ten percent.

Loren Haas is not impressed with the short term view of the share market, and less than happy with the quarterly reporting burden. 'This is a seasonal business' he confirmed - and indeed, the prospectus does state that turnover will fluctuate quarter by quarter.

How the share price fares will depend on perception, quarterly results, and the overall mood of the market. With 20% of the company in the hands of strangers, Vari*Lite CEO H.R. Brutsche III is clearly treading a different path for the next millennium.

One overdue initiative is to get the operations contained in the five leased buildings in Dallas consolidated, a new 25,000m2 facility will be built shortly on a nearby site.

Interestingly the actual inventory of Vari*Lite remains confidential, questions about 'how many' fixtures the firm owns were politely brushed aside. The financials show sound and lighting equipment valued at US\$102 million before depreciation and amortisation. This gives no clues, especially as it also includes ShowCo, the fully owned concert sound company which has been included in the float.

Training and industry access

Some (not all) lighting designers I meet around the world complain to me that they know little of, and do not have access to, Vari*Lite.

In many cases this is simply because they haven't lifted the phone and called their nearest Vari*Lite office, or they haven't visited the LDI trade show in the USA each year

where Vari*Lite do run seminars and exhibit their products.

Loren Haas tells me that the firm actively monitors the lighting market and is quick to call lighting designers to invite them in for a look, 'They are tickled to get the call' he says, and I imagine they are. I sure got a kick looking over the facility in Dallas!

Anne Valentino told me that in the USA the firm operates a campus training scheme, with a system and teacher visiting education campuses which have a heavy drama commitment.

Vari*Lite run on site training seminars for dealer sponsored crew, who learn what is required.

In Australia at least there is some concern that Vari*Lite are remote from up and coming potential users. One wrote to me at presstime to say that having used every brand of moving light available except Vari*Lite, he couldn't get Vari*Lite Australia to actually quote on a hire for a short season - "I ended up hiring Martin MAC 500's and 600's instead".

Where now for VL?

As soon as the float was nailed down, the firm unrolled its VLPS strategy, whereby existing outlets added conventional lighting equipment to their Vari*Lite inventory.

This closed off the situation where two lighting vendors would work one show, as indeed a lighting company can now do a show without Vari*Lite anyway - using automated moving yoke lighting equipment from Martin, High End Systems or Clay Paky.

The VLPS strategy means major capital investment in conventional lighting, dimmers, control and rigging.

While there is no doubting the technical savvy and the considerable design smarts resident at Vari*Lite, these are times where many users have many options.

Unless Vari*Lite can open up the doors and inspire a new generation of lighting designers and event producers, they could be marginalised as just another rental company.

Vari*lites' Tom Littrel at LDI 97



NEWS

ULA NEWS

Lighting Lab has bought two NSI MLC16 consoles from ULA to use in their rental department with a variety of moving lights including JB VaryScans and High End Technobeams. The MLC16 is a easy to use, user friendly console, to control up to 16 moving lights. A large fixture library is supported, and users can custom right their own fixtures too. Lighting Lab +61-3-9898-7064
Lots of Watts purchased a Griven Imperia 4000 from distributor Universal Lighting & Audio, taking a 4000W Xenon lamp this impressive single beam search light uses high definition motorised lamp/reflector assembly to scan through the sky and also supports Lots of Watts have also bought two Griven Spillo 1200HMI single beam searchlights. Lots of Watts +61-2-9638-0302
Universal Lighting & Audio 1800-648-111 or +61-7-5532-9922, www.ula.com.au

SELECON NEWS

Samples of the complete Pacific range 12° - 28°, 26° - 50° Zoom and fixed 20°, 30°, 40°, 50° angles are available from all Selecon dealers. They are generating a lot of interest from production companies, and Clearlight Shows of Melbourne have put 40 units into their rental stock.
Roger Hind of Sydney based Theatrics has recently equipped the Bangarra Dance Company with thirty each of Selecon Acclaim Fresnels and Zoomspots and Springwood's Braemar Cottage - Community Art Gallery with Accent Spots, Frodo Fresnels, and Accent Profiles.
While not being able to claim credit for lighting the World Cup, Selecon Astral Condensers were lighting the displays of the various team uniforms. These formed part of a major promotion at the huge sports shop associated with the French stadium in St Denis. Supplied by Selecon's French distributor Avab Transtechnik who also have just fitted out one of Toulouse's major theatres with 100 Aurora Cyc lights.

There is something new in light effects: ColourDynamic 100.



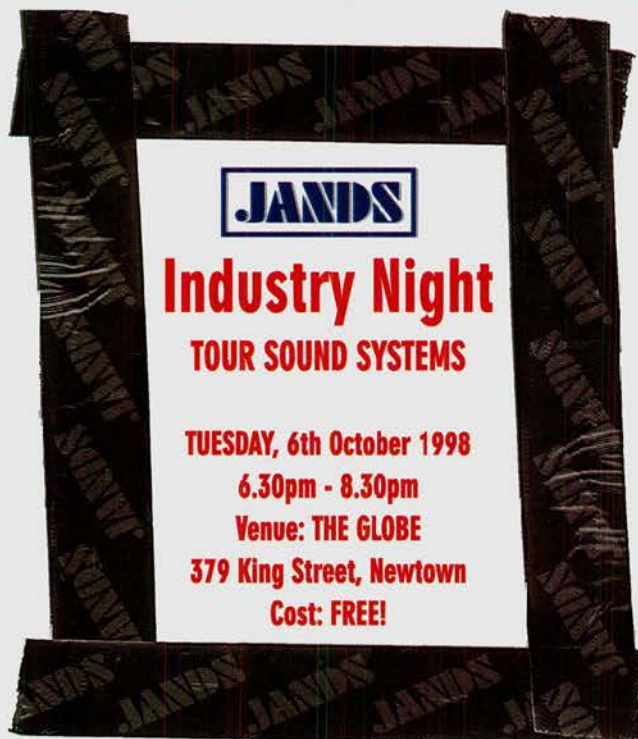
LIGHT TECHNOLOGY

Via Pio La Torre, 1
61010 Tavullia (PS) - Italy
Tel. +39 (0)721 476477 - Fax +39 (0)721 476170
sgm@interbusiness.it - www.sgm.it



Photo: Bazzoli - Anzenberger

Write in Reader Service Number: 157



JANDS

Industry Night

TOUR SOUND SYSTEMS

TUESDAY, 6th October 1998

6.30pm - 8.30pm

Venue: THE GLOBE

379 King Street, Newtown

Cost: FREE!

JANDS INDUSTRY NIGHT!

Jands Australia's largest supplier and manufacturer of audio and lighting products is offering its expertise to the public. On the first Tuesday of every month, Jands are holding an Industry Night featuring all the latest technologies in music production.

Held at: The Globe, 379 King Street, Newtown, all musicians, artists and anyone interested in honing their skills in various areas of the music industry are invited to attend.

To register, please call JANDS ELECTRONICS on (02) **9582 0909**

40 Kent Road Mascot NSW 2020 Fax: (02) 9582 0999 www.jands.com.au

JANDS

Suppliers of Stage Fabric & Machinery

- Theatre Curtain Tracks
- Projection Screens
- Stage Drapes & Gauzes
- Cinema Masking Systems
- Counterweight Systems
- Power Flying Systems

For more information contact
Jands Theatre Projects
9582 0909

40 Kent Road Mascot NSW 2020 Fax: (02) 9582 0999 www.jands.com.au

EMPIRE THEATRE - TOOWOOMBA

GamColor® JUNIOR ROLL

CUT your gel costs 10%

CUT your gel waste

CUT your best deal—



The NEW 24"x 198" Junior Roll that increases usable yield 25% over standard sheets. Available in 121 GamColors and 20 diffusions.

MILLER PROFESSIONAL PRODUCTS

30 Hotham Parade, Artarmon NSW 2064

Tel: (02) 9439 6377 Fax: (02) 9438 2819

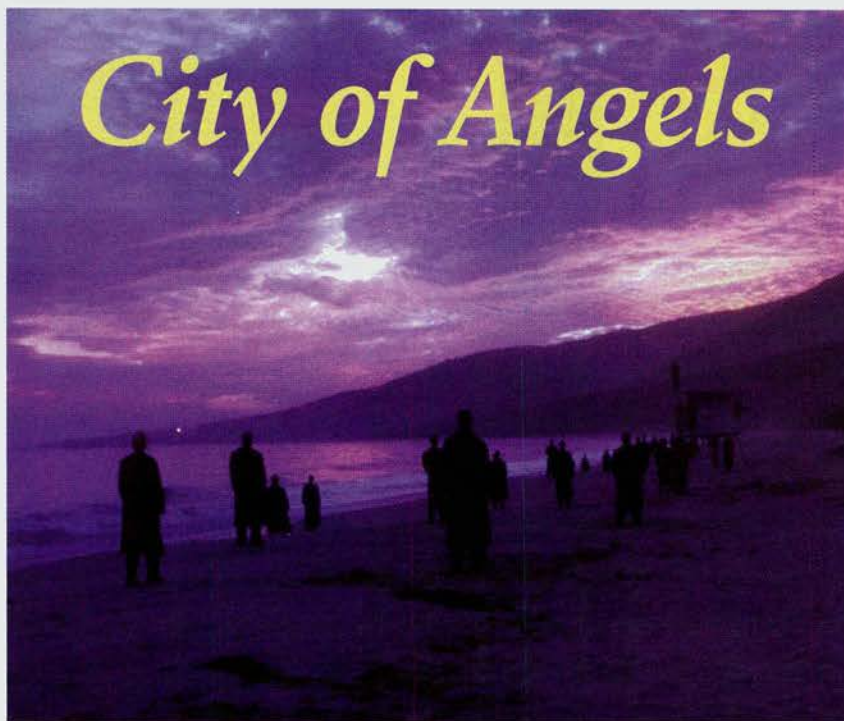
CELESTIAL NAVIGATION

Australian DP John Seale Explores the

Australian director of photography John Seale is not in the habit of shooting remakes, particularly of renowned European films like Wim Wenders' *Wings of Desire*. "I've been asked a few times to shoot remakes of French films," says Seale, "and I haven't done them, because I saw the original version and said, 'How can you beat that?'" But *City of Angels*, the American translation of Wenders' 1987 movie that Warner Bros. released last month, changed his mind. He liked Dana Stevens' script, which transformed the story "in interesting ways"; he thought director Brad Silberling's approach was original; he welcomed the opportunity to work with stars Nicolas Cage and Meg Ryan. But still, he realized, "how will we get it to work successfully without making it too American?"

City of Angels sets its story of a guardian angel (Cage) deciding to fall to earth because of his love for a mortal woman (Ryan) in Los Angeles rather than Berlin, and makes the central female character a soul-searching heart surgeon instead of a trapeze artist. The tone of the movie is more big-studio Hollywood than European art film; the pace, though somewhat languid, is of a steadier clip than *Wings of Desire*, and there are pop songs on the soundtrack.

More noticeably, the movie eschews the black-and-white stock that largely composed *Wings of Desire*. Though it's made clear that the angelic universe lacks a full colour spectrum, *City of Angels* is set more solidly on terra firma, with Ryan's character more strongly the focal point than her counterpart in the German film. Not only is that strategy more commercial, it kept the Australian-born Seale, Oscar winner for *The English Patient*, from suffering comparisons with legendary cinematographer



DP John Seale favored soft bounce lighting in *City of Angels*, a movie that called for an ethereal look. Chimeras and Kino Flo Instruments were most commonly used on the production, both for interiors (opposite, top) and day exteriors (opposite). The entire film was photographed on Kodak's high-speed 5279 Stock. Wherever possible, Seale avoided having his angelic characters cast shadows, as in a scene of the heavenly creatures gathered on a Malibu beach watching the sunset (above).

Henri Alekan's work on *Wings of Desire*.

Seale had his own ideas for representing a world inhabited by angels. "Nicolas Cage's character doesn't exist unless he wants you to see him," says the DP. "So I figured he had to be shadowless, that if he's not actually there, he couldn't cast a shadow on anybody. I think the biggest challenge for the movie was exactly that. In *Wings of Desire*, the angels threw shadows, because back then it was hard fresnel lighting, and they couldn't possibly avoid it if it occurred to them." Even now, doing so "was reasonably difficult," Seale adds. "Once it was known that Nic shouldn't have shadows, he picked that up, and he would say, 'I've got a shadow!' Which was awkward, because sometimes it was just impossible to get rid of it. There were times in the hospital set when he's walking down the corridor where I got caught with shadows. We also did a lot of multicamera work, because Brad wanted a lot of coverage, and that didn't help. But

luckily, modern color lighting is a softer, bounce-type lighting, and that made it easier."

The cinematographer prefers bouncing his light off walls rather than the standard polystyrene boards because "the colour's nicer. I rarely try to use white light since there's not much ill reality." In terms of instruments, Seale is a big fan of the up-to-date soft systems. "You've got these lovely new delights, the Chimeras," he says. "They're big and they're soft, and the crates in front you can make them fairly directional. That was one of our favorites where we could fit them; unfortunately, they're very bulky. So then you shift to the Kino Flo Wall-O-Lites. I think the Kino Flo system is just phenomenal. It's obviously

an adaptation of a standard bracket that's been made for 30 years, but by putting in color temperature, making walls of light, and making them different sizes, you can hide those things anywhere."

These lamps were most common on the *City of Angels* set, except during night exteriors. "Of course, there we'd have to use long-throw fresnel lamps, 20ks, 10ks, things like that," says Seale. "And we did have shadow problems. Whenever possible, we'd use them for wide shots, and when we cut in, we'd use either Kino Flos or Chimeras in closeup."

Another idea of Seale's was that "since angels are shadowless, maybe they glow from the inside, and have their own light." Accordingly, the DP generally used a camera light, either just over or under the lens. This not only highlighted Cage's "very powerful eyes," it effectively hid the actor's shadow. And "it gave him this glow and flattened him out, so he looked sort of eternally

young," says Seale. "Later, when he becomes mortal, his eyes are shot to pieces because wind is on them, he doesn't know what sleep is, he starts to sweat, he gets stubble. At that point, we actually destroyed him; he now had hard shadows on him."

Like the cinematographer's last few pictures, *City of Angels* was entirely shot on Eastman Kodak's 500ASA highspeed film, 5279 stock, as it is currently designated. "I shoot day, night, beaches, desert, interior, exterior, anything with it," he says. "If you're shooting a film like *The English Patient* in the desert in the middle of winter, you've got a very short day. You start shooting when the sun comes up, and you're still shooting when it sets. You reduce the filter to get rid of color temperature changes, and you increase the ASA right when you need it. At night, I can force-develop the negative; it intercuts like a dream with non-force-development. I find this such an easy way: It means I've got one line of magazines, one batch of stock."

Unlike *The English Patient*, *City of Angels* is an anamorphic picture. The format was chosen to emphasize the gap between angelic and mortal worlds, but it meant Seale had to use more light, thereby increasing the shadow hazards. The high-speed film helped. "I am a zoom lens advocate, I dump a zoom on and leave it there for the whole picture if I can," he says. "Those damned things on anamorphic are so slow, they're 4.5 wide open, so shooting night exteriors or interiors, you're really bashing in a lot of light to get there. To pick up another stop or two for free by using a highspeed negative is an absolute advantage. But then when I'm using flat lenses, and I've got 2.8 zooms, I still use highspeed stock, because another stop



formed into the hospital set. In addition, the production made jaunts to San Francisco's Main Public Library, and to a cabin on Lake Tahoe. Both required big gelling jobs. "The library was a giant location with an atrium and skylight," says Seale. "There were hundreds of fluorescent lights and there wasn't any way in the world we could afford to change those for a daylight look. So we had to gel every window on four floors plus the skylight, which took about three days for a big pre-rig crew and was very expensive. I heard the library was in fact keeping all the gels, so if anyone else wants to go shoot in there, there is a full package of daylight correction and fluorescent correction."

At Lake Tahoe, the gel helped create a day-for-night look. "We wanted to shoot a night scene with Meg Ryan in the house, with the lake in the background shimmering away," the cinematographer explains. "It was a log cabin with windows all over it, and we had to use hard gels on that. We wanted moonlight kicking off the lake, but to do one night of shooting in a five-day schedule at Tahoe upset the whole balance of the schedule, and the moon wasn't in the right position anyway."

The scariest location was a 38-story downtown LA skyscraper, on top of which Kilvert built a three-story girder set. Here, Cage and fellow angel-turned-mortal Dennis Franz sit, surveying the city. "We had to do this amazingly complex tracking crane shot, right up to Nic and Dennis sitting, over their shoulders and straight down to the freeway beneath them," says Seale. "We lit it from underneath with Kino Flo tubes, and got a nice soft glow as though from the city and freeway. But poor Nic Cage, if he's 3' off the ground, he's terrified."

Acrophobia or no, Cage made the kind of creative additions to *City of Angels* for which

he is known. "One of his lovely ideas was that, when he was an angel, he wouldn't blink," the DP recalls. "He didn't have to because he didn't have tears. Then when he was mortal, he blinked like crazy. We all had these little things we grabbed out of the script to be part of our contribution." For Seale, it was the attempt to blot out the actor's shadow. "I must say, it's a very subtle thing. One out of every 50 people might pick it up." For others, it will just be part of the texture the cinematographer invisibly gives to a film.

• John Calhoun

Reprinted with permission from: *Lighting Dimensions*



on the lens will give the focus pullers more depth of field."

The film made use of several locations in the LA area, including a beach at Malibu, where the angels gather at sunrise and sunset, and the decommissioned downtown Terminal Annex of the US Postal Service, which production designer Lilly Kilvert trans-

fogfor495*



The new Rosco Alpha 900 is the lowest priced of all Rosco's fog machines, and carries the Rosco assurance of high quality. The Alpha 900 fog machine is ideal for discos, church halls and schools. Simple on/off remote control the Alpha 900 is economical and powerful enough for amateur theatres and all those on a limited budget. Made for Rosco to exacting specifications, the 900 is compatible with all Rosco fog fluids.
*\$495.00 plus sales tax from your Rosco dealer.

**For your nearest ROSCO dealer
Ph (02) 9906626**

Write in Reader Service Number: 133

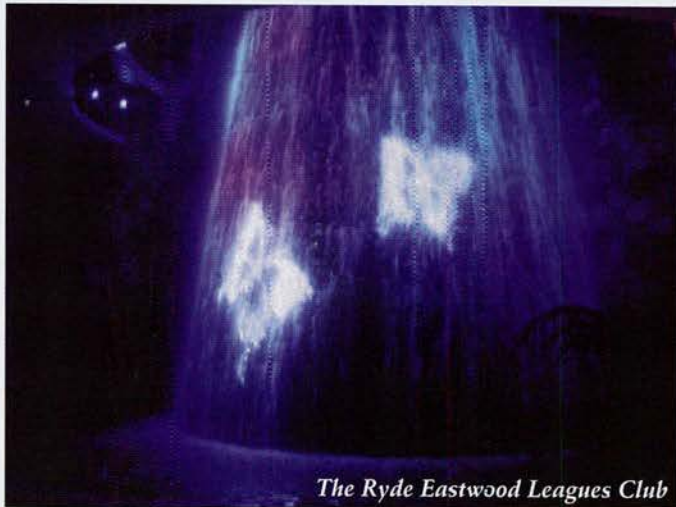
ADDING A SPLASH OF COLOUR

Lightmoves Technologies light up local clubs

The Ryde Eastwood Leagues Club

Lightmoves Technologies has just completed a waterfall feature at Ryde Eastwood Leagues Club using an innovative integrated lighting and audio display.

Situated in the middle of the club looking onto the Bistro area is a six metre high waterfall which gracefully cascades into a base pond. The waterfall



The Ryde Eastwood Leagues Club

feature is shown off with shows operating on the hour mark, running for exactly three minutes during the day. The show begins with the lights surrounding the waterfall area, being dimmed down, as the music starts to play. A haze of fog is created over the waterfall from an atomizing system that is carefully placed around the edge of the pool area. As the music becomes progressively louder the song reaches a climax when the waterfall bursts forth to a maximum speed. At this point a down rush of water sweeps away all traces of fog as a beautiful butterfly, created by two Golden Scan HPE's, emerges from the deep mist of the waterfall. Backed by an ever changing background from the 8 x Martin Pro 400 colour changers, an effect is created with the butterfly dancing on the running water, changing forms with the help of the Prism, frost filters and the strobe effects constantly changing to the beat of the music.

The shows are all pre programmed and replayed by a Pulsar Minder piece replay unit, which is triggered via the analogue input through a Dynalite 6 channel relay device and a Minder time clock. The operation of the CD player and the atomizing system are made through a Grey Interface DMX to relay a closure device. When programming through the Pulsar Masterpiece and using the Environ-

ment chaser feature, one button press will start, run and stop the Golden Scan HPE's, Pro 400's, atomising system, CD player, house lights and the waterfall.

Rooty Hill RSL

Lightmoves Technologies has just completed a visual effects 'Inverted Dome' at Rooty Hill RSL in Sydney. The heart and soul of the system is a complex series of images rear projected onto a Barasol screen. These images are created by Optikinetics K2 (200 MSD) Projectors which have been fitted with shutter cards and eight way slide changes.

The K2's produce the collage of images on the inside of the screen whilst Optikinetics Solar 250's project forms of an organic nature, clouds and fire, around the outer edge.

Both units have been supplied with 2000 hour lamps. Although the K2 Projectors have always used the 200 MSD lamp that provides a 2000 hour lamp life, this is a new



Rooty Hill RSL

feature for the re-vamped Solar 250.

The entire projection system integrates with a Dynalite Energy Management system which supplies timed power to the circuits and provides a trigger that operates the shutter cards and advances the slide changes to the next position. All of this occurs over a set period of time and is self repeating with variations.

The 35mm format was chosen because it is easy to produce images and it allows the club to self-promote with advertising space. The opening theme is Las Vegas to compliment the clubs logo of "Vegas of the West."

• *Cat Forcer*



NEWS

MARTIN NEWS

Lots of Watts has an extra 32 Martin MAC 500's and 600's currently for hire. Managing Director, Greg Kean, said, "We purchased so many moving head luminaries because I am positive there is a huge demand for them, only now will I meet the needs of my current customers. Just!"

Meanwhile Canberra based company, Nova Topstage has recently added more MAC 600's and 500's to the already existing supply and a Martin Case controller to their inventory. Chameleon Touring has also topped up their supply of MAC's to withhold the demands of stage productions.

Sydney based Black Express, has re-created 2 night spot environments, specifically designed to suit the needs of the ever changing night club circuit. The Sylvania Hotel has just added 4 Martin Roboscan Pro 518's and a 2504 Pre-Programmed Controller. And the Eastwood Hotel has had a total face-lift, with 4 Martin Roboscan 812's, 4 Roboscan Pro 518's and a Martin 3032 Controller.

Up north, Phil Hanson from Laser has broadened his scope by setting up an overseas nightclub called *Players* with couple of Roboscan Pro 518's and Roboscan Pro 400's as well as a Martin Punisher or two.

Staging Connections at Sydney now own a Martin Lighting Director Followspot System. Queensland's East Coast Lighting has purchased a Martin Show Designer. Greg Hughes, the owner, said "The Martin Show Designer allows me to show my clients venues and set designs with fully pre-programmed shows. I can illustrate what everything will look like without spending a cent".

100% pure haze and no messing!



The Neutron Star Hazer from Le Maitre produces 100% haze with no waste and without the messy oil residue associated with cracked oil hazers. Yet thanks to its world patent pending technology, it's just a quarter of the price. And it is an impressive 95% more efficient than its water based competition. What's more, with 100 hours' operation from just 2.5 litres of fuel, it's more economical to run. The Neutron Star Hazer from Le Maitre. Designed purely and simply to produce haze. And nothing else.

CALL TO ARRANGE A FREE DEMONSTRATION NEAR YOU!

Exclusively Distributed in Australia by: Universal Lighting & Audio
26 Commerce Drive, Southport QLD 4215
Tel: +61 7 5532 9922 Sales Hotline: 1 800 648 111 Fax: +61 7 5532 4155
E-mail: ula@ula.com.au Website: <http://www.ula.com.au>

Exclusively Distributed in New Zealand by: Lighting Supply Company
2/2 Raocna Street, Henderson, Auckland 3
Tel: +64 9 833 9217 or +64 9 836 0788 Fax: +64 9 834 4326

Write in Reader Service Number: 103

**Neutron
*S*T*A*R*
Hazer**

PURELY AND SIMPLY THE BEST



JANDS ECHELON 1K

By Cat Forcer

Described by Jands as a small Wholehog II, the Echelon 1k lighting control console is equipped with 1000 control channels, the Wholehog II Operating System, an Effects Engine™ and a high powered RISC processor.

The Echelon is the result of a collaborative effort between Jands Electronics and Flying Pig Systems and, just like the Wholehog II and the Jands Hog, it can handle any combination of fixtures, moving or static.

Iain Reed of 32 Hundred Lighting in Sydney purchased an Echelon for the recent Australian Fashion Week and for his busy and expanding lighting design consultancy. Before he purchased an Echelon, Iain had been using a Theatrelight 96-way desk, an LSC Atom and for most of his moving lights work, a Celco Navigator.

"The Navigator has served me well but I opted for the Echelon because it was time to up-to-date," Iain said. "The Jands Hog's have historically had a few problems with process control and the amount of time needed to re-boot if they crashed - 2 minutes is an eternal time if you're in the middle of a show - but with the Echelon it takes 30 seconds, not that I've had a problem."

WHY AN ECHELON?

"I had bought a considerable amount of moving lights and the Navigator was becoming a little old and clumsy for the new fixtures," Iain said. "As I'm often running different systems - Trackspots, Vari*lights, Studio Colors, conventional lighting - it all needed to be unified from the same desk and Echelon was basically the first product on the market which efficiently did them all.

"Previous to purchase, I asked around the industry and the general consensus was that the Echelon was the way to go. The other desk at was the Celco Voyager although allegedly it had a few software bugs. But the convenience of Jands after-sales service basically shoved me in the right direction.

"I first used the Echelon for the Australian Fashion Week in the Yellow Room where we had six Studio Colors, ten V16's, eighty par 64's and fourteen 2K's. It ran the whole system beautifully without a problem and I was very happy with it. On it's first show I managed to get it up, running and programmed with no dramas."

LAY OUT

"The layout is very similar to an Artisan which myself and most of my staff are used to," said Iain. "It's very user friendly



in it's basic layout. The paletting and position focus being transparent through the desk is a very much a time saver - no matter how many functions you do the lectern always moves three times before the end of the show. It is incredibly useful, the palette layout works well for me. Its user friendly with multi-layers so you can start very simply, get a show up and running very quickly, then if you need more advanced features there are more layers within the operating procedures."

MENU BANKS

The Echelon has four Menu banks for access to all presets and palettes, providing fast and efficient programming. Each Menu Bank has sixteen preset buttons that can be programmed with specific Groups, Colours, Positions and Beams. Buttons that have been assigned palettes will indicate this with a red LED. To the left of each bank is a page selection window with + and - buttons to cycle through all 10 pages; a clean set of sixteen more presets is available with each new page. To access each preset, simply press it's button.



Iain Reed

PROGRAMMING

For programming, the Echelon has a numeric keypad and a standard set of buttons including thru, full, @ etc and grouped nearby are the most frequently used programming functions such as Copy, Delete, Undo etc. In addition, the programmer contains four buttons not found on other consoles - Group, Position, Colour and Beam. These

Buttons allow presets to be chosen quickly from the keypad and are an easy way to create a cue.

Below the display screen are Three Parameter Wheels which offer another choice of programming - all parameters can alternatively be set using the wheels to roll through until you find a colour, position etc. that you like.

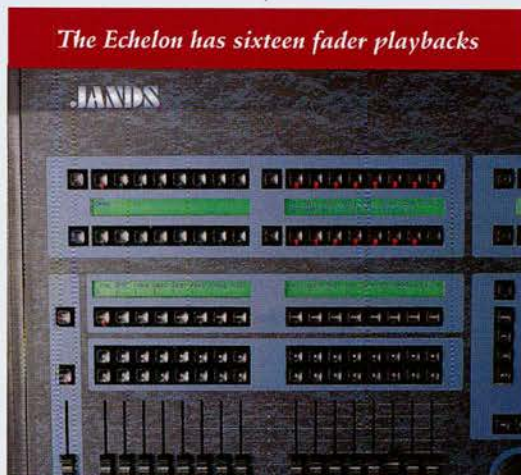
"Any of my staff can put together a show on the Echelon with no dramas which is one of it's beauties and the Effects Engine is a God-send," said Iain. "My senior audio operator, Paula, spent half an hour on the desk and was basically teaching me things!"

EFFECTS ENGINE

The Effects Engine makes light work of programming complicated effect sequences, such as circle movements, rainbow colour rolls and popcorn chases for intelligent lighting fixtures.

"The Effects Engine is incredibly use-

continued on page 72



The Echelon has sixteen fader playbacks

MINI SCAN HPE ON TOUR



The scanner with superior optics - versatile, light and easy-to-handle; ideal for Rental Companies and fantastic for mini budgets.

The most Powerful 95% increase in luminous efficiency compared with the previous model, thanks to its exclusive optical system and the HTI 300 lamp.

The most Compact 55 centimetres and 13 kilograms of concentrated power.

The most Reliable with all the professional quality of Clay Paky.

36 colours, 6 indexed gobos with variable speed rotation, image multiplier prism, frost filters, colour temperature correction filters, dimmer stopper, strobe, PAN 150°, TILT 110°, 7 control channels, DMX 512, RS 232/423 (PMX).



Write in Reader Service Number: 153

Distributors:

SHOW LIGHTING AUSTRALIA Pty Ltd

Administrator Office - 13-15 Bridge Street - Rydalmere NSW 2135

PO Box 480 Rydalmere NSW 1701

Tel. +61 (0) 2 9898 1666 - Fax +61 (0) 2 9898 1222

Email: showtech@showtech.com.au

SHOW LIGHTING AUSTRALIA Pty Ltd

Head Office - One Park Road - Milton QLD 4064

Tel. +E1 (0) 7 3359 3399 - Fax +61 (0) 7 3359 5599

Email: showlighting@showtech.com.au

CLAY PAKY S.p.A. - Via Giovanni Pascoli, 1

24056 PEDRENGO (Bergamo) Italy

Tel. +39 (0) 35.65.43.11 - Fax +39 (0) 35.66.59.75

Internet: www.claypaky.it



PROFESSIONAL SHOW LIGHTING

JANDS ECHELON 1K

continued from previous page

ful for doing quick turn arounds," said Iain. "It saves an enormous amount of time especially when we mainly deal in one day turn around gigs

where the amount of dark time available is very restrictive. It gives you the opportunity to put some new effects in without spending eight hours programming dark time which in most situations is unrealistic. After years of practice on a Navigator you could do it in an hour whereas with the Echelon it would take ten minutes. It's about time a console caught up with wiggly mirrors and wobbly lights."

CUE STACK

"You have to think in stacks as opposed to cues," said Iain. "Normally you think of a lighting console working across a desk but with the Echelon, you have to train yourself to think in depth. I find we can reduce an evenings programming down to at least ten or fifteen faders with no dramas."

PLAYBACK MASTERS

There are sixteen playback masters on the Echelon, each of which can independently play back its own cue list. All masters can run simultaneously with various custom settings. Actions such as add/swap, and button response can be individually set on each fader.

The Playback Masters can be recycled through the use of Pages, with each new page bringing up a clean group of sixteen faders to accept new cues and cue lists.

FAVOURABLE FEATURES

"I like the wheel configuration and the monitoring as I find it quite useful to be able to keep tabs on your cue lists," Iain said. "Split DMX outlets can be particularly useful - when I was doing the Akira show we decided to put some footlights in at the last minute but it was so easy to quickly put another rack in and bang another DMX lead in. If I had been using another desk I would have been very pressed for time to get it all in.

An external VGA monitor connection allows you to use any compatible monitor to display even more information. In addition, an external mouse or trackball can be attached to the console to drive fixtures and to work interactively with the external monitor.

FIXTURE LIBRARY

"I had a couple of minor problems on shows with MAC's not being in fixture libraries but generally borrowing a PC



from the AV guys and a mobile phone sorts that out," Iain told me. "It's remarkably simple to sort out considering the task involved."

SMPTE / MIDI

The Echelon 1K comes complete with MIDI In, Thru and Out connectors, and an optional SMPTE Timecode input panel. Supported protocols are Midi Show Control, Midi Notes, Midi Timecode, Midi Command Strings and SMPTE Timecode with the additional input panel.

"The MIDI output will interpret SMPTE but only through an external hardware control," explained Iain. "These days, with Sydney being more film orientated, a proper SMPTE controller would be nice and to see that interface cleaned up and be able to generate MIDI and use it as a show master controller would be a nice feature."

STORAGE

All show information can be stored on standard 3.5 inch floppy disks and can be merged fully, or partly, between other Echelon 1K or Wholehog II shows, and with information from Jands Hog shows.

DISPLAYS

The Echelon has a central LCD which displays programming activity, menus for functions not found directly on the console and windows to view cue lists or palette lists.

Near the bottom of the main LCD is the Command Line which tells you what fixtures are currently selected for programming and what palettes have been assigned to them. Deselecting an item that's up on the Command Line is simple - backspace over it with the backspace arrow on the keypad.

Along the top and bottom of the main LCD are Toolbars; functions relevant to the current application will appear here and are accessed by pressing buttons directly above or below them.

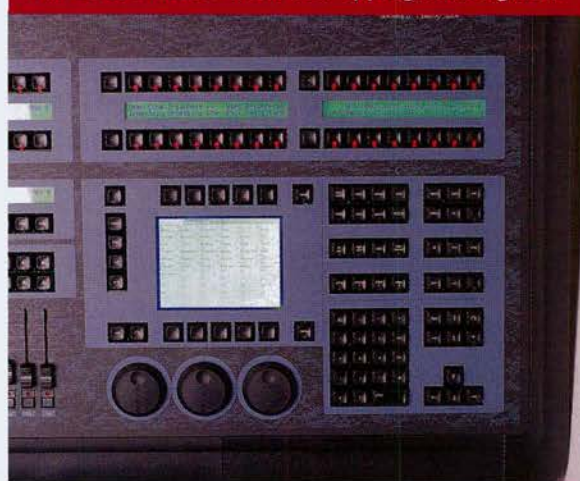
IMPROVEMENTS

"The Cue Command Line is quite small in the LCD window which can be a trap if you're not methodical or experienced enough," warned Iain. "If you're not reading Command Line window, you can be caught.

"Sixteen faders is good but it could go up to twenty-four. If you're running a 'hotch-potch-on-the-fly' show, particularly corporate theatre, you need all faders to drive your room in different states when the show can not be programmed into a stack."

continued on page 80

The Echelon has a whole host of programming tools



The Echelon has a large central LCD screen



LIGHTING ON A BUDGET

To open this article I throw a challenge out to the reader - find for me another occupation where one has to come up with something that looks fantastic, using a small amount of antiquated equipment, with only a minuscule budget available to hire anything else that may be required, while at the same time giving into the director's every whim.

Before you get the wrong idea out there - I enjoy being the LD/Operator for school plays - every time it's a different type of play/venue and style - an interesting and sometimes challenging task. The reason for the opening paragraph is just to jog some of my "fond" memories of some of the more challenging gigs that I have had to light.

Every gig is different - some could be numbingly simple and others stupendously difficult but different none the less. One common thread in all the performances in which I have been involved is that there is so little money available to hire any additional gear, you just have to make do with what is readily available. This can present itself as a major obstacle in a complex play with multiple special effects and/or multiple venues required.

The most recent play with which I was involved was a fairly faithful version of Shakespeare's *Macbeth*. In this version there were FOUR separate venues - two outside and two inside. Rigging a chapel that is used both for Masses and as a theatre meant that additional problems of concealment, necessitating long set-up and pack-up times before and after every dress/tech rehearsal and performance, were created. A full day and a half were spent rigging just for this one venue. Fortunately labour is not a problem with a cast in the thirties, some of who were technically competent with the equipment which simplified matters somewhat.

One factor that made this play quite inexpensive to light was that the school had a fairly comprehensive, though limited in wattage, collection of fixtures ranging from 300watt Parcans to 650watt Selecon Acclaim Fresnels to a 1kw CCT Follow-Spot. This collection of fixtures are fine for the small on-site school theatre where the throw distance is quite small, but this limitation in power is a problem for the staging of *Macbeth* as the throw distance in the chapel is larger than the theatre.

The only fixtures that had to be hired were eight 1kw Teatro-Tratto Fresnels, eight 1kw Parcans and a 2kw Follow-Spot, which meant that the total hire cost was only \$500 for a one week hire from the firm, Active Lighting, which also happened to be close to the school.

One of the problems that the director imposed on me was arranging a method of hanging the lights inside the chapel. This was a problem as the often used method of hanging lights, 'trees-and-truss', couldn't be used as the fixtures needed to be as close to one wall as possible as the edge of the audience area was only three metres from the wall. If the 'trees-and-truss' method had been used then the beam angles would have been extreme - meaning that the lights would be virtually down lights, not at all suitable for this play, as the style was to be naturalistic. This problem was solved by attaching some pipes between the existing wall-mounted light fixtures. Problem solved - next.

Bryan Nolan is currently completing Year 12 at Xavier College in Melbourne and is freelancing as a lighting designer and sound engineer. You can contact him by Fax at (03) 9854 5436 or on e-mail at bnolan@xavier.vic.edu.au

NEED UV EFFECTS? The choices are yours...



Long-throw™ UV-A fixtures - 6 models (WF-401 pictured)



Polycarbonate granules



Fluorescent, invisible and phosphorescent paints



PVC UV active flexible tubing



Makeup and hair products



Fluorescent adhesive tapes



Wildfire sample kits paints, dyes and plastics



Backdrop under white light



Backdrop under Wildfire UV-A

Technical Bulletins and Application Notes available upon request.



82 Arthur Street, Fortitude Valley,
Brisbane, Queensland, 4006 Australia
Tel: +61 7 3358 5118 Fax: +61 7 3358 6032
Toll Free: 1 800 773 187
Email: tscope@mpx.com.au

COEMAR CF1200

By Mandy Jones

Coemar De Sisti caused a stir at ENTECH this year with the launch of their new range of high powered moving head luminaires. The CF 1200s are the new generation of moving lights - faster, lighter, quieter and brighter. Being so new to the market, not many professionals have had a chance to use the CF series. David Tidy from Channel 7 in Melbourne is one of the lucky ones.

David worked in theatre for many years as Head Technician at the Princess and Her Majesty's in Melbourne before moving into television lighting in a freelance capacity. For the last four years David has been with Channel 7 where he has been Lighting Director on shows such as *Four Quarters*, *Full Frontal* and *Live and Kicking*.

As Lighting Director, it is David's role to work out lighting systems for new shows, and in particular, use of moving lights. Currently, Channel 7 own four Golden Scans and a Scan Commander which they use on their various shows; other moving lights are hired in on a needs basis.

"We're always looking at what's available in the moving light market - whether they're wiggly mirrors or nodding buckets, and the boys at Coemar are certainly very helpful in giving us whatever they have to try out."

David has used both the CF6 and CF1200 on several projects at Channel 7. He was first introduced to the units at a demonstration night at the Melbourne Coemar offices set up for those who didn't manage to get to ENTECH.

"That was the first time I got to lay my hands on one of them and I was very impressed."

PHYSICAL CHARACTERISTICS

For such a high powered moving head colour changer, the CF1200 weighs surprisingly little. This is due to the 'Formula 1' type carbon fibre casing of the unit which not only ensures a rugged body, but also an attractive finish with its dark grey speckled design.

Weighing in at only 23 kilos, the CF1200 can easily be carried and rigged by one person either by using the sturdy handles attached to the base plate or by David's method of 'throwing it over his shoulder'.

"Because I usually have to rig the lights, the first thing I wanted to know was how much it weighs. I was very surprised at how light it is considering its features and output."

With 16 bit positioning, 370° Pan and 270° Tilt, and 180° movement per second, the CF1200 is versatile enough to be used in just about any lighting position - as a floor or cyc wash, or hung from truss. It is the first lamp of its type actually designed to be mounted horizontally. Even though other units are commonly used in a horizontal position, the CF1200 is the first to have specially calibrated bearings and shafts strong



enough to support it horizontally. And the width of the base plate has been designed to fit any style of truss, be it tri-truss, box or flat truss.

"Being carbon fibre we didn't seem to have any heat problems. At the end of the show, we could just switch it off, unplug it, pick it straight up leaning it against your body and there was no getting third degree burns from it."

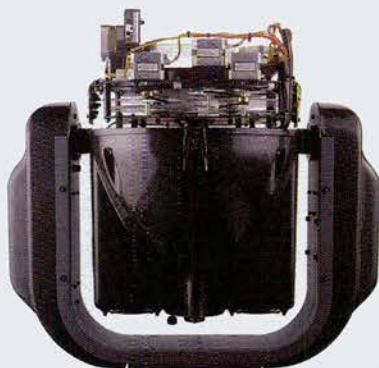
THE LAMP

The CF1200 uses the Philips Blue Pinch MSR 1200 short arc lamp.

"It's an extremely punchy light for a 1200 watt. I was running it on the widest possible beam and on the darkest colours and it certainly packed a punch! In television we're always battling with the Technical Directors because they're always screaming for more light so they can pull

the irises down on the camera to give the cameramen a better depth of field. With the CF1200 they were able to pull the iris down quite a lot! The technical brigade were very happy at the end of the show.

"If the lamp shuts off it's a 'warm' restrike which is only a ninety second delay which is fairly advantageous in those situations."



FEATURES

The CF1200 uses a low temperature optical system - a cold type glass parabolic reflector with dichroic quartzed finish, creating the brightest possible beam while dissipating the heat to the rear of the unit.

It incorporates an iris and shutter system to accommodate dimming and strobing, a frost filter, and a graduated wheel for beam shaping, making the fixture a versatile addition to any rig.

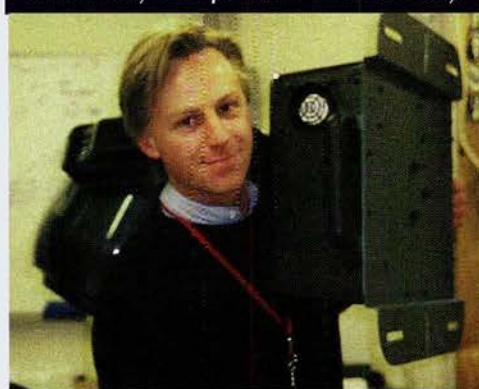
"And there's hardly any reduction in the light level because it only uses one level of glass to accommodate beam shape compared to others which use two."

Coemar have found a way to fix the problem of over-zealous roadies or stage crew bumping intelligent fixtures out of position. Using Active Alignment Technology, the unit recognises it is out of alignment and automatically repositions its yoke or head to its correct programmed position.

"It will go back into position quite smoothly which is really advantageous considering DMX is a one-way protocol and you don't get any feedback to the desk about problems like that. It fixes itself."

CF1200 uses Active Alignment

David Tidy transports his CF1200 easily



COLOUR

When it comes to colour, the CF1200 gives you the best of both worlds with full CMY colour mixing through three graduated colour wheels, as well as a separate colour wheel which allows a further six dichroics to be superimposed over the CMY. This

continued on next page

THERE IS LIGHT. AND THERE IS OSRAM.



OSRAM Photo Optic Lamps: Light for photo, film, TV and optics.

OSRAM has been responsible for milestones in the photo-optical sector with its development of innovative lighting solutions and manufacturing technologies. OSRAM provides a range of lamps to best meet a diversity of requirements in many different fields of application: from simple high-precision incandescent lamps through to modern discharge lamps. With the continuous improvement of the HMI® and XBO® lamps, which have been so important and successful in the film industry, OSRAM is setting the pace in the Photo Optic industry. For more information call 02 - 9481 8399.

COEMAR CF1200

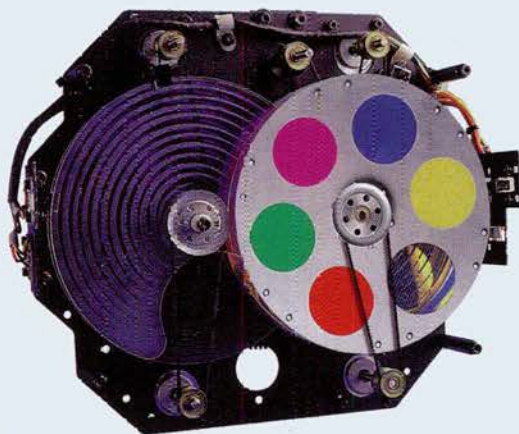
continued from previous page

'Clickcolour' system is especially useful for primary colours or correction filters.

"The additional colour wheel is great because for television you always need primaries and tungsten colour correction. It really is important to get all lamps balanced as close to tungsten as possible, and this makes it so easy."

"With the dichroic colours plus the CMY colour mixing, there's a pretty massive range of colours available and by using the two systems together you can go from pastels to deeper richer colours really easily.

"And setting it up was simple - from playing with its little brother the CF600 a few weeks ago I already had the CMY colour mixing set up in the Scan Commander, and the presets were very quick. I couldn't find any little tricks to trip you up."



The CF1200 uses 'Clickcolour' and CMY systems

VARIABLE BEAM ANGLE

The CF1200 has three different basic beam angles - 5°, 10° and 15°, all of which can be increased remotely up to 40° through the second fresnel lens zooming facility.

"I haven't come across any other fresnel that will do beam angle adjustment, it makes it very versatile to go from a 40° cyc wash or stage wash into a very tight 5°."

QUIET OPERATION

"We use our audio department as a barometer as to how much trouble we're going to have with moving lights. With a television show the requirements are obviously a lot different to using moving lights in a rock and roll style show, so whenever we try out a new lamp we ask the audio boys for their opinion. They were fairly happy with the level of noise the CF1200 put out - it wasn't all that far away from an array of microphones they had hanging above a drum kit, and they had no complaints."

In order to keep critical temperatures down, two 'class F' fans are installed in the body of the unit, and a further fan is located in the case to provide cooling to the ballast, while maintaining low noise levels.

CONTROL & PROGRAMMING

David explained that operation and programming of the CF1200 is a fairly simple exercise. The unit takes 13 channels of control including a special channel for lamp on/lamp off. David quite happily ran it off a Scan Commander without any problems.

"The software version that we have with our Scan Commander allows us to use a range of lights, so it was just a matter of punching in the channel listings, and it sat there like all the other fittings in the board. There were certainly no noticeable delays or problems running it."

Located on the back on the ballast is a multifunction panel which features a liquid crystal display and a four button keyboard which controls functions such as addressing, self tests, lamp

modes and lamp life counters.

"The menu system is extremely easy to operate. And it's great having both the five pin and three pin connections so it doesn't matter what cables you have. We use five pin for all our Clay Paky's, and the more high end of the market uses three pin, so it's very integratable."

SERVICE

The CF1200 has been designed with service access in mind. With the turn of an Allen key you can gain access to replace the lamp, or to get access to the main mechanism.

"To be fair, I've only used them on a few occasions so their long-term reliability is unknown at this stage, but the dealings I've had with them so far have

certainly been very good.

"I tend to service the majority of our stuff, so if down the track we are able to have some of these, which would be fantastic in terms of us keeping up with the technology, I'd certainly spend time at Coemar pulling one apart and putting it back together again to find all the ins and outs. We've had lots of Coemar gear over the years, and whenever it has needed any service attention it certainly hasn't been a problem."

IMPROVEMENTS

"We've pointed out a couple of things to Richie Mickan, Sales Manager at Coemar - like if you ask the lamp to reset while it's on, it would not douse first, it would just go through its honing procedure without dousing. I believe a new software version has been released and will be fitted to all units to fix that problem so now it will douse before it resets."

David also pointed out that problems could occur with the system of addressing as the current software doesn't allow the address to be locked in. Accidentally hitting one of the arrow keys on the multifunction panel would change the address and could be tricky to track down in a hurry when the lamp stops responding during a gig. Apparently the engineers are already onto this one.

The only other improvement David would like to see is a way of making the display on the ballast 'toggle' so that regardless of the unit's orientation, the data would be the right way up.

"It's not essential, but it would be a nice touch so that when you invert the fitting the displayed information is easier to read."

Located on the back is a multifunction panel



FINAL COMMENT

David believes it is only a matter of time before the CF1200s take off in a big way in Australia.

"Once an international act has come through Australia using the CF series, whether it's the CF6 or CF1200, there'll be a lot more interest in purchasing them and putting them in hire departments.

"The CF1200 certainly has a place across the board in TV, theatre,

continued on next page

ALTMAN

HAS IT ALL!



EXPLORER

FOLLOW SPCTS
A complete range
for every
requirement
and budget.



UV-703

BLACKLIGHTS
High intensity illum nat or,
smooth even field,
quiet performance



SKY
CYC

CYCLORAMAS: Luminaires
Broad even wash of light



MICRO SERIES
Small but strong.
Perfect to highlight
pictures and
small areas.
Track mount
adapter, optional.

MICRO FLOOR



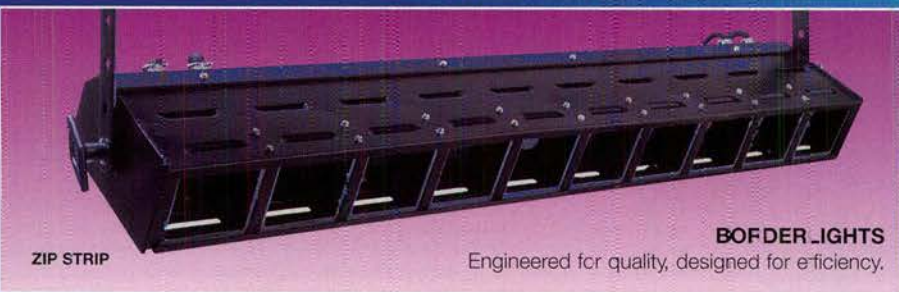
2000L

FRESNELS
High intensity
with soft edged
controlled lighting.



S6-20

**ELLIPSOIDALS/
SHAKESPEARE**
State-of-the-art
engineering
for superior
performance
at lower
operating cost.



ZIP STRIP

BORDER LIGHTS
Engineered for quality, designed for efficiency.

QUALITY RECOGNIZED AROUND THE WORLD

An extensive array of
impressive lighting products
and accessories for all
your film, video and
theatrical needs.

Halogen and Metal Halide
for theatre, studio, location
and still photography.

We have it all!

Exclusively distributed in Australia by:



CHAMELEON PROFESSIONAL LIGHTING SALES

(AGN 066 844 684)

Telephone: 612+9310 5222 • Fax: 612+9310 5511

Write in Reader Service Number: 199

Unit 7, 41-45 Bourke Road
(PO Box 206)
Alexandria NSW 2015
Australia

www.chameleon-touring.com.au

BUYER'S GUIDE

fresnel spots & floodlights

Prices EXCLUDE sales tax and were correct on 15th August 1998. All care taken, no responsibility for errors. Four models only are shown in each category although these manufacturers have many more. Indicative only.

STAGE FRESNEL SPOTS

ALTMAN

Chameleon (02) 9310 5222

3 Inch Fresnel a compact 3 inch fresnel rated at 250w. Accessories include profile snoot, barndoors and clamp. Ideal for display applications. \$119.

6 Inch Fresnel a steel 1000w fresnel spot, ideal for budget applications supplied c/w hook, safety cable and colour frame. \$200.

1KAF a die cast aluminium 6" fresnel suitable for use with 1000w lamps, supplied c/w hook clamp, safety cable and colour frame. \$365.

175Q an 8" steel fresnel rated to 1000w. Accessories include barndoor, snoots, colour wheels. \$389.

AMERICAN DJ

American Dj Supply Australia 1800 643 111

FRES affordable Fresnel with 150mm reflector lens. Beam spread 5.2m at 5m distance. Features full focussing knob, extruded aluminium casing, hanging bracket, gel frame, and power cord. Uses 240v 650w lamp. Weight 3.6Kg. \$122.15.

ETC

Jands Electronics Pty Ltd (02) 9582 0909

Source 4 Par EA 575w HPL Lamp Par style fixture. Interchangeable lens system for clear, VNSP, NSP, HFL and WFL beam angles. Enhanced aluminium reflector for maximum output. \$459.02

Source 4 Par MCM 575w HPL Lamp Par style fixture. Lens system for Par EA. Dichroic coated reflector for cool beam performance. \$680.33.

FAL

ELSTA (02) 9568 2100

PF1043 Stage 500 'N' series fresnel, uses 240v 300 or 500w lamp (GX9.5). Beam diversion from 15 - 40 degrees via external focussing knob. Comes with gel frame, bracket, lead and professional extruded aluminium casing. Optional Accessories include barn doors and colour wheel. Weight 2.3kg. \$245.

PF1047 Stage 1000 'N' series fresnel, uses 240v 650 or 1000w lamp (GX9.5). Beam diversion from 13 - 42 degrees via external focussing knob. Other features and accessories as for PF1043 above. Weight 4kg. \$286.

PF1057 Stage 1000 'T' series fresnel, uses 240v 650 or 1000w lamp (GX9.5). Beam diversion from 13 - 42 degrees via internal focussing knob. Other features and accessories as for PF1043 above. Weight 4kg. \$352.

PF1061 Stage 2000 'T' series fresnel, uses 240v 2000w lamp (GX9.5). Beam diversion from 13 - 45 degrees via internal focussing knob. Other features and accessories as for PF1043 above. Weight 3kg. \$491.

PULSAR

Show Technology (02) 9898 1111

650W Fresnel adjustable focus 680 to 8.50; safety brackets; locking cup; sprung gel frame; interchangeable lens and system to convert the unit to a pebble convex lantern. \$210.

Fresnel Pebble Convex 650W; adjustable focus down to 60; safety brackets; locking

cup; sprung gel frame; fitted with a pebble convex lens which offers a tighter focus. \$235.

650W Profile Spot produces a fully focusable hard or soft edged beam along with the usual features of a profile spot. Also comes with runners for optional gobo holder or iris. \$435.

SELECON

Various distributors

Selecon Acclaim Fresnel 300 - 650W. Wide range of beam angles (6 - 60). Captive slide focus system. Adjustable yoke. Rear grab handle Auto mains power disconnect, exceeds European safety requirements. L - 280mm W - 200mm H - 270mm. Wgt - 2.4kg. \$210. Also available: Selecon Compact Fresnel 1.0 / 1.2kw. \$415.

Selecon High Performance 1200 Fresnel 1.0/1.2kw. World leading performance from a theatre Fresnel. Uses a 175mm (7 inch) lens. Beam - 7 to 56 degrees. Captive slide focus system. Adjustable yoke. Rear grab handle Auto mains power disconnect, exceeds European safety requirements. Pole Op. option L - 320mm, W - 280mm, H - 320mm. Wgt. 5 kg. \$565.

Selecon Arena Theatre Fresnel 2.0 / 2.5 kw. 200mm dia. industry standard lens. Beam angle - 7 to 60 degrees. Captive slide focus system. Adjustable yoke. Rear grab handle Auto mains power disconnect, exceeds European safety requirements. Pole Op. option. Available with GY 16 or G22 lamp base. L - 400mm, W - 365mm, H - 450mm. Wgt 8.7 kg. \$860.

Arena High Performance Fresnel 2.0 / 2.5kw. World leading performance from a theatre Fresnel. Uses a 250mm (10 inch) lens. Beam - 8 to 60 degrees. Captive slide focus system. Adjustable yoke. Rear grab handle Auto mains power disconnect, exceeds European safety requirements. Pole Op. option. Available with GY 16 or G22 lamp base. L - 400mm, W - 365mm, H - 450mm. Wgt 8.7 kg. \$1080.

SPOTLIGHT

Ashton Admar (08) 9478 3800, (02) 9690 0991

Area 05 650w GY9.5 lamp base; compact die cast aluminium professional fresnel with totally closed accessory frame; microswitched relamping door; screw focus; absolutely no light spill; all accessories available. \$297.20.

Area 12 as for Area 05 but 1200w GX9.5 lamp; safe, speedy protrusion free snap locking system for luminaire setting; electrical components and lamp socket totally removable for maintenance. \$426.

Area 25 as for Area 12 but 2500w G22 lamp (option GY16). \$765.

Quadro 500 650w GY9.5 lamp; Combi and Quadro range has same optics as Area range but cheaper housings for professional theatres on limited budgets. \$194.5C.

TEATRO

Lightmoves Technologies (02) 9560 0000

Comma F650 650W; GY9.5 lamp; 4 leaf barndoors; colour frames; suspension clamps and safety chain. \$305.

Spazio F1200 1000W; GX9.5 lamp; 4 leaf barndoors; colour frames; suspension clamps and safety chain. \$455.

Tratto-2F1200 1200W; GX9.5 lamp; 4 leaf barndoors; colour frames; suspension clamps and safety chain. \$720.

Acuto F2000 2000W; GY16 lamp; 4 leaf barndoors; colour frames; suspension clamps and safety chain. \$1340.

WILDFIRE

Techscape 1800 773 187

WF-400SF-E Wildfire 400 watt Long-Throw UV-A Spot-Flood Fresnel. Focuses from 16.5deg to 59deg and throws over 33 meters. Supplied with ballast, header cable, C-Clamp, safety cable and lamp. \$5,433.62.

WF-600SF-E Wildfire 600 watt Long-Throw UV-A Spot-Flood Fresnel. Hot re-strike, supplied with ballast, header cable, C-Clamp, safety cable and lamp. \$12,190.82.

WF-401F-E Wildfire 400 watt Long-Throw UV-A Flood. 105deg field throwing over 53 meters with integral ballast, compact design, digital lamp life meter

and supplied with mounting bracket, C-Clamp, safety cable and lamp. \$2,849.80.

WF-250 SERIES Wildfire 250 watt Long-Throw UV-A fixtures available in 20deg Spot, 50deg Wide Spot & 90 deg Flood versions with throws from 18 to 46 metres in compact design with integral ballast and supplied with mounting bracket, C-Clamp, safety cable and lamp. \$2,205.43.

FILM/TV FRESNEL SPOTS

ALTMAN

Chameleon (02) 9310 5222

Tungsten Halogen Fresnels The Altman range of Tungsten halogen Television and Film fresnels are available in ratings from 300w to 5000w. Full range of accessories available including scrims, snoots etc. From \$680.

Metal Halide Fresnel Spotlights available in ratings from 575w to 4000w, these daylight balanced fresnels can be supplied with either magnetic or electronic (flicker free) ballasts. Full range of accessories available including snoots, scrims etc. From \$8000.

ARRI

John Barry Group (02) 9439 6955

Junior 300 Plus the baby of the ARRI fresnel lights, lightweight (1.2kg) but sturdy aluminium construction, spot and flood mechanism, user friendly, uses 300W CP/81 or CP/82 500W globe maximum output, with barndoor and diffuser frame. \$850.

Junior 650 Plus ideal for location and smaller studio use, wide angle fresnel lens,

focusable spot and flood mechanism, adapts to either CP/82 500W or CP/89 650W lamps, includes barndoor and gel holder. \$950.

Studio 1000 ARRI studio 1kW in either manual or pole operation, highly efficient wide angle lenses, spot and flood mechanism, easy to maintain and user friendly, lamp either CP/71 or CP/40, maximum output 1000W, includes barndoor and diffuser frame. \$1600.

Studio 5000 versatile ARRI studio lamphead, manual or pole operation, even light distribution, anti corrosion aluminium construction, efficient spot and flood operation, lamp either CP/85 or CP/29, maximum output 5000W, includes barndoor and diffuser frame. \$2500.

BALCAR

Miller (02) 9439 6377

Spotflux II Spotflux 2 is an 85W studio or location focussable fluorescent light fixture offering both tungsten 3200°K and daylight 5600°K lamp options and an equivalent light output to a 350w tungsten fixture. Spotflux offers a 35 - 90°K focus range to provide a more concentrated light source than traditional fluorescent softlight banks. \$3500.

K5600inc

Miller (02) 9439 6377

Joker 200 A portable, high output daylight PAR HMI. Available with a complete range of accessories including electronic ballast, barn doors, fresnel, wide lenses and inverter. (Kit include two lamp heads, ballast, lamps, power cables, barndoors, 4 x focusable lenses and solid flight case). \$3150.

LOWEL

Miller (02) 9439 6377

Fren-L 650 Portable 7:1 focusable fresnel light fixture with barndoors and mounting frame to accept scrim, filters, snoot and many Lowel accessories. Accepts 300W, 500W or 650W lamps and incorporates a double-wall convection cooling system, oversized swing-down handle and single arm yoke design. \$790.

SELECON

Various distributors

Selecon High Performance 1200 Fresnel with pole operation 1.0/1.2kw. World leading performance from a 1.0/1.2kw Fresnel, flat even beam. Uses a 175mm (7 inch) lens. Beam - 7 to 56 degrees. Pole operated pan/tilt yoke and focus system. Rear grab handle. Auto mains power disconnect, exceeds European safety requirements. Accessories include barndoor, safety mesh etc. L - 320mm, W - 280mm, H - 320mm. Wgt .5 kg. \$1040. The Selecon Compact 150mm (6") lens Fresnel is also available with pole operation \$920.

Arena Pole Operated High Performance Fresnel 2.0/2.5kw. World leading performance from a Fresnel, smooth, flat beam. Uses a 250mm (10 inch) lens. Beam - 8 to 60 degrees. Pole operated pan and tilt yoke, focus movement system. Rear grab handle Auto mains power disconnect, exceeds European safety requirements. Accessories include barndoors and safety mesh. L - 400mm, W - 365mm, H - 450mm. Wgt 8.7 kg. \$1650. The Selecon Arena

ARRI Studio 5000



Fresnel with 200mm (8") lens is also available with pole operation. \$1470.

SPOTLIGHT

Ashton Admor (08) 9478 3800, (02) 9690 0991

FR05 MSR 575w MSR/HMI G22 lamp single ended. Daylight fresnel includes power supply, safety net and 4 door barndoor. Hour counter and safety microswitch. \$4733.

FR12 MSR 1200w MSR/HMI G38 lamp single ended. Daylight fresnel includes power supply, safety net and 4 door barndoor. Hour counter and safety microswitch. \$5621.

FR25 MSR 2500w MSR/HMI G38 lamp single ended. Daylight fresnel includes power supply, safety net and 4 door barndoor. Hour counter and safety microswitch. \$7360.

FR40 MSR 4000w MSR/HMI G38 lamp single ended. Daylight fresnel includes power supply, safety net and 4 door barndoor. Hour counter and safety microswitch. \$11,364.

SINGLE FLOODS

ALTMAN

Chameleon (02) 9310 5222

F-Cyc winner of the LDI'97 "Best Product of the Year", this cyc can be linked to form 2 way, 3 way, 4 way, 5 way etc. units. Accessories inc. custom yokes 2/3/4. Rated for lamps from 500w to 2000w. From \$505.

BALCAR

Miller (02) 9439 6377

Quadlite 200 The lightweight Quadlite is a studio fluorescent light array drawing 200w and producing an equivalent light output of 2K. Quadlite generates virtually no heat while an extensive accessory list lets the operator adapt the Quadlite to a range of permanent and portable applications. Available with tungsten 3200°K or 5600°K lamps. \$3250.

DYNAMITE

Disco World (03) 9735 0588

PAR 56 Can 300W flood includes colour frame, silicone cable, available in black or polished. Fully wired and assembled. \$53. *Disco World (03) 9735 0588*

PAR 64 Can 1000W flood includes colour frame, silicone cable, available in black or polished. Fully wired and assembled. \$69.

LOWEL

Miller (02) 9439 6377

Omni-Light Multi-input voltage: with a choice of 500w and 650w lamps in 240V model and 250W lamp with 30V system. Standard Omni comprises #1 reflector, protective screen, and cable. Accessories include a choice of reflectors, filters, scrims and barndoors. Available in lightweight carry cases as kit with up to 3 Tota and/or Omni fixtures and accessories. \$310.

Tota-light Extremely compact broad light with rectangular reflector doors with 800w lamp and a wide range of accessories including barndoors, scrims, umbrellas, gel frames, flags and reflectors. Available in kit form in lightweight case with a combination of other Lowel lights including Omni, DP and Rifa-lights. \$277.

KUPO

Show Technology (02) 9898 1111

Par Cans come complete with colour frame, lamp base, lead and mains plug where applicable. Range starts as small as the PRO16 cans right through to the PAR64 Pro Cans and are available in either black or chrome. \$Varies.

SELECON

Various distributors

Selecon Acclaim

Cyc 300 - 500w. Asymmetric reflector using linear halogen lamps. For lighting Cyc/ backcloth up to 5m high from a throw distance of 1.5m to 2.0m. Smooth, well controlled output due to software modelling and extruded reflector. Constructed from injection moulded rynite & extrusions. Dual chamber air flow unique to Selecon luminaires maximises filter life. Designed to be used as groundrow. Modular assembly. 3 & 4 way batten options. Barndoors fitted as an accessory. Auto mains power disconnect, exceeds European safety requirements. Wgt - 2.7 kg. \$208.

Selecon Acclaim Flood 300 - 500w. Symmetric reflector using linear halogen lamps. Smooth, well controlled 90 degree flood beam. due to software modelling and extruded reflector. Constructed from injection moulded rynite & extrusions. Dual chamber air flow unique to Selecon luminaires maximises filter life. Fitted with 4 barndoors. Modular assembly. 3 & 4 way batten options. Auto mains power disconnect, exceeds European safety requirements. Wgt - 2.75 kg. \$225.

SPOTLIGHT

Ashton Admor (08) 9478 3800, (02) 9690 0991

Ribaltina RA1 200w to 1000w halogen R75 lamp symmetrical floodlight with safety

net. Accessories include safety tempered glass, colour frame and 4 door barndoor. \$115.30.

Domino asymmetrical cyclorama floodlight for 1000w lamps. Suitable for top or bottom lighting without alteration. Excellent heat dissipation. \$280.50.

TEATRO

Lightmoves Technologies (02) 9560 0000

Diluvio A1000 1000W linear tungsten halogen lamp (RTS) four leaf barndoors; colour frame; out rigger colour frame; suspension clamp and safety chain. \$390.

Diluvio A500 500W linear tungsten halogen lamp (RTS) four leaf barndoors; colour frame; colour frame; suspension clamp and safety chain. \$310.

Altman 1KAF



MULTI FLOODS

ALTMAN

Chameleon (02) 9310 5222

Ground Cyc is available in multiples of 'cells' up to 12 maximum. From \$409.

Zipstrip is available in 1, 2, 3, and 4 circuit configurations. Using an MR16 lamp source, the Zipstrip is one of the most compact high output floods available. From \$700.

Microstrip similar to the Zipstrip, the Microstrip uses the MR11 range of reflector lamps. Available in single, dual, three and four circuit versions. \$500.

Top Cyc units are rated to 1500w and are available in single, double, triple and quad formats. All units supplied c/w lamp, clamp and safety screen. From \$560.

KUPO

Show Technology (02) 9898 1111

Spot Bank 4 audience blinder also handy for solid colour was on back drops and stage sets. Takes 4 x MR16 lamps. \$570.

Spot Bank 8 audience blinder also handy for solid colour was on back drops and stage sets. Takes 8 x MR16 lamps. \$819.

SELECON

Various distributors

Selecon Aurora Cyc range 625 / 1000/ 1250w. Asymmetric reflector using linear halogen lamps. For lighting Cyc/ backcloth up to 9m high from a throw distance of 2m to 3m. Smooth, well controlled output due to software modelling and extruded reflector. Dual chamber air flow unique to Selecon luminaires maximises filter life. Flat filter frame, economic sheet cut. Comprehensive range - single, dual vertical, 4 way linear & 4 way "square" configurations. Your

choice of multi connectors. Pole Op option. Barndoor accessory. Auto mains power disconnect, exceeds European safety requirements. Wgt 8.8 kg. \$395.

Selecon Aurora Flood range 625 / 1000/ 1250w. Symmetric reflector using linear halogen lamps. Smooth, well controlled 90 degree output due to software modelling and extruded reflector. Dual chamber air flow unique to Selecon luminaires maximises filter life. Flat filter frame, economic sheet cut. Comprehensive range - single, 4 way linear configurations. Your choice of multi connectors. Pole Op option. Barndoor accessory. Auto mains power disconnect, exceeds European safety requirements. Wgt - 8.8 kg. \$395.

Selecon Aurora Groundrow range 625 / 1000/ 1250w. Asymmetric reflector using linear halogen lamps. For lighting Cyc/ backcloth up to 9m high from the floor, as close as 1.0m from the cloth. Smooth, well controlled output due to software modelling and extruded reflector. Dual chamber air flow unique to Selecon luminaires maximises filter life. Flat filter frame, economic sheet cut. Comprehensive range - single, 4 way linear configurations. Your choice of multi connectors. Auto mains power disconnect, exceeds European safety requirements. Wgt - 8.8 kg. \$460.

SPOTLIGHT

Ashton Admor (08) 9478 3800, (02) 9690 0991

Domino 2 x 2 M 1000w four head asymmetrical cyclorama flood. In 2 x 2 format hand operated. \$1399.

Domino 2 x 2 P 1000w four head asymmetrical cyclorama flood. In 2 x 2 format pole operated. \$1615.

Domino 4 x 1 1000w four head asymmetrical cyclorama flood. In 4 x 1 in line format. \$1153.

Ribaltina RA4 4 compartment in line floodlight for halogen lamps from 200 to 1000w. Length 1 metre. \$304.

TEATRO

Lightmoves Technologies (02) 9560 0000

Riga 3 500W linear tungsten halogen lamp (RTS) four leaf barndoors; clear safety glass; suspension clamp and safety chain. \$340.

Riga 4 as above.

Riga 3A 500W linear tungsten halogen lamp (RTS) four leaf barndoors; clear safety glass; safety guard; suspension clamp and safety chain. \$425.

Riga 4A as above.

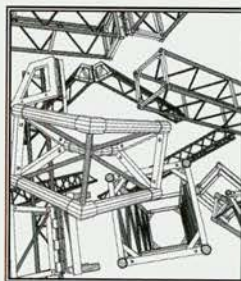
next month
Followspots

The Professional Choice

Being leaders in the Design and Manufacture of quality Truss Systems, we know how important safety is to you. That is why we specify the highest grade materials, the best welding processes and supply the right support documentation.

- Alloy Folding Truss • Curved Sections • Corners • Custom Sections • Joining Cubes • Hinges
- Tri Truss • Box Truss • Base Plates

CONCERT LIGHTING SYSTEMS MANUFACTURING PTY LTD
282 Normanby Rd PORT MELBOURNE 3207 Tel: (61-3) 9646 8444 Fax: (61-3) 9646 8555



COEMAR CF1200

continued from page 76

film and rock and roll. If you had a rig of 40 of them running at full speed in a TV environment the audio department would freak out, but in the right application used the right way I can't see why they couldn't be used in all the main fields of entertainment.

"The venue we're doing *Live and Kicking* at just screams for a whole rig of them because it's an 'in the round' show with limited hanging points, and we've found that using other fixtures there, the mirrors just can't get to where we want them to go. Even just half a dozen CF1200s scattered through the rig would make such an impact on the whole look of the show.

"I am very impressed with the units - their size and weight, how fast you can pan and tilt, and of course the colours and effects. I just wish there were more of them in being used in Australia right now."

Price: \$13,405.00 ex tax

Manufactured by: Coemar S.p.a. +39 376 77521

www.cdaust.com.au/cda

Australian/NZ Distributor: Coemar De Sisti Australia +61 3 9467 8666

Singapore Distributor: De Sisti Asia +65 382 7622

Hong Kong Distributor: JAI HUI Sound & Lighting +86 20 8481 9099

JANDS ECHELON 1K

continued from page 72

CONCLUSION

"It does everything I require a desk to do and every day I'm discovering something new and more fabulous about it," Iain said. "It seems a little complex getting in and out of the features, but then maybe that's because I'm a novice still. It's half way between a Strand Galaxy and a Jands Instinct, I suppose.

"Like with all desks there are traps for young players. My main trap is finding the DBO, the Grand Master being down. You patch a whole show and nothing's working because the Grand Master is down. But it's basically well laid out, is quite economic and I haven't had any major dramas with it at all. Jands have provided fantastic after sales service."

PHYSICAL SPECS Dimensions: 960mm(W) x 530mm(D) x 110mm(H). Net/Shipping Weight: 19 kg/24.5 kg.

Price: \$28,995 RRP

Good People to Know: 32 Hundred Lighting +61 2 9693 1777

Manufacturer: Jands Electronics +61 2 9582 0909

www.jands.com.au

Australian Distributor: Jands Electronics +61 2 9582 0909

Worldwide Distributor: AC Lighting +44 1494 461 024

JANDS ECHELON INDUSTRY NIGHT

To introduce their new lighting control console the Echelon 1k to prospective users, Jands held a demonstration evening at the Globe Hotel, Newtown Sydney. Jands were delighted with the turn out as people packed the room.

The evening started with free pizza and drinks, then the entertainment began with a lighting demonstration by Alan Stone of All Stone Productions. Alan ran a light show to music using Vari*lite V15's and V16's, MAC600's, Clay Paky Miniscan HPE's and various generic fixtures. The rig was supplied by Jands and Electric Sunshine. Alan has purchased three Echelon desks for his company. Large television screens placed around the room showed Alan's hands working the desks - an effective feature.

This was followed by an informative talk on moving lights deliv-

ered by Simon Steinfurth, Jands' Lighting Product Support Manager.

Alan Stone then ran through the features of the Echelon again using the television screens to great advantage. Alan certainly made the desk look easy to use and no doubt encouraged many of the audience to have a go themselves after the presentation.

A 'Questions & Answers' segment with Alan, Simon and David Timmons, Jands' Senior Design Engineer, followed.

Half an hour was left for informal talk with Jands staff as well as hands-on experience with the Echelon. The evening was very well presented and Jands must be congratulated.

Jands plan to run further product presentation evenings on the first Tuesday of every month. On Tuesday October 6th the subject will be tour venue sound.

• *Cat Forcer*



BYTECRAFT

Design and Manufacture of
High Quality Entertainment Lighting Systems and Stage Automation Systems



HIRE

- Stage, TV & Location Lighting
- Lighting Control Equipment
- Dimmers
- Automated Lanterns
- Searchlights
- Pani Projectors

SALES

- Bytecraft Range of:
- Broadcast Quality Dimmers
 - Architectural Lighting Control Systems
 - Stage Automation Systems

Exclusive
Australian
Distributor of



SERVICE

- Lighting Equipment Service & Repair
- Preventative Maintenance
- Genuine Strand & Quartzcolor Spare Parts
- Lamps
- Colour & Correction Filters
- Gaffer Tape

VIC - 23-31 Fonceca St, Mordialloc, 3195
Phone: (03) 9587 2555 Fax: (03) 9580 7690

Website: <http://www.bytecraft.com.au>
Email: bytecraft@bytecraft.com.au

NSW - 5/31 Bridge Rd, Stanmore, 2048
Phone: (02) 9550 3955 Fax: (02) 9519 3977

Write in Reader Service Number: 101

When Catherine O'Shea was 20, she decided she was bored, and dropped out of her third year of a mathematics degree.

Eight years later, she is a Lighting Supervisor at the Opera House. Of all the supervisors in all the departments, she is one of two women. Within minutes of meeting her, I suspect that she was picked for her personality as much as her technical skills. She seems to be both candid and tactful, always a good combination. She probably has good judgement, essential to every job.

But just to make sure, I called one of the companies who had put a show on at the Opera House. The lighting person said, "I'm extremely happy that we got Catherine as supervisor. She's a real sergeant major around the stage, nothing gets past her. She knows the rules, she's got the handbook, she's very cluey. She's a very good worker, and she's on the case."

The job

O'Shea organises the crews, and goes to meetings with hirers to work out their needs. She works closely with Colin Alexander of OA, John Rayment from Sydney Dance, and John Berrett from the Australian Ballet. From the lighting plan, she gets the colours for the rig. She oversees the crew, and their schedule, making sure they are not working too many hours. "It's all those housekeeping things, plus touching up focuses after the lighting designer has gone," she says.

If you read this February's Connections, you would remember that the OA has a gruelling schedule of putting up and taking down three shows within 24 hours. After the performance, they strike the set and change lights around midnight. Next morning at dawn, they set the stage and lights for a rehearsal of another opera at 10:30. By mid-afternoon, the evening opera is being shifted onstage. This involves changing the focus and gels of all the lights, for every different show. There is a fair amount of pressure, of time, and the long, odd hours.

For the OA season, the Opera House have a six person crew - O'Shea, a lighting desk

operator, and four others. The OA people are pointing the lights, but the Opera House lighting crew are up in the Cougar focusing and recolouring them.

"We are show-dedicated. My job is to make sure the floor is running smoothly, the prompt side, and the OP. I deal with any lighting desk problems, I basically oversee everything that goes on. During an opera season, which is pretty hectic, you are with the same six people, plus the OA staff, the mecs and others. You need to be able to



OPERA HOUSE LIGHTING

a young, female supervisor

keep the crew wanting to work, keep the morale up, be able to step in if there's a problem, and fix it in a hurry."

O'Shea is dedicated and proud of her work. She stresses that, "when the hirers come in, the Opera House crews play a really important part in the setting up of the shows. We have the same sort of pride in those shows as the people that bring them into the theatre. Making it come together, and working long hours are all worthwhile when you see the product every night."

Being a woman

"I've never found it to be an issue. I've never had any problems, like men belittling me because I'm a woman.

"We haven't got as many women as perhaps it would be nice to have. There are 2 out of 20 in the lighting department.

"I don't think the technical departments are impossible to get into. Look at me. When I was 20, I never thought I'd be supervising, and it's often a crewful of men. I think there is a way in, but you have to forget you're a female, almost. Or forget that they are men. Don't try to be a man."

I wonder how O'Shea approaches giving orders. Does she say, "I was just wondering if you would possibly mind putting that gel in." Or does she say, "Put that f*** gel in!"?

"I think giving orders is something that

you grow into," she answers. "When I first started I was a bit tenuous about it. I know that I like to be asked nicely to do things. Being pleasant to people is a part of the job, or we would all drive each other mad. But I've also got no problem with being direct if it's needed. I can be as hard as the next person.

"You can be pleasant as well as being forceful. Especially asking the mecs to do things for you. When I first started at the Opera House, there was a lot more 'Sorry, I don't touch that light, I'm not a lighting person.' You hardly ever get that now. At the same time, I don't mind picking up a bit of set, if I have to. We're all there for the same reason."

Off to London

After O'Shea quit uni, she dabbled in amateur theatre, then did a traineeship, working in every department at the Opera House. Lighting appealed to her, and she got casual work, then a permanent job. "Basically most of my technical training has been at the Opera House. So I jumped in with both feet, trained myself up, got the lighting desk experience." From follow spot operator, she became leading hand follow spot. "Then Peter Marshall, our boss, gave me a chance at acting as supervisor for an Opera season."

In the middle of all this excitement, O'Shea is off to Europe for two month leave without pay. She has never been overseas before. She plans to combine her interest in lighting design, with the trip, and hopes to apprentice to a lighting designer in England.

• *Madeleine Murray*

ON SALE AND IN STOCK!

Numark

MACKIE

Mach
SPEAKERS

ADJ

GENI

JEM

LEE Filters

OSCO

Nashua

6 MONTHS INTEREST FREE! to approved applicants

DAYLIGHT LIGHTING & AUDIO 4 Bridge Road Glebe NSW 2037 (02) 9660 7755

ADVERTISER INDEX

Acoustic Technologies	9
Amber Technology	23
AON Risk Services	20
AR Audio	15
ARX	37
Audio Telex	Insert
Australian Audio Supplies	21
AV Technology	24
AWA	27
BASF Tracking Guide	49-50
Birkart Concert Cargo	59
Bytecraft	80
Cannon Wholesale	39
Caprina	20
Central Musical Instruments	19, 33
Chameleon	77
Concert Lighting Systems	79
Connections Shop	55
Connections Trader	46-48
Daylight Lighting & Audio	37, 81
dmc	37
Edith Cowan University (W.A.)	45
Group Technologies	31
H & C Audio	16
ICIA	43
Institute of Lens Art	44
Jands	2, 29, 53, 65
Lake DSP	35
Lots Of Watts	17
Magna Systems	13
Martin Professional Lighting	63
Meyer	11
Miller Professional Products	65
NIDA	45
Osram	75
Penn Fabrication	38
Philips Communications	25
Production Audio Services	18
Qld. School of Film & Television	44
Richardson & Devine	10
Rosco	67
School of Audio Engineering	41
Screenco	28
SGM	64, 83
Show Lighting Australia	71, 84
Stage & Screen Travel	7
Studio Supplies	35
T-PAC	26
Techscope	60, 73
TRC	26, 42
Universal Lighting & Audio	69
Yamaha	34

USING

our reader service card

You can obtain information about services advertised in Connections.

Just write the issue date and the Reader Service Number shown on the advert.

We send your details to the advertiser, they then send you the info!

THE PA PAGE

With Michael Orland

YAKKETY YAK, DO TALK BACK PT. 1

Most of my P.A. Page articles this year have been aimed squarely at beginners, with subjects like how to roll mic leads, gaff multicores, relocate boxes, etc. A bit of a leap away from where I began a few years back; sharing tips with others like myself who own or run sound systems. I guess you could call this month's offering something of a return to those somewhat more advanced levels.

Running a talkback (hardwired intercom) system may be perceived by some smaller operators as something of a luxury. "Big Boy's toys". But once your system develops to the point where you've added a separate monitor desk it can sure come in handy and needn't cost that much to add. At rock gigs it often forms the basis of yet another one of Murphy's Corollaries. The only times you really need it are the times you haven't bothered to set it up. Seriously, it can get pretty scary abandoning the FOH desk to fight your way through a rowdy crowd to eventually get a message to the monitor operator. "I've lost bass guitar"; "The snare sounds atrocious, is the mic touching the drum?"; "The right hand stack looks a bit wierd. Is that top box about to rattle off? (forgot to gaff-wad it!)" And it often gets just as important for the monitor guy to communicate with FOH. "Mate! 1 muted the whole system and the moan was still there. It must be coming from Front Of House!"; "Hang off on the CD. The band wants to do another encore...," Or even "Call security. NOW!"

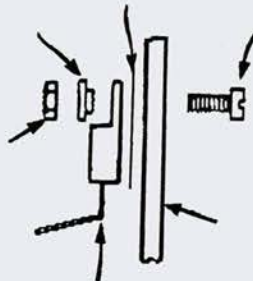
By the time you expand your client base to include corporate/"event" type work or theatre/shows, talkback becomes mandatory.

A basic talkback system comprises substations, headsets and a power supply. It need not include a master station, which can inflate the overall cost beyond the reach of many small operators. Although master stations can include many features such as multizone control and the ability to feed program level (usually meaning a separate mix) to directors calling a show, if you really can't see yourself ever using these features, then don't pay for them. For simple FOH to monitors or lighting to followspots, a master station will be nothing more than a substation and power supply in the same box (at twice the price).

No mystery in wiring up. You simply interconnect power supply and substations or "beltpacks" with mic leads, running down a spare channel of your audio multicore (separate earths preferred) where applicable. Second hand substations usually sell for around \$150 each. The most common wiring standard worldwide is the Clearcom type, on which most Australian brands (Jands, Creative Audio, etc.) are based. This means around 30 volts is supplied on pin 2, with pin 3 carrying the audio, and as always pin 1 is ground. Melbourne's "Sound Developments" systems were based on a system where pins 2 and 3 were reversed, but because the voltage was still 30, all that is needed to make them compatible is to reverse this wiring within the substation. Or use phase reversed leads.

Building a power supply for your talkback system isn't too hard. The easiest method with a good looking result is to use a kit supplied by Altronics (Australia-wide, number in the phone book) catalogue number K 5255, with a current rec. retail price of sixty nine dollars. Unlike any other kit suppliers, Altronics Pre-Punch and Silk screen their metal work so no boring drilling and filing is necessary. However, some alterations to the instructions supplied are needed. Firstly, the component labelled D6 should be omitted. Secondly, their diagram shown as Fig.3 has left out the insulating bush (supplied) for mounting the regulator on the connector panel which serves as its heatsink. See my fig.1. I also think its a good idea not to mount the regulator directly on the circuit board, but to use a length of ribbon cable between them. Makes the finished product just that little bit more roadworthy".

Heftier bolts for the transformer are a good idea too. Thirdly, adding a terminating resistor (1K, 1/4 watt) is a nice touch, between pins 1 and 3 of the unit's XLR connectors. This is especially important when using the unit to power Jands Ezicom stations, which may flip out a little without it.



For headsets, you have a few options. Original exhire Telex headsets are available for around \$50 each. These work fine for relaying urgent messages such as the examples in paragraph 2. But they become too uncomfortable for extended wear applications such as lighting to followspots.

After a few minutes you feel your head compressing. Even worse if you wear glasses. At the other end of the range is the pro industry standard Beyer DT109. Very comfy, excellent isolation, and reasonably tough. Unfortunately, priced accordingly at around \$400. Been around for yonks. Older ones have a small problem where the leatherette ear pads can molt. You take them off after wearing them for a while to find lots of silly looking little black flecks around your ears. The obvious answer is to replace the ear pads. These are available in either identical leatherette or velvet, which stops the problem recurring, from Syncrotech, a company fast gaining a reputation for its standard of service to the industry. The not so obvious but certainly more cost effective answer to the molting DT109 is to remove and invert the earpads giving it a hard vinyl look that's still reasonably comfy.

For those who want something better than the old Telex sets (I should mention here that the new ones are really nice) but can't justify the expense of the Beyers, then a good compromise is the Gamma headset, model number LH075, available from Jaycar electronics for around \$90. Lightweight and comfy. They come wired to two minijack connectors on a Y split, which you will need to snip off to replace with a 4 pin XLR. Female for Jands, etc; Male for Sound Developments. The ribbed wire (you'll see what I mean when you've got one in front of you) which leads to the microphone, wires up pin 1 shield, pin 2 core. The two remaining wires, which load to left and right earpieces, wire pin 3 cores, pin 4 "shields".

OK, we have our components. Next month we'll look at wiring options and a few cool "tricks".

Michael Orland runs T-PAC, call him on +61 2 9799-7219.

Do you ask for products really powerful, reliable and supported by a great technical assistance? The only answer is SGM.



Foto Blow-Up - Pesaro

Write in Reader Service Number: 164

Contact SGM or your local dealer for the complete info catalogue.



Via Pio La Torre, 1 - 61010 Tavullia (PS) - Italy
Tel. +39 (0)721 476477 - Fax +39 (0)721 476170
<http://www.sgm.it> • info@sgm.it



Stage COLOR 1200

Stage ZOOM 1200

Interchangeable.

Stage COLOR 1000

Stage COLOR 575

The show light.

Stage COLOR 300

Stage LIGHT 300

Ultra-compact.



JUST A FEW MINUTES TURNS A WASHLIGHT INTO AN EFFECTS LUMINAIRE OR VICE VERSA.

STAGE COLOR 1200 - Washlight

- HMI 1200 hot restrike lamp.
- 4-colour mixing (CMY + Amber).
- Gradual colour temperature correction (GTC).
- 3 levels of diffusion (max. aperture 50°).
- Special colour effects.

STAGE ZOOM 1200 - Effects Projector

- HMI 1200 W/S hot restrike lamp.
- 12°-24° electronic zoom lens.
- Colour mixing: CMY + 2 CTC filters.
- Continuously variable frost (up to 50°).
- Gobo and rotating prism combinations.



WASHLIGHTS ALLOWING TOTAL MASTERY OF COLOUR.

STAGE COLOR 1000 - Washlight

- 1000 W halogen lamp.
- CMY colour mixing.
- New generation 50° frost.
- Electronic dimmer.
- Stopper and strobe.

STAGE COLOR 575 - Washlight

- HMI 575 W/SE hot restrike lamp.
- 4-colour mixing (CMY + Amber).
- Gradual colour temperature correction (GTC).
- 3 levels of diffusion (max. aperture 50°).
- Special colour effects.



PINT-SIZE FIXTURES WITH BIG PERSONALITIES.

STAGE COLOR 300 - Washlight

- HTI 300 or HMD 300 lamp (3000 h).
- CMY colour mixing.
- Continuously variable frost (up to 50°).
- Single-channel dimmer.
- Single-channel stopper.

STAGE LIGHT 300 - Effects Projector

- HTI 300 or HMD 300 lamp (3000 h).
- Manual zoom with electronic focusing.
- 36 colour combinations.
- 6 rotating gobos + three-side prism.
- Mechanical dimmer + high-speed strobe.

Trust Clay Paky to come up with an entire family of high technology moving-body luminaires. Advanced features include a revolutionary system which lets you transform the great Stage Color 1200 washlight into a Stage Zoom 1200 effects projector in just a few minutes, or vice versa. All Stage fixtures feature 8 or 16 bit control of their 450° pan and 252° tilt angles, automatic repositioning following accidental movements and a convenient moving-body lock system for easy transport. This family of luminaires gives you a unique 50 degree aperture, letting you create fantastic washes of perfectly uniform light even when working close up. Other exclusive new features in the 1200 and 575 washlights include 4-colour mixing (CMY + Amber) – giving a vast range of special pastel tones, and a GTC system for gradual variation of colour temperature.

Clay Paky Stage Line: innovation and traditional reliability to suit your every need.

Distributor:

SHOW LIGHTING AUSTRALIA Pty Ltd

Administration Office - 13-15 Bridge Street - Rydalmere NSW 2116

PO Box 480 Rydalmere NSW 1701

Tel. +61 (0) 2 9898 1666 - Fax +61 (0) 2 9898 1222

Email: showtech@showtech.com.au

SHOW LIGHTING AUSTRALIA Pty Ltd

Head Office - One Park Road - Milton QLD 4064

Tel. +61 (0) 7 3369 3399 - Fax +61 (0) 7 3369 5399

Email: showlighting@showtech.com.au

CLAY PAKY s.p.a. - Via Giovanni Pascoli, 1

24066 PEDRENGO (Bergamo) Italy

Tel. +39 (0) 35.65 43 11 - Fax +39 (0) 35.66 59 76

Internet: www.claypaky.it



PROFESSIONAL SHOW LIGHTING