

Connections

PROFESSIONAL AUDIO & VISUAL TECHNOLOGY

FEBRUARY 2002 A\$4.90 / NZ \$6.50

ENTECH

2002

SHOW SPECIAL

MONDAY 4 - WED 6 FEB

TRACK
CUE

AUTOMATION

SCENE

REORDER

AUTO MIX

EDIT

SCENE MEMORY

RECALL

- LIGHTING LIVE, SWEENEY TODD
- REPORT: DIGITAL RECORDERS
- NEON COLONIAL DAZZLES!
- HUGE NEW PRODUCT PREVIEW

ISSN 1320-5595



Print post approved: #P255003/007511 • NZ \$6.50 • Malaysia 36r • Thai 250bt • Sing \$10 • HK \$45 • Elsewhere US \$7

total freedom

■ **total freedom**

total freedom

total freedom



*“you can
whisper
if you want to”*

Gina Jeffreys

■
The freedom of Personal Stereo Monitors answers the challenges of traditional foldback systems.

No stage clutter, no restriction of movement, consistent controllable foldback for every performer at every venue. No wonder Shure PSM's are revolutionising how performers see and hear foldback.

For more information contact your nearest Shure dealer or contact Jands on (02) 95820909.

Perfect foldback for all performers...

SHURE[®]
IT'S YOUR SOUND™

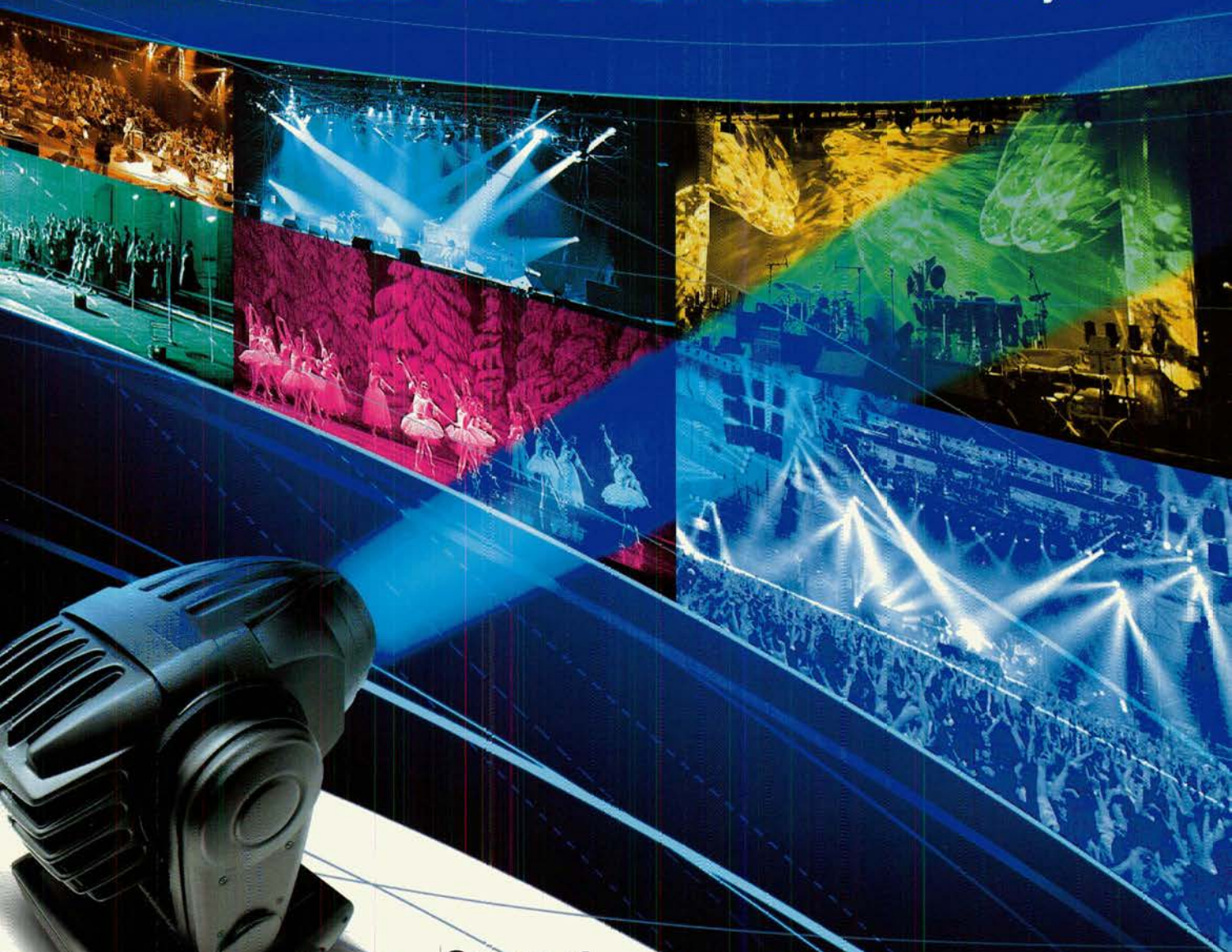
HERE IT IS!

You asked for a great fixture: we've come up with more than that.
The new **GIOTTO SPOT 400** offers the most advanced functions in its class:

- › **400W** hot restrike lamp
- › **M**otorized 9° - 24° zoom with autofocus
- › **L**inear iris
- › **E**lectronic ballast (90-245V)
- › **L**ayerable colour, effects and gobo wheels
- › **V**ery compact and light-weight
- › **U**ltra-low running noise
- › **E**xtremely easy maintenance.

Concerts, theatre, television.

Find out what **GIOTTO SPOT 400** can do for you.



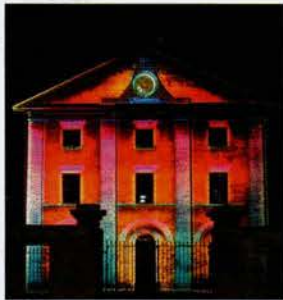
See us at
ENTECH
2002



Distributor: **Universal Lighting Audio;**
QLD: 11 Distribution Ave, Ernest QLD 4211. Tel +61 7 5510-1333. Fax +61 7 5510-1344
VIC: 2/40 Assembly Drive, Tullamarine VIC 3043. Tel +61 3 9310-4999. Fax + 61 3 9310-4655
FREECALL 1-800-648-111 Email ula@ula.com.au WEBSITE: www.ula.com.au



LIVE
Australian Tour
Page 63



Painting Buildings
With Light
Page 69

ENTECH

TRADE SHOW Page 7
Quick Guide Page 26

MARKET REPORTS



Digital Recorders
Page 50



Page 58

Features

ENTECH AWARDS NOMINATIONS	22
LIVE! In Concert	63
Staging Sweeney Todd A look at the OA's version of Musical Theatre	66
Electric Canvass Paint the Town Projection making it mark	69
MARKET REPORT - Digital Recorders	50
MARKET REPORT - Dimmers	58
TAFE TALK Audio Training at North Sydney TAFE	73

News

ENTECH Arrives	7
Back to Court - Defamation case looms	7
Million Dollar Mix as church buys 3x PM1Ds.....	8
Retro Rig at the Awards	8
Meyer and Selecon at QPAC	12
Massive Martin Audio Purchase in NZ	28
NEXO GEO at ENTECH	42
Philips announce new partnership	44

Installations and Reviews

Macau's Son et Lumiere	9
Mundowie Festival	18
The Flood Drummers - Reviewed by Julius Grafton	26
Christmas in East Timor	28
The Zone Nightclub	34
Domain Alive	42
Tasmania - New Sound at Cricket Oval	42
Walsh Bay - Building a new venue	61

New Products

Dougherty Winch-ups	10
DBX - Quad Gate.....	10
Bose System Controller	10
Shure ULX Wireless	12
Clay Paky Golden Spot.....	12
Biamp - Digital Audio Platform	14
Jands - HUB24	14
Peavy - Digitool MX	16
Martin - Atomic 3000	16
Yamaha EMX Powered Mixer	18
DBX - Drive Rack	20
ENNTEC EVO Lighting Control	24
JBL EVO Speaker System.....	26
Alcorn McBride - MP3 Audio Machine	28
Futurelight - new moving lights	30
Sony - SRP-X700P AV presentation solution	30
Quest Engineering - New Powered Speakers	30
Martin Mac2000P	34
American Audio Turntable	34
Rane HC4 - Headphone Distribution	36
ARX - ZA Multi-channel Amp	38
ShowCad Artist	38
Margi - Preseter-to-go	38
Shure Beta 98 H/C	38
grandMA - new lighting control consoles introduced ...	40
Sony PVS-R102 Multimedia Matrix Switcher	40
Coemar iSpot - new additions to the range	44
Jands DD6-2 DMX Iso and Splitter	44
Altinex Matrix Switcher	45
American Audio APX-152 Speakers	45
Bose MB4 and MA12 - New Installation Speakers	46
JBL SB210 - High Output Subwoofer	46
Condom - UpsideDome	48
Rane SAC22 and SAC23 Crossovers	48

information:

UPCOMING REPORTS:

Mar - Microphones
Installation Projectors
Apr - Commercial Audio
DMX Devices

NEXT ISSUE:

Onsale 12th Dec,
subscribers earlier.

CONTACT US: email

mail@conpub.com.au,
Call +61 2 9876-3530
Toll free in Australia:
1-800-635-514
Fax +61 2 9876-5715

On the Cover...

Recognise the Yamaha AW4416? It just so happens that the desk that we shot for the cover some time ago is now up for an ENTECH Award - see page 22. Photograph by Dario Gardiman +61 2 9698 0700



Forum

Tracking Guide.....	74
Classifieds.....	76
People and Places.....	77
Letters and Email.....	79
Subscriptions	??
My Gig -	77
Comment by Walne - Light Years	80
Deep Fry - A Load Of Claptrap	81

The EV Sx300™ has the guts to outperform the competition.

Clean, powerful sound

RMD® Technology (Ring-Mode Decoupling), the same concert technology found in EV's award-winning X-Array™ Series, creates precise speaker intelligibility and clean, powerful performance across all volume levels. RMD removes mechanical and acoustic resonances in the enclosure and components so only "pure audio" remains.

Bright, crisp highs

VariPath® Throat Geometry, another EV innovation, provides smooth, extended response and detailed, accurate highs from our exclusive constant-directivity HF horns.

Chest-pounding bass

Sx-Series™ Woofers have cast-frames and incredibly heavy-duty magnet structures. The result is unrivaled bass response that lets your audience "feel" the performance.

Protect your investment

The EV PRO® Circuit protects the compressor driver from damage if a dangerous condition occurs. Plus, the entire speaker is built within a durable, easy-to-carry case that stands up to the toughest road conditions.

Before you buy sound-reinforcement speakers, find out what's inside 'em

Only EV, the pioneer of professional speakers, packs such a huge level of technology into a portable and rugged 15-kilo case. You can't pay less for sound reinforcement speakers, but "less" is exactly what you'll get. So go ahead and compare the others... we have a gut feeling you'll make the clear choice.



EVERYWHERE™

© Telex Communications, Inc.



Two Sx300 speakers matched with the Powermate 1000 ensures top input-to-output performance from the individual components. EV, the world leader in sound reinforcement, offers matched systems for all speakers in the Sx series.

For more information contact your Electro-Voice Dealer or EVI Audio (Aus) Pty Ltd.

Tel: 02 9648 3455 Fax: 02 9648 5585

Email: sales@eviaudio.com.au

Web: www.eviaudio.com.au

(EVI Audio (Aus) Pty Ltd is a division of Telex Communications, Inc.)

See them all at ENTECH, stand Q38



innova SON
the New Way to Watch Sound
Innova Son Sensory
Grand Live Digital Console



xta
XTA Electronics DP324 SDD
Seriously Intelligent Digital Dynamics



Gentner
You're *Actually* There™
Gentner XAP 800
Audio Conferencing System



EAW
EASTERN ACOUSTIC WORKS
EAW NEW KF760 Line Array



Production Audio Services Pty Ltd
Email : sales@productionaudio.com.au
Website : www.productionaudio.com.au
Phone : 61-3-9415-1585 Fax : 61-3-9415-1585
6-8 Elizabeth Street Richmond Victoria 3121 Australia

Connections

The Asia/Pacific Professional Audio and Visual Technology Monthly

FEB 2002

ENTECH TURNS ON DARLING HARBOUR

Monday 4th February at 10am, the doors open for three days. On Wednesday 6th they close, not to reopen for two more years. ENTECH is back, bigger and better!

ENTECH comes slightly early this year, having moved back to Darling Harbour where trade show bookings were hard to obtain.

Then September 11th impacted, causing cancellations and postponement of events across the world.

This ENTECH is a full house, despite the 9-11 shockwaves, and is widely anticipated as the best trade show yet in this biennial series.

More than 130 exhibitors are staging a range of exhibits that in several cases are the largest physical stands yet seen at an ENTECH. The combined mains power draw at ENTECH exceeds that of any other trade show, at opening time the mains burn exceeds several thousand amps per phase.

Pro Audio exhibits are at an all time high, occupying greater than a whole hall for the first time, while lighting, vision and staging exhibits are all substantial.

But it's the ancient origins that have generated a lot of interest at this show. A museum celebrating 30 years of rock audio and lighting has taken on a life of its own. It features a specially made, never seen before video of old band clips, with crew credits. The video has exclusive footage which is too hot to detail here, lest the people featured be forewarned!

Aside from the video, there is an old stage, displaying equipment and pictures from the deep dark past.

"People forget how hard it was 30 years ago" says industry

Mac 2000P with framing control, new at ENTECH



veteran Buck Freeman, now living in Detroit. "We were seen as against authority, the cops hassled us on the road all the time, the gear

was primitive and heavy, and the trucks old and slow. The media slandered us and painted the picture we were a drug and booze fuelled conspiracy to steal their daughters. Actually, they were right!"

The trade show floor is where it is at, with very large exhibits by Jands, Sony, Show Technology and U.L.A. across the 100,000 square feet of space - equal to three jumbo jet hangers.

The mix of exhibits mirrors changes across the industry, with new players like Network Entertainment Technology and Audio Products Australia alongside older companies like Audio Telex and Bycraft who have expanded and changed direction since the last show.

This issue previews much of what we know will be shown, but a lot of equipment is under embargo at presstime lest it miss air shipments. The show promises a lot of surprises!

• **Darling Harbour is at the western edge of the Sydney CBD. ENTECH entry is free to trade.**

Yamaha's PM1d - first show viewing at ENTECH



Heavy court case for lighting duo

By Julius Grafton

The partnership buyout at Australia's Martin and Clay Paky importership Show Technology was settled, but now appears headed for court over an article in Mondo.

The article contained comments we cannot publish regarding Emmanuel Ziino's former partner.

Rod Salmon, now a Sydney Hotelier, has launched defamation proceedings in the Supreme Court of NSW against Emmanuel Ziino and the UK publishers of Mondo.

Rod Salmon is searching for the un-named journalist to join into the action.

Rod Salmon told Connections he was seeking damages as his reputation could be affected by the story. As a hotelier, accusations such as those in the article could affect his various and pending liquor licences, he argues.

TAFE partner for Connections training in NSW

North Sydney TAFE have partnered with CONNECTIONS to deliver the first of seven new Connections Courses in NSW.

The first courses start next month, with full day and part time schedules announced covering two batches of courses. Some of the courses, namely Professional Induction courses for both production lighting and live audio, carry a TAFE attainment in NSW.

Connections are seeking venue or trainer partnerships in other states, in order to roll out training dates for the second half of 2002 in locations other than Sydney.

• See www.conpub.com.au

Connections

10th year of publication!

ISBN: 1320-5595

CONNECTIONS is published monthly -
except January - by Connections
Publishing Pty Ltd
Australian Company number 058 443 182
ABN 66 058 443 182

Mail: PO BOX 439, EPPING
NSW 2121 AUSTRALIA.

NEW: Deliveries: 6D Villiers
Street, North Parramatta 2151 NSW

Web: www.conpub.com.au

Email: mail@conpub.com.au

NEW: Phone: +61 2 9890-2111

NEW: Fax: +61 2 9890-2766

Hours: 0900 - 1700 Sydney.
After hours try any of the mobile
numbers below, email, or fax.

Advertising:

Julius Grafton, (Publisher)
julius@conpub.com.au,
call toll free 1-800-635-514
or +61 2 9890-2111.
Mobile 0408 498-180

Subscriptions: - sent in a recyclable
brown paper lunchbag! Call toll free
1-800-635-514 or +61 2 9890-2111 or
email michelle@conpub.com.au

Bulk sales, dealer sales: toll free
1-800-635-514 or +61 2 9890-2111 or
email michelle@conpub.com.au

Newsagent sales: NDD code CNC.

Publisher: Julius Grafton
julius@conpub.com.au
mobile 0408 498-180

Editor: John Grimshaw
john@conpub.com.au
mobile 0408 833-394

Melbourne bureau: Mandy Jones
mandaj@deakin.edu.au
mobile 0414 537-847

Contributors: Worldwide.

Office Manager: Michelle Perry

Tax, finance: Jennifer Royal

Cover Photography: Dario Gardiman

Deadlines: Tight, to bring you news
faster. 15th of month prior OR BETTER.
Call us as late as you like.

Write for us: We PAY! We welcome your
unsolicited material, however rough, and
we understand spelling mistakes. Call to
discuss your ideas.

Legals: Nothing herein to be reproduced
or transmitted by any means without the
express written approval of the publishers.
All contents copyright of Connections
Publishing Pty Ltd. All material thought
to be correct at time of publication, but
we accept no legal responsibility if it isn't.

We have made every reasonable effort to
track original copyright holders.

Rather than call your lawyers, or suffer
stress, please *rationaly* email or fax us
any corrections. We will try to fix.

Lawyers: Gilbert & Tobin

Printed in Sydney by: Superfine

Reprographics: Omicron

V. good IT consultant: Brendan King
bking@ozemail.com.au

Platform: Mac, PC, cables & \$\$\$\$

This publication is checked by virus scanning
software to ensure your safety while reading. All
spelling and grammar mistakes are deliberate.

Who is doing what?

Retro rig for Awards as moving lights go back in the truck

The ENTECH awards is set to show lighting designers how it was, as anything controlled by DMX is consigned to the scrap heap.

"We thought it would be fun to test our ability to once again use generic equipment in a meaningful way. Forget the point and shoot mentality!" said Awards Producer **Meri Took**.

Lighting designer **Martin Kinnane** was briefed to beg, borrow and steal old lighting, and his truck is visiting various repositories as this issue is distributed. As the theme of the show covers 30 years of technology, the Par 64 can be theoretically too modern for the awards, although it may creep in as it was introduced in 1974.

Martin threatens to fire up some Strand Pattern 263's, and a guessing competition will

be held during the gig to see if anyone can discern light emanating from the lens. A hunt was on at presstime for some Pattern 23 flicker wheels, specifically at 15 and 40 rpm, to emulate a Zapco or Vide lightshow of the mid 1970's.

Dim it may be, but exciting too, as Martin doesn't need to program anything. The hunt for an SP 40 to run it all on may be futile, so some kind of slightly more modern desk will feature.

The PA system at Metro is also partly 1980's technology. It'll be fun!

• Some dinner tickets may still be available, you can buy them at ENTECH. The awards are on Tuesday night, 5th February, at the Metro at 7pm. (Located on George st, near Bathurst street).

ENTECH

Million Dollar Mix is the new high as church goes LOW Hillsong awards live audio contract, shortly to announce comms and lighting

Last issue Connections reported the frantic bidding war for a lucrative audio contract at Hillsong church in Sydney's north western bible belt.

The contract was awarded to Sydney outlet **Lots Of Watts**, and is notable as it sets a new benchmark for installation audio in the region.

Hillsong's new 3,500 seat auditorium will feature a sound system based on EAW loudspeakers and Crown amplification.

The console specification sets a new limit on what is desirable or necessary at a state-of-the-art venue. Hillsong is in many ways a world leading church, because it astutely

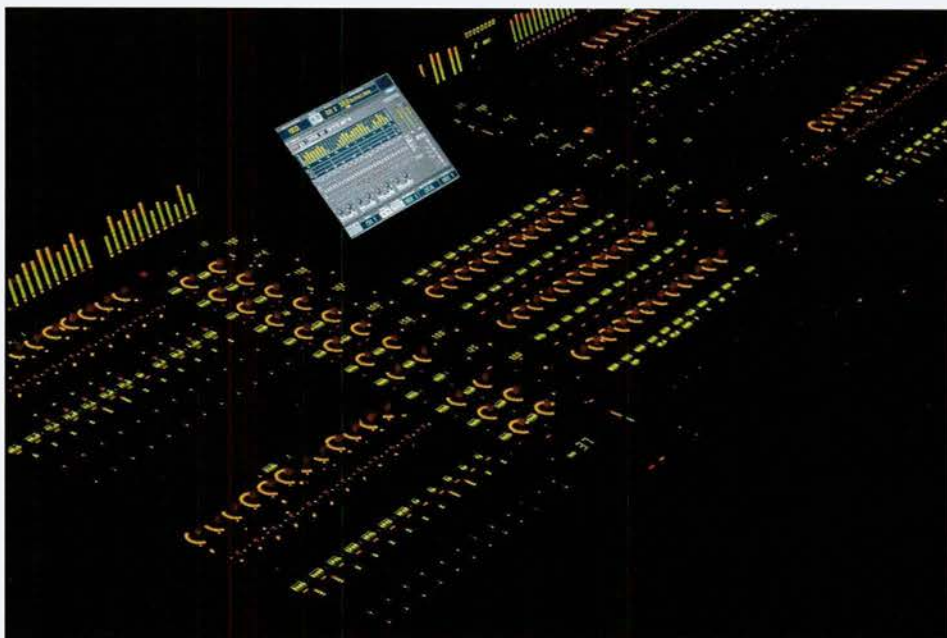
markets its product via multimedia.

Hillsong broadcasts on TV, makes DVD's, and releases high selling CD's of its music, which is in a contemporary form.

The console chosen is the new Yamaha PD1d, a fully digital live console. Hillsong have ordered three, one each for front of house, monitors, and broadcast. The three consoles will cost around A\$1 million.

Lots Of Watts are assisted with the contract by **Acoustic Dimmensions**, a Texas based consultancy who will provide expertise for the more complex aspects of the job, such as dsp control and programming.

Other Hillsong contracts are pending.





GREAT picture by Paul Mazlin from Oracle Laser Productions



Janet Parker tests the Neumann D digital mic system at HuLabaloo Music in St Leonards Sydney

Neumann for Syntec

Syntec International are proud to announce they are now the Australian and New Zealand distributors of Neumann microphones. At ENTECH Syntec will display the full range of Neumann mics, including new models such as the large diaphragm TLM103 and the KM100 miniature mic series, and latest tube models. Also featured will be the new Solution D digital mic system.

Selecon intro Ardiis

Ardiis is the new branding on architectural and commercial lighting devices designed by Selecon. The firm has a big push on the aesthetic lighting market, and will debut this at ENTECH.

ENTECH pix go online

For the first time, this year's photography from ENTECH will be available online for all exhibitors and visitors to view. The service will be provided by EventPix, described as the most efficient online delivery system for event photography in Australia.

EventPix photographers will cover the trade show and various social events including the awards dinner, with the images available online the day following each event.

EventPix was developed by Trevor Connell, publisher of Australasian Special Events, a monthly online magazine and portal for the festivals, conference and event industry.

EventPix will have a stand at ENTECH where you can meet the team behind the system, and of course watch out for the colourful EventPix photographers covering the event.

www.EventPix.com.au

Son-et-lumiere pushes boundaries at gusty tower

Crew freeze and climb ladders, LD composes music while Australia bakes up a hot xmas

Gordon Richmond is the modest Australian lighting sorcerer who serves up grand lighting concepts in his role as consultant and designer. Just prior to Christmas he took his imagination to Macau (near Hong Kong), where Sydney firm TCP won a contract as a joint venture with Vision Design Studios to light the opening of the new Macau Tower.

Aside from supplying a stack of permanent outdoor lighting around the convention and entertainment complex, the 343 metre tall tower was lit as an opening night spectacular

visible and televised across the region.

Gordon conceived a Son-et-lumiere and produced the 8 minute music track in partnership with Anthony May.

25 crew from the region, including Australia, New Zealand, Hong Kong and Singapore put a massive rig of over 130 rented fixtures on and around the tower, while Oracle Laser Productions braved sub zero temperatures rain and wind up top.

> please turn to page 14

Technology Update

Winch Up Stands –
by Doughty

Doughty have developed a new generation of Strata and Zenith winch stands for the entertainment industry.

The newest refinements being a unique self-locking secondary safety system and an option of two different styles of base arrangement. The 'turnbuckle' base arrangement allows the stand to encounter slopes while keeping the mast in a vertical position, two heavy duty castors are incorporated for maneuverability.

These stands have also been manufactured using a four-section mast, resulting in an extremely low loading height. The stands are finished in crackle black outer section and zinc plated inners.

Doughty is distributed in Australia by Coemar DeSisti Australia.

- Coemar DeSisti Australia
+61 3 9467 8666
ENTECH Stand 016



DBX INTRO 10 SERIES QUAD GATE



dbx's 1074 QuadGate is a companion to their 1066 and 1046 devices. The 1074 offers 4x channels of gating with threshold, depth and release controls on each channel. The 1074, like the rest of the products in dbx's 10 Series, is based on the dbx V2 VCA and offers XLR I/O, and 1/4" side-chain input.

In addition to an external key input per channel, the 1074 also has an internal filter that can be independently activated and controlled on a channel-per-channel basis. This filter allows the 1074 to not only clean up tracks, but gives you frequency selective control on each gate, to open exactly when you want it to.

These features combined, make the 1074 an absolute must for those who require quad gating

on applications including: gating dry and percussive sounds such as snare drum and kick drum, gating sounds that have longer decay times such as cymbals and pianos, gating hum or buzz from live instruments or recorded tracks or eliminating headphone leakage into microphones.

A 'PeakStopPlus' feature allows you to set the maximum signal level you want to pass through a channel, while 'Stereo Link' allows you to link channels 1 & 2 and 3 & 4 for two channels of true stereo gating.

All four channels feature balanced gold plated XLR and 1/4" inputs and outputs.

It sells for a suggested A\$1995 list.

- Jands, +61 2 9582 0909
ENTECH Stand T30

ENTECH

Bose Panaray system digital controller

The new Bose Panaray system digital controller is designed to provide a smooth, accurate spectral response for Bose professional loudspeakers requiring active EQ.

Push-button control allows easy selection of loudspeaker EQ along with four independent programmable delays, limiters and signal routing to select full-range or high- or low-pass alternatives.

Unlike previous Bose loudspeaker controllers, the Panaray controller is upgradable as a venue's speaker design evolves. By eliminating multiple controller types for different Bose speakers, the Panaray system digital controller consolidates all settings and system

information into one central location. Troubleshooting becomes more accurate and immediate. And a special "lockout" feature prevents others from changing your settings once your installation is complete.

Standard presets in the Panaray controller used in conjunction with Bose Panaray MB4 speakers and bass array brackets let you create bass arrays at the touch of a button. Bose say Bass arrays enable you to control



bass energy – directing the bass to the dance floor but not the bar, for example.

Bass directivity is a big issue with this box. The PSC is priced at \$999.

- Bose, +61 2 8737 9999
ENTECH Stand G25



GEAR TO MOVE?

IF YOU'VE GOT GEAR TO MOVE,
CALL STAGE & SCREEN ON (02) 9383-4544

STAGE & SCREEN
TRAVEL & FREIGHT SERVICES PTY LTD

Everyone's Listening and Everyone's Talking



...about Sony's DMX-R100 Digital Console

With over 500 units in Europe alone, there are now thousands of users worldwide offering testimony to our DMX-R100 digital console. So what are they saying? Which features do they use?

The biggest single talking point... the sound quality!

After we developed a small-format console with eight bus digital mixing, designed for stereo and 5.1 surround operation with emphasis on quality and ease of use.

The R100 can operate with sample rates up to 96kHz, using quality, 24bit converters and high speed SHARC Digital Signal Processors. Its 56 input channels include 24 analogue inputs as standard and a total of 18 output buses can be configured to suit the application.

The 48 full channels, Mix, Multitrack and AUX send buses all boast 4 band fully parametric EQ (plus 43

point high and low cut filters) as well as Dynamics control with Compressor/Ducking and Expander/Gate.

Creative mixing is yours with the R100. Up to 99 Snapshot/Cues per title provide static recall including input/output routing while smooth, time-code automation is also applied to the quality touch-write faders and all EQ/Dynamics controls.

To centralise your system the R100 has a built-in machine controller for Sony 9-pin, MIDI and T/C chase.

So, by all means listen (your golden ears will never be the same) but please appreciate the operational features of the R100. Your projects and creativity certainly will.

Call 1800 017 669 for further details (for Sydney call 9878 9736) or check-out www.sony.com.au/proaudio

Sony Australia Limited A.B.N. 59 001 215 354

Head office: 33 Talavera Road, North Ryde NSW 2113 Web: www.sony.com.au
Sydney (02) 9887 6666 Melbourne (03) 9264 0200 Brisbane (07) 3334 4000
Perth (08) 9202 2555 Adelaide (08) 8234 3777 New Zealand +64 9 486 6130

SONY

Technology Update

Meyer and Selecon chosen at QPAC

Queensland Performing Arts Centre have received Selecon's largest single order to a single client - over 700 luminaires, including Pacific 5.5 - 13, 12 - 28, 23 - 50 and 90 degree units and both Arena and 1200 High Performance Fresnels and P.Cs.

Supplied by **The Production Shop**, Selecon's Queensland dealer, the decision to choose Selecon luminaires came after months of extensive tests held at the Centre under the exacting eye of **David Schultz**, Manager Lighting and his crew. **Tim Kennard**, at that time of the Production Shop, arranged the numerous sample units and provided the technical back up.

On the audio front, the four QPAC venues have combined to purchase a further 96 Meyer speakers to enhance their existing stock of 46. QPAC bought CQ-2s, CQ-1s, UPAs and UPMs for the 2000-seat Lyric theatre. MSL-4s, PSW-2s, CQ-2s, UPAs and UPMs will go in the 1800-seat Concert Hall. UPAs, UMs and USW-1Ps are for the 850-seat Optus Playhouse and UPAs and UMs for the 335-seat Cremorne theatre. 650-Ps, UPAs and UPMs were purchased as floating items.

These speakers will all be on show at Entech, as well as the M3D line array, the SB2 full range sound beam, and the DF4 downfill box. The inaugural products in Meyer's new industrial series, including the MM4, will also be on show.

- **Selecon New Zealand**
+64 9 360 1718
ENTECH Stand L5
- **Meyer Sound**
+61 7 3252 4493
ENTECH Stand E30



Left to Right - Richard Stuart, (QPAC's Executive Manager of Technical Services), Graham Hicks (The Production Shop), Jeremy Collins (Selecon). Pictured in QPAC's Optus Playhouse, which has a new Pacific FOH rig.

SHURE INTRODUCES ULX WIRELESS

New system finds empty frequencies

Shure recently introduced its new ULX Standard and ULX Professional UHF Wireless Systems. These systems are in the affordable bracket, and are designed for both live performance and fixed install applications. They feature Shure's 'Automatic Frequency Selection' circuitry, to simplify system set-up by scanning a user's environment for open frequencies.

Both frequency-agile models operate between 662-698 MHz and offer up to 1440 selectable frequencies that are organised into pre-programmed groups. These groups enable a user to quickly set-up and operate up to 20 compatible systems simultaneously. ULX receivers also include 'Predictive Diversity' circuitry which Shure claims virtually eliminates RF drop-outs.

The unit has an easy-to-read, multi-function liquid crystal display for monitoring group/channel selection and battery level.

ULX Professional System features include frequency and volume lockouts, indicators for RF signal strength, furnished rack hardware,



remote mountable wave antennas, and an extruded metal chassis.

ENTECH

ULX Systems are available in over 30 system configurations with a variety of Shure's handheld, headworn,

instrument and lavalier microphone options, including the SM58, Beta 87A, Beta 87C, Beta 53 and WL50.

Shure is distributed by Jands Electronics.

- **Jands +61 2 9582 0909**
ENTECH Stand T30

Gold returns for Clay Paky

Inventors of the classic Golden Scan go for gold with new model moving lights

Clay Paky's Golden Spot 1200 and Golden Color 1200, both of which were amongst a range of lights released at UK's PLASA trade show in September (*Connections Oct pg 58*), will be on display at ENTECH.

Show Technology, the Australian distributor of numerous brands including Clay Paky, will be showing off this range of moving head lights on their ENTECH stand.

The Clay Paky Golden Spot 1200 and Golden Color 1200 are less-featured budget versions of the Stage Spot 1200 and Stage Color 1200. With the benefit of the high output HMI 1200W/S lamp, these lights still have a respectable suit of features despite being positioned as a 'budget' fixture.

The Golden Spot 1200 requires 10, 12 or 13 control channels, has two gobo wheels, one of which has bi-

directional, indexable rotating gobos. The unit is fitted with a wide-angle 24° lens and has variable focusing. An optional lens can be fitted by hand to reduce the light beam to 15°.

Two colour wheels with dichoric filters as well as a 5-sided prism and a frost filter. Other built-in effects are iris, dimmer and stop/strobe effect. The unit is priced at A\$15,199.

The Golden Color 1200 is a CMY colour wash light. Its features include a microlens frost filter, ovalizer, dimmer, stop and strobe, using a total of 8+2 control channels. It also has an amber disc with gradual insertion which allows a gradual colour correction from 6000K to 3200K, as well as creating "pastel" colours if used with the CMY colours. This unit is priced at A\$15,199.



- **Show Technology**
+61 2 9748 1122
ENTECH Stand S10

LOUD IS GOOD

(Preferably so loud that you can stun small animals and peel paint)

Active is better

(...assuming you've practiced a lot and are reasonably in tune)

the SRM450, SR1530 & SRS1500 ARE BOTH

SRM450



Active is not the same thing as powered. A powered speaker is just a passive speaker with an amplifier clamped on its back.

The high-current FR Series™ amplifiers in the SRM450 Active 2-way, SRS1500 Active 600 Watt Subwoofer and the new Active 3-Way Speaker System are tightly coupled to their transducers via sophisticated servo feedback circuitry for better control and higher output.

The SRM450 has redefined compact active speaker sound quality. Combine it with the bone-shaking SRS1500 Active Subwoofer and your system now threatens to violate strategic arms limitation treaties! Thanks to 600 watts of internal amplification, electronic equalisation and weapons-grade 15" LF transducer, it has the most bass output of any 'small' SR subwoofer.

You'll get tight response down to 35Hz at -10dB, at up to 127dB! A special 3" surround-wound voice coil dissipates heat and lets the SRS1500 crank all night at max volume.

Plus it has a built-in electronic crossover system so you can help out passive systems' low end to.

Hear the SRS1500/SRM450 combo at a Mackie Dealer today. Crank up the SR1530 Active 3-way system. Have a good listen and then start shoving our audience around.

SR1530



The SR1530 just looks like an SR Speaker. Actually it has a 3-way electronic crossover, three FR Series™ power amps with 500 total watts RMS delivered to three transducers, three parametric equalisers and an electronic time corrector...all built into the Mackie SR1530.

...Combined with the Mackie SRS1500 Active 600-watt sub and you have the new **Rock Pig Pig** of choice! We challenge anyone to deliver a better-sounding, more portable, easier-to-setup system that produces over 2 Kilowatts for a price that was unheard of just a few years ago!



1-inch exit diameter compression driver with integrated phase plug

Optimised Wavefront™ Horn properly blends HF and mids

6-inch midrange transducer with integrated phase plug

16-ply Baltic Birch trapezoidal enclosure with rugged resin end caps

Weight balanced side handles plus top and bottom handles

15-inch LF transducer with heat-resistant Inside/Outside voice coil and high-flux magnetic circuit

Inside: 3 FR Series™ amps with 500 total watts RMS delivered to transducers

Inside: Phase accurate electronic crossover, electronic parametric EQ, time correction and phase alignment circuitry

600 watts of high-current FR Series amp power built in

15-inch transducer with 3" Inside/Outside wound voice coil

Inside: time correction and phase alignment circuitry

Built-in electronic crossover for active or passive systems

Level and phase controls

Less than 3 sq. ft. of stage space

PERFECT MATCH: THE CFX-20 MIXER

• 4-bus design • 16 premium XDR™ microphone preamps • 20 total channels with 16 mono line level/mic chs. & 2 stereo line level chs. • Built-in 16 EMAC™ 32-bit Digital Effects • 9-band stereo graphic EQ • 4 aux sends per ch • Inserts on mono chs. • 5-band EQ with swept mid & low cut filter (mono chs.) • EFX to Monitor • RCA tape inputs & outputs • 60mm long-wear log-taper fader • Solid steel chassis & more!



MACKIE.

For more info & a glossy brochure contact:
Australian Audio Supplies
FreeCall 1800 50 20 15
sales@ausaudio.com.au

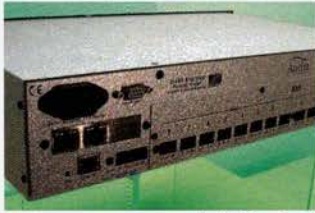
MACKIE ACTIVE

Australian Audio SUPPLIES



www.mackie.com

Technology Update

Biamp dsp
audio platform to
debut at ENTECH

Audia Rear Panel

Audio Products Australia have announced the inclusion of Biamp Systems to their stable of products. Biamp Systems is based in Portland, Oregon, USA and have evolved to create a range of commercial audio equipment for installation by professional sound contractors.

ENTECH

Audio Products Australia now have available automatic mixers, DSP's, stereo preamplifiers, mixers, distribution units, switchers, echo cancellers and noise compensators. Most products are programable software based with user friendly software. Biamp offers 5 year warranty on all products.

One of the Biamp products to be released at ENTECH is Audia. This DSP based Digital Audio Platform has been designed to be fully networkable, it can either be used as a decentralized system or all rack mounted together.

Using six Sharc DSP ic's in each unit, a network of multiple units will increase the power of the "network" proportionally to the number of Audia's used.

The I/O configurations include 8x8, 4x12, 12x4 and 16x0, 0x16 to follow.

CobraNet compatible, the Audia is software programmable and can be remotely controlled. Audia will be fully demonstrated at ENTECH 2002.

- **Audio Products Australia:**
1800 642922
ENTECH Stand J25

NEW APPROACH TO DIMMERS AND DISTRIBUTION



Jands Electronics have announced the release of their next generation lighting control solution – HUB 24.

The Hub incorporates a 15 channel dimmer rack, 9 channel power distribution unit (for moving lights and suchlike) and a two channel opto-isolator into one compact unit that weighs only 28kg. Designed to be the self-contained central 'hub' for any lighting system, the unit is intended for streamlining mid-sized lighting system storage, transporta-

tion and setup. The device combines new dimmer technology, integrating several devices into one unit, removing the necessity for multiple rack mounted dimmers and the associated power and DMX distribution systems.

"We designed the HUB 24 primarily for the Australian rental market," said Paul Mulholland, CEO of Jands Electronics. "However, after showing the product at PLASA it seems it will be a success in Europe. I was surprised at how many people came up with applications we had not yet considered. You know you have a winner when the only thing people complained about was the fact that the connectors were not suitable for their local market."

The dimmer section uses chokeless IGBT circuitry, which allows for virtually silent operation and reduces weight significantly. Microprocessor control with a 128 x 64 pixel graphics LCD gives advanced feedback and control of all parameters of the unit. The HUB 24 can be safely operated from a standard 32A supply using a lockable, software based current control/limiting feature.

See HUB 24 at ENTECH.

- **Jands, +61 2 9582 0909**
ENTECH Stand T30

Son-et-lumiere (continued from page 9)

"The opening was a logistics nightmare, we had 14 shipments from 8 countries and a 3 week timeframe from go ahead to show" states Gorcon. If that wasn't enough he managed to make lighting history by remote controlling the Strand 500 series control desk via microwaved ethernet.

"We had a Strand 510 with a 530 as a remote programming surface – located in a hotel some kilometres away. It was very exciting seeing 7k Space Cannons doing their thing from level 64 as you control them!" enthuses Gordon.

Gordon planned to play out the music from SP Beta with timecode, so the lights and the laser would sync, but ended up calling cues instead. There's a lot that could have gone wrong", he stated.

The music production part of the gig is unusual for an LD. But Gordon – a youthful 50 something- is also a dance music DJ with a big passion for dance music.

"I made sure it melds really well, and takes you on a journey to enhanced places". Connections heard the soundtrack, and allied with Gordon's description it made for a compelling, and ultra challenging production.

Music and Lighting - Gordon's Son-et-lumiere partially described

The Initial Revealing:

Opens with George Gershwin's "Summertime", a strong vivacious and energetic opening, with lots of expressive colour and movement of lights climbing the stalk of the tower.

The Majesty:

From the sound track of the Hollywood blockbuster film "Fifth Element". It starts with a beautiful gentle operatic piece that conveys the isolated majesty of the tower, far above and far away from all its peers in the Macau CBD, where lighting effects will amplify the sense of height and majesty. Broad slow rotating sweeps of the lasers will accompany the vocal nuances, while the tower will be completely bathed in warm gracefully changing colours.

The Grand Climax:

The sixth and final section, whose building chorus, heralding brass, and marching orchestra all build to one final climax utilising the dual 70kW "lightning strike" strobe lights at the very top of the Tower mast, and then finally the entire site (all tower and entertainment centre external lighting) is returned to "black-out". This section comes from the sound track to the film "Star Wars Episode 1 – The Phantom Menace".



our innovation, your imagination

ACCLAIMED AROUND THE WORLD AS THE LEADING ELLIPSOIDAL PROFILE RANGE, THE PACIFIC IS IN DAILY USE IN THE WORLD'S LEADING PERFORMING ARTS CENTRES, INCLUDING THE METROPOLITAN OPERA, NEW YORK; OPERA BASTILLE, PARIS; MARIINSKY THEATRE, ST PETERSBURG; QUEENSLAND PERFORMING ARTS CENTRE, BRISBANE; ADELAIDE FESTIVAL CENTRE; AOTEA CENTRE, AUCKLAND; MANITOBA PERFORMING ARTS CENTRE, WINNIPEG.

Pacific

Delivering more for the designer, technician and owner

WIDEST CHOICE OF LIGHT SOURCES INCLUDING THE UNIQUE LOWER VOLTAGE 80V POWER SYSTEM, MSR AND MECHANICAL DOWSER, AND 600/800/1000W TUNGSTEN HALOGEN. **WIDEST RANGE OF OPTICAL SYSTEMS** – 5°-13°, 12°-28°, 23°-50° ZOOMS, 20°, 30°, 40°, 50° & 90° FIXED BEAMS. **LOWEST COST OF OWNERSHIP** DUE TO SELECON'S UNIQUE HEAT MANAGEMENT SYSTEM, GUARANTEED BY THE ONLY **THREE YEAR WARRANTY** IN THE INDUSTRY. **COOL OPERATING CONTROLS** EVEN AFTER HOURS OF CONTINUAL USE. A GATE SO COOL YOU CAN USE **DIY PLASTIC GOBOS**.

TO TRIAL THE WORLD LEADER CONTACT YOUR LOCAL SELECON DEALER NOW – SEE OUR WEBSITE FOR DETAILS.

www.seleconlight.com

SELECON

Technology Update

The DigiTool - a new DSP Tool for Peavy MediaMatrix



The DigiTool MX is a fully programmable audio processing and control system. It includes advanced parallel DSP processing, a multi-layer front panel display and multiple interface and control options. Signal processing is

accomplished using two 24-bit parallel SHARC processors with a combined power of 120 Mips. The DigiTool MX gives the system designer an economical alternative to design and is considerably more powerful than similarly priced components.

The graphic display is capable of displaying real-time audio signal activity, active presets and control information for audio processes, as well as monitoring critical variables such as internal cabinet temperature and power presence.

The DigiTool MX's host processor and non-volatile flash memory maintain user-defined configurations and allow interface via the unit's front panel control and optional external control interfaces.

Features of the DigiTool are extensive.

It boasts eight balanced analog mic/line inputs, phantom power, eight balanced analog line outputs, and 24-bit A/D and D/A converters. Sample rates can be set at 44.1 kHz, 48 kHz, or 96 kHz, and there are three front panel parameter controls.

It has RS-232 connection for easy set-up and operation, RS-485 connection for remote serial functions, four assignable control input ports (analog) with 0-10 VDC range for external potentiometers and for the ultimate in contractor convenience, optional wall plates for external control.

Price not available at presstime.

• **Audio Telex Communications**
+61 2 9647 1411
ENTECH Stand J38

PROFESSIONAL LOUDSPEAKERS

Technical innovation & quality...
Eighteen Sound is committed to manufacture loudspeakers, designed to meet the most stringent requirements in the industry. Using new concepts, new materials and new production processes we guarantee a product of superior quality. Try and listen how they perform...

Eighteen Sound
Via dell'Industria, 20 - 42025 Cavriago (RE) - Italy
Tel. +390522941596 - Fax +390522941464
E-mail: zucchi@eighteensound.it

LX Remote for Atomic series



The Atomic 3000 DMX strobe by Martin can now be controlled by a specially designed remote called Detonator. The Detonator is an optional, dedicated remote control tool for control of an Atomic strobe's flash rate and intensity. Flash rate is from 0-25 Hz (0-30 Hz in the US) and an intensity fader from 0-100%.

The remote adds options like "blinder effect" and "single flash" on the Detonator, and allows for multiple units to be synchronised. The remote is priced at \$289 and is distributed by Show Technology.

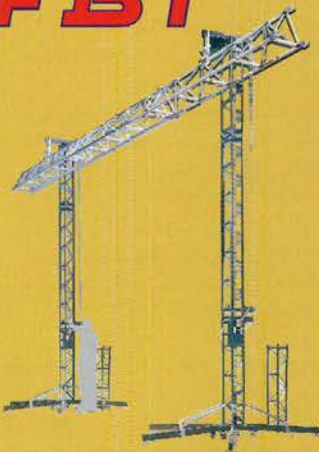
• **Show Technology**
+61 2 9748 1122
ENTECH Stand S10

a brighter future...

Showrooms: 631-635 Parramatta Rd
P.O. Box 1013 LEICHHARDT NSW 2040
Ph: (02) 9568 2100 • Fax: (02) 9568 2300



FBT



MOBIL-TECH

FRANCE



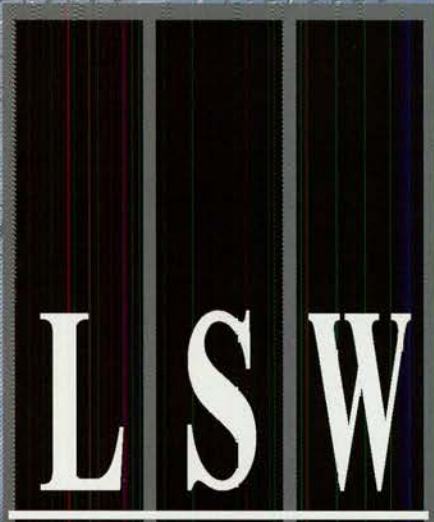
AMERICAN AUDIO

value • innovation • performance

SATISFACTION

GUARANTEED

At LSW, we distribute exclusive professional and unique products at unbeatable prices. We offer high stock availability, a caring service, free advice, after sales assistance, and we ship to most parts of Australia overnight. We strive to offer the most competitive value in the industry today on every single product. Let us help you with all your sound, lighting, special effects and security products.



IMPORTS AND DISTRIBUTION

If you would like information on how you can create your own profitable enterprise with our products, why not consider an LSW partnership today. Contact us now for the latest LSW product information and dealership opportunities in your area.



LIGHT EMOTION



Antari

FOG MACHINE



f.a.l.



sonlite

computerized lighting controller

Technology Update

Yamaha Powered Mixer EMX Series



EMX 88S

Yamaha have released a new series of powered mixers with most models including a high quality effects unit.

EMX Powered mixers inherit some technology from the top of the range Yamaha PM3500 and PM4000 sound reinforcement mixing consoles, including superior RF (Radio Frequency) rejection and exceptionally clean, transparent head amplifiers.

The EMX power amplifiers feature Yamaha's EEngine technology for efficient operation with significantly reduced AC power consumption and heat generation — factors that contribute to the light weight and compact dimensions.

EMX5000-12



Digital Effects on the EMX68S, EMX88S and the EMX5000 mixers feature SPX digital effect technology with 24-bit AD/DA conversion and 32-bit internal processing.

All models except for the single-amp EMX62M feature power amp mode selector switches so the user can configure the amp channels to suit a range of applications.

The EMX5000 models, for example, offers four choices: Main (L) + main (R) to drive stereo house speakers, Mono + AUX to drive a mono house speaker system plus a mono monitor system, AUX1 + AUX2 to drive a monitor system while an outboard power amplifier drives the house, and Mono Bridge to deliver 1000 watts to a subwoofer.

The LPF filter provided on the EMX5000-12/20 outputs is also an ideal feature for subwoofer drive.

Another feature is the Stand-by switch included on all stereo models. It is designed so that when engaged, the stand-by mode mutes all mono channels while leaving the 2-track inputs (and stereo channels on the console types) active for BGM playback.

With the exception of the largest model in the line-up (the 20-channel EMX5000-20), all models can be rack-mounted using an optional rack-mounting kit

Models -

EMX 62M - 6 flexible input channels, effects, 7-band graphic EQ, and 200-watt mono power section. A\$845.

EMX66M - all the features of the 62M, but with two mono 300-watt power amps and an extra GEQ for foldback. \$1,195

EMX68S - all the features of the 66M, but stereo - with 400W/ch 2ch amp, a selection of 16 effects and standby mode. A\$1,395

EMX 88S - all of the features of the 86S, with 8 input channels (6 mono & 2 stereo), 400W/ch 2ch amp, 3-band channel EQ, individual 7-band graphic EQ for the main and monitor outputs, SPX effects and Yamaha Speaker Processing. A\$1,595

EMX5000-12 / EMX5000-20 - In addition to all of the above features, the 12 or 20-channel EMX5000's both feature a 500W/ch 2ch amp, 4x auxiliaries, mid-sweepable EQ, and twin SPX processors. 12ch - A\$2,295, 20ch - A\$2,895

• Yamaha +61 3 9693 5111
ENTECH Stand L30

Mundowie festival debut for new Golden lights



From a humble beginning in 1994, with 15 local youths attending a Christmas Party in an empty factory unit in Sydney's north, the event has grown into the Mundowie Music Festival attracting thousands.

All performers and staff donate their time and skills to the festival for free. Local businesses join together to provide the equipment and finance for this charity event.

The 2001 festival ran over two days with acts such as Ian Moss, Jon English and the AC/DC Tribute show on the bill.

Lighting and audio was supplied by Entertainment Installations on the Central Coast, who took the opportunity to try out new Clay Paky Golden Spots and Golden Colors which were hot out of their crates.

Neale Mace, Entertainment Installations' Managing Director (left) was more than happy to try the fixtures on his show.

"We wanted a bit more fire power and

these sounded ideal," said Neale. "I had a quick look at them in our warehouse. They're an awesome fixture - bright, punchy and responsive. In fact the light is very, very bright for a 1200W lamp. They're lighting up the entire back of the festival area. The gobo mixing and the standard gobos with the Golden Spots are incredibly nice. And for Clay Paky, the price is reasonable.

"I only needed two Clay Paky Golden Colors to wash the entire back cyc of a 32ft wide stage. It would take me twice the amount of MAC250's to do that.

As well as the Clay Paky fixtures, the rig contained 12 Martin MAC250+, 6 MAC300, 4 Pro400, a couple of Molefays, 8 Par 64 and 2 Geni Shimmers on the front of house tent. A Martin Pro2000 smoke machine provided smoke.

"If I can help it, I never use cans," said Neale. "The idea is to have a flexible rig".

POWER HOUSE

"The System 6000 not only changes the way I work but speeds the process up!"

Brant Biles

SYSTEM 6000

Ultimate Multichannel Processing Platform



Only the System 6000 platform offers a full range of essential tools for your Multi-channel and Stereo applications. From stunningly real Room Simulations with multiple sources and expressively dense Reverbs to Pitch Shifting, the System 6000 delivers unparalleled power, control and integration to your studio.

Only the System 6000 and its touch screen remote offer specialized software options. These include true benchmark standards like Multi-channel MD5.1™, Stereo MD-3™ Multi-band Compression and Brickwall Limiting, Backdrop™ Psycho-acoustic Noise Reduction, Engage™ Binaural Processing, Stereo to 5.1 Conversion, the 5.1 Monitor Matrix with Bass Management, Multi-channel EQ and much more...

Only the System 6000 is fully networkable via Ethernet. Talk about expansion... a single TC ICON remote can control up to 256 channels of digital audio, all using industry standard Ethernet cabling and routing hardware supported by continuous free software updates on the Internet.

"I've been using the System 6000 as a four engine device connected to my console at BackStage studio in Nashville. Configuring the unit for each application could not be easier allowing me to use it for stereo as well as 5.1 mixes.

I must say, at this point, I do not think I could get along without it!"

Chuck Arlroy

FILM

POST

MUSIC

MASTERING

BROADCAST

MULTIMEDIA

www.SYSTEM6000.com



t.c. electronic
ULTIMATE SOUND MACHINES

For details of your nearest TC Authorised Dealer, please contact:

Amber Technology Pty Ltd ACN 003 231 187 ABN 86 003 231 187

www.ambertech.com.au

Sydney
Melbourne
Brisbane
National

Unit B, 5 Skyline Place, Frenchs Forest NSW 2086
Unit B, 192 Burwood Road, Hawthorn VIC 3122
Unit 1, 220 Boundary Street, Spring Hill QLD 4000
Toll Free Customer Service Tel 1800 25 1367

Tel (02) 9452 8600 Fax (02) 9975 1368
Tel (03) 9815 2710 Fax (03) 9815 2523
Tel (07) 3831 8444 Fax (07) 3831 8455
Email: professional@ambertech.com.au



Technology Update

DBX INTRODUCES THREE NEW DRIVERACK UNITS



Top to Bottom:
dbx 240, dbx 241 & dbx 442

dbx recently announced three additions to its DriveRack line of equalization and loudspeaker management systems. The new 240 and 241 DriveRack units, designed for touring and fixed-installation contractors and engineers, feature complete EQ, crossover and compressor/limiter technology in a single rack space.

The dbx DriveRack 442 is based on the same operating system as the DriveRack 430 and offers the user four inputs and four outputs on XLR connectors.

The 240 DriveRack unit houses two inputs and four outputs in a XLR/Euroblock configuration with 31-band graphic or 9-band parametric pre-EQs on each input and 4-band parametric post-EQs on the outputs. The unit offers pre-crossover digital delay of up to one second and numerous crossovers types including Butterworth, Bessel and Linkwitz-Riley.

DriveRack 240 features compression/limiting, output phase compensation and post delay with up to 300 milliseconds of delay. All editing aspects of the 240 can be changed with the front panel controls or via the included DriveWare interactive software (PC).

The 241 DriveRack unit carries the same processing power as the 240 but utilises a streamlined front panel and is controlled exclusively by the included DriveWare interactive software.

The dbx 240/241 units are the latest addition to the DriveRack family and offer comprehensive signal processing between the mixing

console and power amp.

With the dbx DriveRack 442, each of the four channels has EQ in the form of a 9-Band Parametric or a 31-Band Graphic and Notch Filters.

In addition the 442 features a filter set that can be used to create a Highpass, Lowpass or Bandpass filter. Dynamics processing is available on all channels with a Compressor/Limiter that emulates the classic dbx 160.

The output section of the 442 offers delay, output level and phase compensation. The 442 is also capable of running dual real-time analysers on channels three and four. A 480 master, a PC GUI, or a 480R remote can control the 442. Any combination of 480s, 481s, 482s and 442s can be controlled on a single DriveRack network consisting of up to 100 units. Imagine that!

The 442 DriveRack was designed with the purpose of providing four independent channels of processing power that includes 31-Band Graphic equaliser, as well as dbx's own industry standard dynamics processing. All features can be controlled by the included dbx Professional Products Interactive DriveWare software. Software updates can also be downloaded instantly through the RS 232 port.

dbx 442 Features include:

- 4 Input and 4 Outputs;
- 31 band graphic or 9 band parametric equalizer on every input;
- Time Alignment Delay;
- Compressor/Limiter on every output;
- Multi-level Security System;
- Separate House & Show EQ with individual lockouts;
- Triple redundant back up of all parameters when running network, 480R and GUI;
- TYPE IV™ Conversion System;
- Electronically balanced/RF filtered XLR Inputs and Outputs;
- Proprietary RS-485 Control Network;
- RS-232 PC Interface for computer display and configuration.

• Jands Electronics Pty Ltd
+61 2 9582 0909
ENTECH Stand T30

ENTECH

DMX CREATOR

3D Emitter

NEW!
EFFECTS GENERATOR!

- Supports any DMX512(1990) device
- 512 or 1024 output and 512 input channels
- USB or LPT Interface with advanced stand alone mode!
- Windows® 2k/ME/98/ based control software
- Download free software: www.dmx512.net

VXCO Lighting Systems - Switzerland - Phone: +41 (0)32 675 34 89 - E-mail: info@dmx512.ch Distributors welcome...

MAC 2000

Attention to Detail

Color Temperature Correction

The MAC 2000 houses the highest quality Color Temperature Correction (CTC) system in a 1200-watt profile spot in the lighting industry. Especially useful in TV and theater applications, MAC 2000 CTC flexibility makes it possible to gradually and smoothly increase or decrease color temperature, ensuring color shade quality and consistency over the entire beam projection.

Quality that only comes from attention to detail.

Power

Intense light output from a powerful HMI 1200-watt source

Optics

Extraordinary, multi-coated, 10-lens optical system and multi-faceted glass reflector system

Graphics

Multiple effect wheels combine to create unique Moiré, morphing, iris and 3D effects (all wheels house glass gobos)

Color

Full spectrum CMY color palette and effective CTC system

Operation

Newly developed 3-Phase Motor Technology ensures fast and smooth movement

Handling

Convenient pan/tilt-lock mechanism and specially designed flight case for easy fixture handling



Martin

 **SHOW**technology

SHOW TECHNOLOGY AUSTRALIA PTY LTD ABN 99 062 241 785

102 Derby Street Silverwater NSW 2128 • PHONE 61 2 9748 1122 • FAX 31 2 9748 1499 • EMAIL Martin@showtech.com.au • www.showtech.com.au

Technology Update

ENTECH AWARDS
NOMINATIONS

THE AWARDS ARE ON! The winners will be selected from votes taken on the tradeshow floor, for the first time.

Winners will be announced at the Awards Dinner, on Tuesday February 5th.

Across the first two days of ENTECH there will be special voting terminals **AT THE CONNECTIONS STAND** where attendees will be able to cast their ballots.

Towards the end of the second day (at 4pm), these terminals will be deactivated, and the votes tallied for that night's awards. Even the presenters will not know who is the winner until the final opening of the envelope.

Four special ENTECH awards will also be given on the night. Three of these awards are for the best Lighting, Audio and AV product displayed at the show. Visitors to the show will be able to select the product(s) that most impressed them, and cast their vote. The fourth award, also voted by attendees, is for the best stand at the show.

The awards process was fully explained previously.

Nominations for the awards were collected from the December Connections special nomination form. All of the correctly filled out nomination forms were collected and collated by the accountancy firm, Partlet, Chave and Rowland, and the top three nominated people, companies and products in every category were short-listed into the Nomination List here.

Those that have made nominations using these forms have already had the opportunity to cast their votes, via a special fax/email process.

The awards will be presented at the special ENTECH AWARDS DINNER, sponsored by Connections Magazine. If you are reading this page at ENTECH, it may not be too late to attend the dinner. If tickets are available, they can be purchased from registration.

• **ENTECH AWARDS DINNER;** Metro, George St, Sydney, from 7pm. Tickets A\$86, incl. 3 course meal and welcome drink.

People Awards

Best Lighting Designer (Event/Live Production)

Gavan Swift, Alex Saad, Trudy Dalgleish

Best Lighting Designer (Installation/Architectural)

Gordon Richmond, Barry Webb, David Sparrow

Best Sound Designer (Event/Live Production)

Wyn Milsom, Adam Iuston, Tony Moffat

Best Sound Designer (Installation/Architectural)

Mick James, Jeff MacKenzie, Chris Dodds

Best Lighting Technician

Mark Hammer, Darren Irving, Matt Burden

Best Sound Engineer (Event/Live Production)

Tony Moffat, Wyn Milsom, David Cafe

Company Awards

Production Company (Lighting)

Bytecraft Entertainment, Chameleon Phaseshift Productions

Production Company (Sound)

Norwest, Jands Production Services Coda Audio

Production Company (Audio Visual)

Technical Direction Company Haycom Staging, Staging Connections

Distributor/Importer

Technical Audio Group Jands Electronics Universal Lighting & Audio (ULA)

Australasian Manufacturer

Acoustic Technologies, ARX, Fairlight

Pro-Equipment Outlet

Lots Of Watts, Kosmic Sound and Lighting Factory Sound

Audiovisual Integrator

Total Concept Projects Space Age Communications Rutledge Engineering

North Sydney College of TAFE Award Industry Support for Graduated Trainees

Equipment Awards

Digital Recorder or System

Yamaha AW4416HD Digidesign Pro Tools Mackie HDR24/96

Speaker (Small PA up to 500W RMS)

Mackie SRM450, JBL Eon GII Acoustic Technologies LG01

Speaker (Large PA over 500W RMS)

Martin Audio Wavefront 8 EAW KF750, L-ACOUSTICS V-DOSC

Speaker (Studio Monitors)

JBL LSR32, Mackie HR824 Genelec 1030A

Analogue Mixer (Live Production)

Allen & Heath GL4000, Soundcraft Series V Midas Heritage 3000

Digital Audio Mixer (Live Production)

Yamaha PM1D, Innova SON Spirit Digital

Digital Audio Mixer (Studio Production)

Yamaha O2RV2, Mackie Digital 8 Bus Sony DMX R100

Microphone (Dynamic)

Shure SM58, Shure Beta 58, Sennheiser Evolution E835

Microphone (Condenser)

Rode NT1, Shure Beta 87 Audio Technica AT3035

Wireless Systems (Microphone)

Shure UC Series, Sony

Freedom, Sennheiser 100 series

Wireless Systems (In Ear Monitoring)

Shure PSM 700, Sennheiser EW 300 DB Technologies IEM-2000

Dimmer or Dimming System

Jands HP12, Jands GP12 Bytecraft Bytesize APC

Conventional Luminaire Range

ETC Source 4, Selecon Pacific Strand SL Range

Intelligent Light (300W Lamp or less)

Martin Mac 250

SGM Giotto 250 Spot

Clay Paky Mini Scan HPE

Intelligent Light (greater than 300W Lamp)

Martin Mac 2000, Varilite 2402

High End Systems X.SPOT

Control Desk

Strand 300 Series, Jands Event 408

Avolites Pearl 2000

Projector (Installation +15kg)

BARCO SLMG5

Sony VPL-FE110 (formerly VPL-FE100)

NEC XT5100 (formerly XT5000)

Projector (Portable less than 15kg)

Sony VPL-CX11 (formerly VPL-CX10)

Panasonic PT-L6500 (replaces PT-L797)

PLUS U3-1100z

Plasma Fixed Display

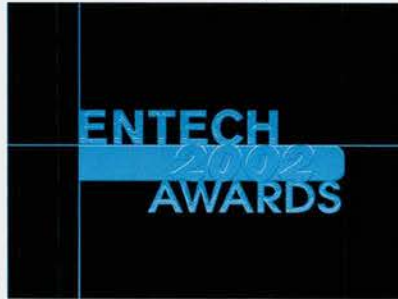
Panasonic TH-42PWD4

NEC 42MP2 PX-42VM2G

Fujitsu Plasmavision PDS4241WH (formerly

PDS4221)

Show Awards

Best Lighting Product at the show**Best Audio Product at the show****Best Audiovisual Product at the show****Best Stand at the show**

If you haven't heard...

...everyone else has
MEYER SOUND

Meyer Sound Australia
ACN 079 632 787
PO Box 595, Albion Qld 4010
4 Gordon St., Newstead Qld 4006

Web site
www.meyersound.com.au
sales@meyersound.com.au

Direct
T: 07 3252 4493
F: 07 3319 6016

Toll Free
Australia: 1800 4 MEYER
New Zealand: 0800 3 MEYER





ENTTEC to launch the EVO Lighting Control

ENTTEC - the Australian manufacturer with a name similar to the tradeshow - is to release its flag ship product: the EVO at ENTECH.

This is a new generation of lighting desks utilising Ethernet and other new technologies. The hardware is based around a large 5'7 inch blue back lit touch screen LCD and 7 motorised faders.

The EVO communicates through its Ethernet port, plugging your DMX lighting is done the same way as using their standard DMX Ethernet suite of products, or any other DMX over Ethernet solution.

The EVO was designed for maximum ease of use and no fuss programming. The inbuilt effects engine is similar to the ones you would find in the top of the range desks. The user interface gives constant feedback over the current show or programming actions using plain English sentences. Thanks to the motorised faders, the user will be able to program scenes like an analog desk or run entire cue lists from one submaster.

ENTTEC have also included new features such as: semi-automatic crossfades and web remote control.

The EVO is not built around a PC and uses an industrial real time Operating System for added reliability. Fixture libraries can be downloaded from the ENTTEC web services website or edited using our easy to use web editor.

The EVO will be the base of our lighting control products. After the initial release we plan on developing the software to include networking programming, where multiple desks on the same network could be used to program the same show, or remote Ethernet based process-

ing nodes to upgrade the processing power. They also have a range of add-ons and options in the pipeline including: an offline editor, an expansion wing with more faders, buttons and a trackball, low cost play back unit, and expansion modules such as sound inputs, VGA video output.

EVO Specifications: up to 2048 DMX channels, 100 moving lights and 300 dimmer channels, storage is memory limited and

estimated to hundreds of cues, cue lists, pages, groups, palettes, macros.

Hardware: 5'7 inch backlit touch-screen LCD, 7 motorised faders, 3 rotary encoders, size 510mm x 280mm x 90mm, floppy disk drive, dimmable desk light, 2 expansion ports, Ethernet port.

The EVO is available in 3 factory colours (red, blue, black) or an optional custom colour.

• **Enttec Pty Ltd +61 3 9819 2433**
ENTECH Stand S8



Lots of Watts is your hire, sales and installation 'stop'.

From installing a mixing desk at the local church to providing an entire sound and lighting system for a concert at the Entertainment Centre, you can count on Lots Of Watts to deliver professional results, every time.

'Stop' at Entech stand H19 to discuss your sound and lighting requirements.

The company everyone else uses

2 Bridge Street, Rydalmere NSW 2116 Tel: +61 2 9638-0302 Fax: +61 2 9638-0331
Email: sales@lotsofwatts.com.au hire@lotsofwatts.com.au Web: www.lotsofwatts.com.au

**Lots
of
Watts**
Pty Ltd

 **audio-technica.**

30

series



AT3035

Cardioid Condenser Microphone

RRP \$595



AT3032

Omni Condenser Microphone

RRP \$445



AT3031

Cardioid Condenser Microphone

RRP \$445

- Flat, extended frequency response
- High SPL handling capability and low self-noise
- Low-frequency roll-off switch and 10 dB pad
- Operate on 11-52V phantom power
- AT3035 includes a custom shock mount
- www.audio-technica.com

Proudly distributed by



Yamaha Music Australia Pty Ltd
Professional Audio Department
PO Box 263, Sth Melbourne Vic 3205
Toll Free 1800 805 413

ABN 84 004 259 527

Technology Update

3 days, 3 nights - and one massive loadout!

ENTECH is a beast of many colours, and has assumed a momentum of its own. Connections attempts here to guide you through this event, which only comes every second year.

- **REGISTRATION** is easy, just walk up, demonstrate a connection with the trade, or an interest in the technology. Then, it is free to enter and browse 130+ stands for three days between 10 and 6.

- **SEMINARS** are on all three days, a program of available events will be posted at registration where you can buy tickets. They are very reasonably costed, designed as non profit events.

- **NAVIGATION** is never easy through the halls. Pick a reference point, and look at the floor plan. Try to arrange your time with some gaps for unexpected encounters.

- **SOCIAL EVENTS** abound. Many exhibitors have arranged their own, the main events are the Opening Night Party at the Pumhouse (free entry), and the Awards Dinner on Tuesday night. This requires payment at Registration, if tickets are available.

- The **MUSEUM** is a large attraction staged with extensive industry and sponsor support, near the exit. It features our roots, man, like from the 1970's. Experience *deja vous* and re-live the distant drugfuelled hopeless past. It does show just how hard it was 30 years ago, and there is a terrific 'pick the faces' competition. Speaking of which.....

- **COMPETITIONS** - there are plenty of these, just go find them on the floor.

And, come and say hello at the Connections stand, we are in the middle of the floor with TAFE!

ENTECH

JBL EVO comes to ENTECH

EVO is an intelligent, self powered speaker system with automatic digital control over room equalisation, feedback suppression, delay settings and amplifier dynamics.

The core of the EVO system is the EVOi.324 intelligent speaker. Each EVOi.324 includes two JBL 14 inch speakers for low and mid frequencies and a newly designed horn for high frequencies. A built-in electronics module includes one 100 Watt linear and two 600 Watt digital power amplifiers together with switch mode power supply and system electronics for a wide range of control and customisation.

Based on a principle of distributed intelligence, up to four EVOi.324 speakers can be networked from a single controller.

- **Jands +61 2 9582 0909. ENTECH Stand T30**



THIS IS THEATRE?

SEDUCED BY HYPE, DROWNED BY REALITY

Julius Grafton has a stupefying night out, as French production plumbs the depths

Swept along by a tidal wave of media hype, we paid \$83 each and trooped into the terrific RHI pavilion at Fox Studios to see Sydney Festival's star attraction, *The Flood Drummers*.

Described as "a spectacular treatment of political ethics on an epic scale, presented in the form of an Asian puppet theatre", the production was long in duration and hideously short of interest.

Imagine the scene.

A horribly cramped and uncomfortable temporary seating system that made a park bench desirable.

An extremely basic set. A large, indulgent older male percussionist sitting stage right with an attentive slender young female assistant. Two lesser percussionists doing little in the gloom upstage. A dull lighting design featuring too much footlighting, which weakens visual interest.

That this was a technically minimal production, without a sound system, wasn't an issue for me. The play itself was.

Professor Adrian Kiernander, who is head of Theatre Studies at UNE, said Theatre du Soleil is devoted to the pursuit of the "theatri-

cal" rather than the "realistic" in its productions. "*The Flood Drummers*, drawing on the conventions of Bunraku, requires the actors to rely on gesture rather than facial expression in conveying emotion. It also requires the characters to be accompanied on stage by shadowy 'manipulators'."

The result is a patently absurd parody of a puppet theatre, with character voices delivered in a weird falsetto pseudo Chinese style, but conveniently screeched in French. The storyline was thin as ice, something about a dam needing to be breached to drown a few thousand peasants.

I've seen some boring theatre in my 30 years working around the medium. This plumbed the depths.

The occasional seemingly random percussive crescendo prevented sleep, while the weird bird noises induced it. After an hour of

soporific sleep deprivation, we left, forced to traverse the long aisle directly in front of the actors and the silent, stupefied, dumbstruck audience. See 'ya all later.

Perusing the programme the next day, I pondered the cost of subsidising this kind of taxpayer funded theatre. Each 'actor - puppet-thing' required two 'shadowy manipulators'. Two pages of cast credits preceded the page of production credits, listed amongst which was a 'decoder of maps and mysteries' — and two master chefs.



The Flagship Professional Loudspeaker From Bose[®] Just Got Better.

Now there's even more to like about the loudspeaker of choice for many singers, musicians and DJs. The 802 loudspeaker has been re-engineered for smoother acoustic performance and more durability outdoors. *Installed Anywhere*[™] speaker performance withstands snow, sleet, rain, severe cold, intense heat, salt fog and humidity with no extra treatment required.

Smooth, lifelike sound for musical instruments, vocals and recorded music from eight patented 4½" full-range drivers per cabinet.

Uniform coverage over a wide listening area from proprietary Articulated Array[®] speaker configuration.

Natural balance of low, mid and high frequencies - at low or high volumes, in small or large venues.



Bose[®] Panaray[®] 802[®] Series III Loudspeaker

For more information call
1800-659-433

pro.bose.com



ACME AUDIO MAKES MASSIVE NZ MARTIN AUDIO UPGRADE

ACME AUDIO's 72 new cabinets is set to make a major impact on the New Zealand concert scene.

ACME purchased its first Martin products in 1995, then in 1997 a 42 box Wavefront 8 acquisition was made to develop its rapidly expanding hire business. The latest purchase is a result of the tremendous success ACME has experienced with Wavefront 8.

Rex Vizable, (pictured above, at right, shaking hands with **Robert Judd** of TAG) MD of ACME Audio said, "We realised during 2001 that the ever growing demand for high quality PA systems in New Zealand could not be met with our current level of stock. We needed to take the next step to be able to provide the level of service that our clients required. With this major upgrade we now have a substantial inventory of equipment to service our clients as well as provide for expansion throughout New Zealand."

"We first purchased Wavefront 8 because it just sounded great! What we got as a bonus was the tremendous flexibility of the system, it's just as effective at a 50,000 crowd outdoor festival as a two box a side jazz gig and of course everything in between."

Powering the new cabinets is a compliment of 40 Martin amplifiers along with 10 Martin DX-1 digital controllers.

Martin Audio is distributed in Australia and New Zealand by Technical Audio Group.

- **ACME Audio Limited**
+64 9 357 3600
- **TAGNZ**
+64 9 416 0190
- **TAG Australia**
+61 2 9810 5300
ENTECH Stand 030

Alcorn McBride Announces Digital Audio Player

Book-sized audio player delivers hundreds of MP3 clips on demand

Alcorn-McBride have introduced the MP3 Audio Machine. This versatile box plays either MP3 or WAV file formats and can be triggered by external contacts or controlled via serial RS-232. The unit can also be set to auto-loop on start up.

Measuring a slim 1.75" x 5.5" x 11" and weighing in at only 4 lbs, the unit can be mounted almost anywhere. It can run on standard 110/220 VAC or from a 12 volt power supply, such as a car battery.

Equipped with a removable flash memory card, the unit can withstand vibrations of up to 20 g, making it suitable for use in high-

vibration environments such as pneumatic attractions and roller coasters.

Extended playback time can be achieved with the use of higher capacity memory cards or with the IBM MicroDrive, which has a storage capacity of up to 1Gb. The MP3 Audio Machine also comes with free software that allows you to create and edit audio on your PC. Retail price is US\$995, which includes one 16 meg flash card.

Alcorn-McBride is distributed by EAV Technologies.

- **EAV Technologies +61 3 9417 1835**
ENTECH Stand J42

ENTECH



Defence Rock Concerts Grooves East Timor

The Australian Defence Force's Christmas Concert tour of East Timor featured performances by Killing Heidi, Paul Dempsey from Something for Kate, Groove Terminator and Missy Higgins. Backing the performers was the Army's award-winning Sydney Band.

The Concert tour concluded in Dili in front of hundreds of Australian and UNTAET Servicemen and women, and locals.

The Australian Army band decided that this year they would purchase some special lighting that would be initiated in Timor. Corporal Jason Grimstead is in charge of lighting the band as well as leading the percussion section of the band.

"Everyone in the army band has a second job!" he said. "I have no formal training in lighting design so I was looking for lights that

are simple to set up and operate."

Consequently Jason opted for nine Martin Pro 400 fixtures as well as Martin LightJockey for a controller, purchased from Black Express Light & Sound in Sydney.

"I had used the Pro 400 before because the band based in Wagga has ten of them as well as five Pro 518 fixtures," Jason added. "It's also useful to have the same fixtures as them so we can combine them when required. The Wagga band also has a Jem Stage Hazer.

"The lights were flown over to East Timor on a RAAF Hercules plane and then bounced around in the back of a truck for the two weeks we were in East Timor," sad Jason. "We took spare globes and fuses but they weren't needed."

VCA desks for the real world

The ML consoles embody our mission to make previously exclusive technologies affordable to people on a real world budget. These mixers have changed the rules for VCA desks, forever raising the pro audio industry's price / performance expectations.

→ ML3000



→ ML4000



→ ML5000



ALLEN & HEATH

ML3000 / ML4000 / ML5000 features:

- **8 VCA Groups** / Giving you control of any number of channels from a single fader, including control of all post fade sends
- **Advanced Mic Preamp** / The ML pre-amp uses a new custom made potentiometer and in addition to achieving the lowest possible noise and THD figures, we've eliminated inter-modulation distortion - something that makes many other products sound harsh.
- **Front-of-house / Monitors / Group / Aux mode switches** let you use the MLs as full function front-of-house mixers or full function monitor consoles
- **LCRplus Panning** / Paired blend and pan controls on channels and groups allow you to position signals across the C and LR busses

Allen & Heath live sound mixers:
ML5000 / ML4000 / GL4000 / ML3000 / GL3300 / GL2200



Technology Update

Futurelight's new Lights + Controllers

Coemar DeSisti Australia have announced the release of several new SC range moving mirror scanners from Futurelight. The new range includes SC-240, SC-250, SC-335, SC-375, SC-380 & SC-570.

The new range of scanners all use the HTI and MSD/HSD series of lamps, thus using the long-life characteristics with excellent luminous output of these lamp types. The entire SC series also have numerous configurations of gobos, colours and effects with physical sizes to suit a broad range of applications.

Also from Futurelight are several new additions to the MH moving yoke range from Futurelight. The new range includes the MH420, MH670 and MH680. The MH fixtures use a range of lamps from the new long-life and high output CMD series up to the powerful MSD discharge lamps. Each of the units have a range of features including gobos, dichroic colours, focus etc.

Several new dedicated, universal and Windows-based controllers from Futurelight are also now available. The new range includes CP-256, EX-1, EX-4 & Wizard 1024DMX Software.

The EX series are easy-to-use dedicated controllers which allow the user to take full advantage of the features available Futurelight products. Readily programmable, they also offer several useful in-built functions.

The CP-256 is an economical universal controller that is able to operate up to 16 DMX fixtures of up to 16 channels.

The Wizard 1024DMX is a pc-based software control system. With in-built libraries of fixtures, the full range of DMX-controllable equipment can be programmed easily with this software. Fully Windows 95/98/2000 compliant, the software uses USB connectors to easily and quickly connect the DMX card to existing hardware.

• Coemar DeSisti Australia
+61 3 9467 8666
ENTECH Stand 016

Sony's complete A/V Presentation Solution, the SRP-X700P

Clever Box time, as this is a unique device WITH inbuilt power amp

SONY'S SRP-X700P is many things to all people: a Digital Audio Mixer; a Digital Power Amplifier; a Digital Processor; a Wireless Mic Receiver Station and an RGB/Video Switcher.

It's a cool box, looking for a better name than SRP-X700P. We'll call it the 700P!

It's got a simple front panel and 4 mic, 2-mic/line, 2-line inputs, with 10 assignable bus outputs. 24-bit A/D and D/A converters are clocked at 48kHz while the digital power amp delivers 150W+150W into 8 ohm speakers or 150W for a 70V line.

You get PC based set up and operation software, which allows access to Feedback Reducer, Parametric Eq, Low-Cut Filter, Compressor/Limiter, Delay, Automatic Mixing and Signal Routing functions with 20 Scene memories.

This is all executed in the digital domain via USB, RS232C or parallel connection to your PC or controlling device.

The 700P has an RS232C output port for

selected projector or plasma control while Control-S ports remotely control: VCRs, DVD, CD, MD players and projectors.

A parallel output port is for remote control to environment devices such as video screen up/down, window curtains open/close, projector up/down and lighting on/off.

Get this: on the front panel are mounting slots for two Sony Wireless Mic tuners that display transmitter conditions including remaining battery time.

A built-in 6 x 1 A/V switcher controls 3-RGB/Component, 3-Composite/S-Video inputs with corresponding 4 x stereo, 2 x 5.1 surround sound audio and RGB/Component, Composite and S-Video outputs.

High-resolution component signals such as 480p or 1080i, and RGB signals with bandwidths up to 150 MHz (1280 x 1024 pixels, SXGA) can be handled.

The 700P will sell at about A\$4,500.

• SONY +61 2 9887 6674. STAND T25

ENTECH



Group Technologies introduce Quest Engineering

Quest Engineering will debut their new powered line of speaker cabinets at Entech with the introduction of the QSA400. The amplifier design is an actively crossed, bipolar split rail providing 400 watts RMS (at the actual rated impedance of the drivers). The amplifier is assembled to withstand continuous vibration and has an extra 20% tolerance over industry standards, so it will survive a typical beating better than you or I.

All QSA series cabinets feature heavy-duty speaker components that are capable of long-term power handling in excess of double the amplifiers rated power. This is coupled with an advanced multi-band compressor limiter to provide the protection needed in demand-

ing situations without providing a noticeable degradation in sound quality.

A comprehensive input section with separate combo connectors for high and low gain signal governed by a master volume means more than one signal source can be input simultaneously. An electronically buffered line output allows for individual tuning and stable signal if a long "daisy chain" of cabinets is required.

The QSA400 is the first in the Quest powered range and provides quality high performance audio in a compact 12" + horn package at an extremely competitive price.

• Group Technologies + 61 3 9381-4911
Stand P35

'WE CAN'T KEEP THESE A SECRET ANY LONGER!'

evolution
500 SERIES

SENNHEISER

PRODUCTS

- Evolution Handheld mics
- Evolution Radio Mic & IEM systems
- Tourguide narrowband RF system, 6 freqs
- Infrared system
- NEW! Guideport system for museums, galleries etc



Guideport System

CLOUD

PRODUCTS

- Zone Mixers
- Integrated Mixer amps
- Multichannel amps
- Stereo compressor/limiter
- Stereo 2 way/3way crossover
- Fitness centre headphone system
- Full range of accessories & modules



CXM Mixer



Z4 & Z8
Multi Zone Mixer

T12



TANNOY

CMS 50

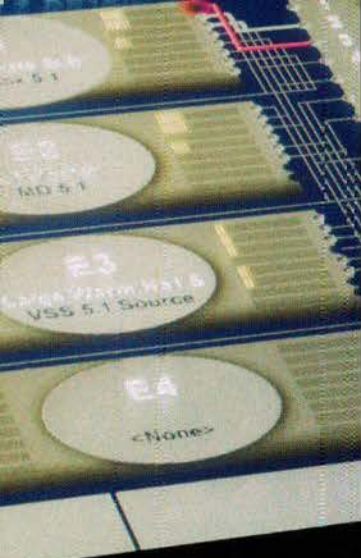


PRODUCTS

- Ceiling speakers
- Wall mount speakers
- Medium to high power installation speakers

SEE US AT ENTECH 2002
CALL FOR OUR LATEST CONTRACTING CATALOGUE

Syntec International Pty Ltd 60 GibbesSt, Chatswood NSW Australia 2067
Ph: (02) 9417 4700 Fax: (02) 9417 6136 Email: contracting@syntec.com.au Web:www.syntec.com.au



A new standard for industry entry

Martin

SEVEN SHORT COURSES FOR FIRST HALF 2002

The two PROFESSIONAL INDUCTION courses are each made up of three shorter courses. You can do one or two of the shorter courses or you can select the PROFESSIONAL INDUCTION courses. You automatically do all three shorter courses as part of the PROFESSIONAL INDUCTION course.

SYDNEY: March - April

- **Industry Safety and OH&S**

\$99/\$130 • 2 Courses on March 2nd or April 15

- **Basic Performance Lighting**

\$240/\$300 • 2 courses starting March 7 or April 16

- **Advanced Performance Lighting**

\$240/\$300 • 2 courses, starting April 11 or April 18

- **Professional Performance Lighting Induction**

\$550/\$700 • 2 courses, starting 7 March or 15 April

- **Basic Live Audio**

\$240/\$300 • 2 courses, starting March 9 or April 16

- **Advanced Live Audio**

\$240/\$300 • 2 courses, starting April 13 or April 18

- **Professional Live Audio Induction**

\$550/\$700 • 2 courses, starting March 9 or April 15

Lower price above is for 30 day or more advance booking. Higher price is standard course fee, booked less than 30 days before. All prices include gst.

- **Industry Safety and OH&S**

1 day or 2 half days / evenings

- **Basic Performance Lighting**

2 days or 4 half days / evenings

- **Advanced Performance Lighting**

2 days or 4 half days / evenings

- **PROFESSIONAL Performance Lighting INDUCTION**

5 full days, or part time

- **Industry Safety and OH&S**

1 day or 2 half days / evenings

- **Basic Live Audio**

2 days or 4 half days / evenings

- **Advanced Live Audio**

2 days or 4 half days / evenings

- **PROFESSIONAL Live Audio INDUCTION**

5 full days, or part time



Technical Training

Condensed, fast stream learning, hands on and theory

OUR COURSES ARE TAUGHT WITH CONTEMPORARY EQUIPMENT, IN A PERFORMANCE ENVIRONMENT • **WE DE-MYSTIFY TECHNOLOGY** • **WE TEACH YOU USEFUL SKILLS**
• **WE DELIVER ACCELERATED LEARNING** • **WE UNDERSTAND OUR INDUSTRY**

Connections Magazine presents **technical training** - brought to you by the people who stage ENTECH.

We come from the live audio and lighting production industry, and have compiled these courses with exhaustive feedback from employers and venues.

These are **PRACTICAL** courses.

These courses are properly structured to provide a learning outcome for each lesson.

In NSW, our courses are partnered by TAFE.



**ENTERTAINMENT INDUSTRY TECHNICIAN
OCCUPATIONAL HEALTH AND SAFETY, INDUSTRY
PRACTICES COURSE. DURATION: ONE DAY.**

This one day course is **ESSENTIAL** for anyone considering working in, or already working within, the entertainment industry as a technician who has not already completed a similar course. It is **HIGHLY RECOMMENDED** all students and all crew **DO THIS COURSE**. This course is offered as a stand alone course. It is also the first part of our two **PRO-FESSICNAL INDUCTION COURSES**. See full course map on left page.

• OHS Course: \$99/\$130 • 2 Sydney courses, March 2 or April 15

Full course info and bookings: www.conpub.com.au

Connections
TECH TRAINING

www.conpub.com.au • email mail@conpub.com.au • call
1-800-635-514. 6d Villiers street, North Parramatta 2151 NSW

Courses presented by Julius Grafton Projects Pty Ltd. ACN 098810036

Technology Update

MAC add new
2000 Performance

ENTECH will see the Australian launch of the highly anticipated Martin MAC2000 Performance, first seen at PLASA last September (*Connections Oct*).

The MAC2000 Performance is a 1200-watt profile framing spot featuring a 4-blade framing system for precise stage lighting and a gobo animation wheel.

The four blade framing system can be controlled to reproduce framing much like a conventional profile luminaire.

Also new to the MAC2000 Performance is a gobo animation wheel. The wheel creates an 'animated' effect which is particularly effective over other fixed gobos to produce water and fire effects. The wheel itself can be moved through 90 deg to align the effect with staging as required.

The MAC2000 Performance retains many of the features of the first release MAC2000 Profile, while increasing the light output by a reported 25%. The CMY colour-mixing system remains unchanged, as does the graduated colour temperature (CTC) correction system.

Other features include a single gobo wheel with 5 indexable rotating gobos, additional effects wheel with rotating beamshaper and 3-facet prism, and a variable frost capable of smooth gobo fade in/out possibilities.

The MAC2000 Performance has a fast and precise focus and zoom system, smooth dimming, and fast strobe effects using a combined dimmer/shutter. The unit operates at a very low noise level, and ships with an electronic ballast and a "Lamp Hot-Re-Strike" feature.

- **Show Technology +61 2 9748 1122. ENTECH Stand S10**

New American Audio
Turntable

American Audio has recently released its newest top-of-the-line turntable. The Power Drive 2.2 Turntable has a high torque platter motor (forward /reverse), 33/45/78 RPM speeds, tone arm height adjustment, and a user-selectable automatic quartz lock speed control.

The turntable has also been designed to use with American Audio's Digi Pro CD scratching system. The Digi Pro combines the turntable with the CD player, including the ability to "scratch" using a CD.



This is American Audio's first turntable release onto the Australian market and is priced at \$699.

- **LSW +61 2 9568 2100**
ENTECH Stand H16



THE ZONE NIGHTCLUB

The Zone, Melbourne's newest and perhaps Australia's finest club opened recently. As The Zone's publicity machine describes it, the club is focused on 'harnessing the effects of spectacular lighting, ecstatic visuals and invocative sound with a sincere, genuine, warm and embracing VIP welcome.'

The club's themes, interior and extraordinary attention to detail must be seen to be appreciated. The main room, for example, is seemingly lifted from Easter Island with hand carved replicas of those famous Moai statues complete with foliage growing over rough rock walls. The DJ booth consists of smoked glass, more statues, more rocks and foliage such that it becomes barely recognisable. The bar doubles as a small stream with water pumped from one end to the other bubbling along under the glass top. In this sort of

INSTALLATION

setting the mind can't help but be transported!

Situated in the heart of South Yarra at 386 Chapel Street, The Zone was, from the outset, determined to combine this extravagant architectural and interior design with leading edge visual and audio technology to achieve its charter and to remain current well into the future. Three of the first guys on-board were **Jay Mic'A** (Audio/Lighting Technician), **Michael Spektor** (Lighting and Programming) and **Paul Nicolaou** from AVL Electronics (Equipment Supply).

Having worked for some of the leading Club management organisations in the UK including Bar Med and Litten Tree Group, Jay unhesitatingly specified Martin Audio for The Zone.

(please turn the page)



SHOW TECH

Australia

510 Williamstown Road, Port Melbourne, Vic, 3207
Phone: +61 3 9645 4133 Fax: +61 3 9645 4637
Email: showtech@showtechaustralia.com.au
Website: www.showtechaustralia.com.au

**RIGGING SERVICES
HIRE &
INSTALLATION**

**CONCERT &
TOURING
PRODUCTIONS**

**STAGING &
SCAFFOLD
STRUCTURES**

**THEATRE, BALLET,
OPERA**

**PERMANENT &
TEMPORARY
THEATRICAL
INSTALLATION
SERVICES**

**CIRCUS &
PHYSICAL
THEATRE**

**SAFETY, CONSULTANCY
MANAGEMENT
& CO-ORDINATION**

**ARCHITECTURAL
& VENUE RIGGING**

**ELEVATED WORK
PLATFORM
HIGH ACCESS RIGGING**

FILM, TELEVISION,

ENGINEERING SERVICES

**COMMERCIALS
& DOCUMENTARIES**

**SPECIAL FX FLYING &
STUNT SERVICES**

**CORPORATE
EVENTS,**

**PROFESSIONAL &
LICENCED CREWING**

**PRODUCT
LAUNCHES,**

**VENUE & EQUIPMENT CONSULTANCY,
MAINTENANCE & SAFETY REPORTS**

**EXHIBITION &
TRADE SHOWS**

**HOIST & EQUIPMENT REPAIR,
MAINTENANCE,
TEST & REPORT FACILITIES**

**OUTDOOR &
ARENA
PRODUCTIONS**

**ENTERTAINMENT RIGGING &
TECHNICAL TRAINING & SEMINARS
AVAILABLE IN-HOUSE OR ONSITE**

**FESTIVALS &
COMMUNITY
EVENTS**

**SCHOOL &
AMATEUR
THEATRE**



Technology Update

RANE'S HC 4 HEADPHONE CONSOLE

The HC 4 provides master stereo inputs which can be used to drive the four stereo headphone amplifiers. A mono switch is provided on the front panel to drive both channels of all four amplifiers from a common mono source.

The HC 4 is capable of delivering up to 200 milliwatts into headphones with rated impedances between 32-600 ohms. The precise amount of power depends on the exact impedance of the headphone in use and the number of headphones connected to the unit. Under most conditions, the HC 4 produces sound pressure levels in excess of 120 dB. A\$995.

- Rane is distributed by Jands, +61 2 9582 0909 ENTECH Stand T30



ZONE NIGHTCLUB

(continued from previous page)

'There are two critical issue with getting a club sound right' stated Jay 'positioning speakers to technically get the best coverage with the maximum direct to reflected sound and secondly using high quality components to provide the clarity and the impact without the pain! When you spend this much money on the concept and infrastructure then you can't leave anything to chance when it comes to the quality of the sound. I was very upfront in insisting on Martin Audio Wavefront as I've experienced just how good Martin and its technical support is.'

On the main dance floor Jay and Paul developed a design incorporating eight W3's positioned in a giant 'donut,' four in the middle in a tight circle pointing out and four on the outside of a much larger circle pointing in and thereby providing a continuous even stereo source for the dance floor area. To achieve big bass impact are eight WS2 double 15" subs each powered by a mono bridged amplifier. The subs form a cylindrical base stack directly below the inner circle of W3's with a small circular stage sitting on top of the subs for feature dancing etc.

At the perimeter of the room are fourteen Martin EM15's providing fill with two BlackLine S15 single 15" subwoofers providing bass. DJ Booth monitoring is courtesy of two BlackLine F12's with additional, delayed, F12's covering the balcony areas.

Audio amplification is entirely QSC with a mixture of PLX and RMX Series models. An Allen & Heath Xone2:62 presides over events in the DJ Booth.

'The audio impact matches the visual impact with superb clarity and heaps of bass power on the dance floor and a seamless transition to the perimeter areas. 'Summed up Jay.

Elsewhere in The Zone two other dance style rooms are equally spectacular with a

Bohemian harem theme in the Moser Room complete with tapestries, marble, carved wood pillars and heavy curtains and in the Gaian Room a visual dreamland featuring an 'electronic wallpaper' concept with projected images constantly moving around the walls. Audio is supplied in each of the rooms with Martin BlackLine F12's with two S15 SubWoofers in the Gaian Room and two double 18' S218's in the Moser Room.

To control the audio Jay incorporated a BSS Sound Web and a patch bay system with 1 In/2 Out splitters allowing him to link any room to any of the others or to provide live feeds for internet webcasting on zos.org or live crosses for radio broadcasts, etc.

LIGHTING

Jay was equally uncompromising in his specification for lighting insisting on a combination of Clay Paky and Martin Lighting. In the main room Jay utilised twelve Clay Paky Mini Scan HPE's as well as four Martin MAC 250+ moving heads. Two 1,500 watt strobes and two blinders add to the stunning lighting effects. All are controlled by a Jands Hog 250.

'The Clay Paky Mini Scans are so reliable and have a great output,' said Jay. 'We decided to add the MAC 250+ fixtures so we could provide some colour washes, particularly on to the rock wall.' A JEM stage haze machine and a JEM ZR22 DMX smoke machine provide further atmospherics.

Design Quintessence manufactured the custom MEC truss that consists of one major 4 metre circle in the middle with four 2 metre circles branching off it.

Four Martin Roboscan 518 fixtures, controlled by a Martin 2308 dmx controller light the Moser room with mirror-balls completing the effect.

The Zone is already well on the way to establishing its niche in Melbourne with rave reviews about its extraordinary appearance and feel.

Introducing
**Buhl's
 Large Venue
 LCD Lenses**

The newest and brightest Large Venue LCD projectors require special lenses in order to harness the full brightness of the illumination system. Buhl Optical's new series of large aperture, multi-element, super bright lenses is specifically designed for these Large Venue LCD projectors. Now you can project giant video and data images in very large rooms from long distances without sacrificing image quality or brightness.

Phone 1-412-321-0076 or 1-800-245-4574 • Fax 1-412-322-2640
 E-mail info@buhloptical.com • Website www.buhloptical.com

BUHL
 O P T I C A L
 A Navitar Company



WITH SO MUCH TECHNOLOGY INSIDE EPSON PROJECTORS WE WANTED TO MAKE A FEW THINGS CLEAR.

Electronic Keystone Correction
Digitally aligns the image to the screen.

Panel-on-Prism Technology (POP)
Provides accurate image alignment and increases reliability.

EPSON Polarisation Conversion Technology
Improves optical efficiency to maximise brightness.

Easy MP
Memory card slot for laptop free presentations.

Picture-in-Picture
Simultaneously drop-in additional visuals within existing presentation.

UHE Lamp
Ultra-high lamp output - ultra-high efficiency.

In-Built Speakers
All EPSON projectors have built-in sound.

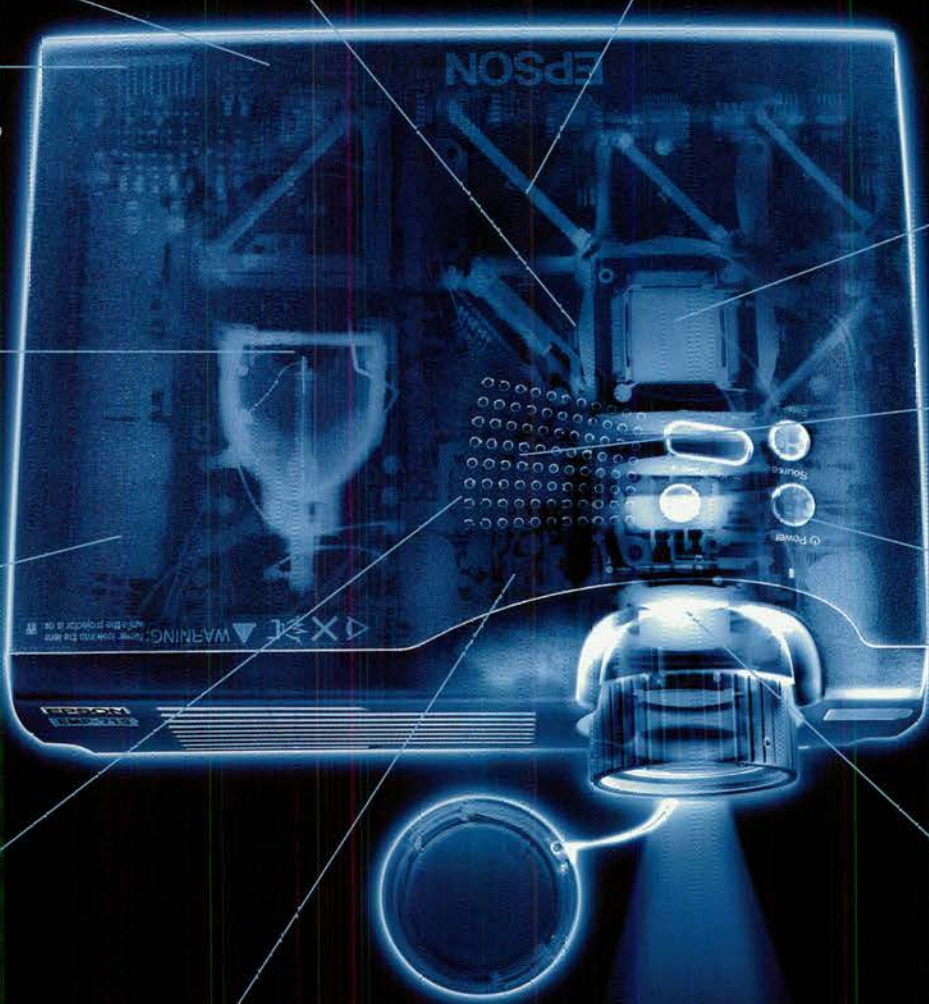
Digital Active Resizing
Digitally matches your computer's resolution with the projector - simple plug and play.

Remote Control
Full function remote operation including mouse control.

True Multi-Media Usage
Compatible with all video and data sources including DVD.

Integrator Lighting System
EPSON's ILS for consistent and uniform bright images.

EPSON's Micro Lens Array System
EPSON's MLA maximises light energy - minimises heat energy.



It's easy to see why EPSON's range of multi-media projectors produce brighter, crisper images than their competitors and are also amongst the smallest and lightest in their category. From the slim ultra-portables to the ultra-bright installation class there's a model to suit your individual needs. When it comes to choosing the right multi-media projector, EPSON is the clear winner. Call 1800 652 726 for details or a demonstration and quote reference number 21002.



EPSON[®]
www.epson.com.au

Technology Update

ARX expands ZA Multi Channel Amp Range

ARX have added two new products to the popular ZA range of Multi Channel Power Amplifiers. The new ZAT Constant Voltage Transformer units provide a quick and simple way to add 70 or 100V Line Transformer capabilities to the ZA 600 and ZA 800 multi channel amplifiers.

The ZAT 6 – an 6 transformer unit and ZAT 8 – an 8 transformer unit both feature Neutrik peakon Inputs and Outputs, 4x BiFilar Toroidal Transformers and are housed in 1RU Peavy Duty Steel Chassis.

Initial sales of ZAT 6 and ZAT 8 units included Multi Channel Audio Installations at the Singapore Zoo for their new Ethiopian Exhibit and the Sydney Taronga Zoo for their new Gorilla exhibition.

ShowCAD Artist – By ShowCAD

The original software control system has been updated - ShowCAD Artist operates via a standard PC (Windows), and can control all 'operating system resident' devices such as DVD, CD etc. The system is designed to operate continuously without user intervention, and can use SMPTE and MIDI control interfaces. A large fixture library, unlimited DMX output channels, unlimited scenes and cues running concurrently and instant access focus, colour, gobo, and beam palettes are all included. ShowCAD will be on display at ENTECH.

- Coemar DeSisti Australia
+61 3 9467 8666
ENTECH Stand 016



PRESENTATIONS FROM A PDA? MARGI DOES!

Amber Technology, the Australian importer and distributor for MARGI Systems USA, has released the Margi Presenter-to-Go: a complete presentation solution providing a simple, fast and flexible tool for the delivery of high-quality colour presentations.

The new Compact Flash module allow presentations created in any printable Windows application to be transferred directly to Pocket PCs and Pocket Manager devices - almost any PDA with a Compact Flash type II slot running Windows CE to display images on a Projector or computer display in XGA resolution.

"Mobile business professionals are looking to smart handheld devices such as the Casio CASSIOPEIA to conduct business more effectively while on the road," said Gary Schultz, Director of Marketing for Casio's Mobile Information Products Division USA. "MARGI Systems' new Compact Flash module for Presenter-to-Go, enables Casio to provide its customers with a total solution, increasing functionality by allowing our customers to deliver professional quality presentations directly from their selected Casio PDA devices."

Presenter-to-Go allows speakers to create presentations from multiple applications such as PowerPoint, HTML and Word or display the device's screen display to a monitor or projector via the MARGI Mirror application.

With the increasing demand put on educators, government officials, sales professionals and corporate executives to deliver a greater number of presentations with less time and budget, Presenter-to-Go offers a simple, cost-effective solution which maximizes the potential of Pocket PCs and Pocket Manager products.

Presenter-to-Go is the only

complete hardware and software application of its kind. This flexible offering allows today's mobile workforce to transfer presentations created in Windows printable applications to their handheld devices, as well as the ability to preview slides and present at XGA, 1024 x 768 resolution.

MARGI's gizmo also allows users to selectively hide/show slides, drag and drop slides, view slide text and view presentation notes and continuously loop slide shows, providing a remote control for ease of presentation.

It comes in three versions, Springboard, PCMCIA, and Compact Flash and includes software for slide creation from any printable Windows application, MARGI Mirror software for displaying handheld content, VGA Adapter and Cable, Infrared remote control. Contact Amber Technology for you're nearest stockist of the Presenter-to-Go. The MARGI Presenter-to-Go has a RRP of A\$699 including PSU, Software and hardware.

- Amber Technology +61 2 9452 8600
ENTECH Stand L33



SHURE BETA 98H/C CLIP-ON INSTRUMENT MICROPHONE

Shure announce the availability of the Beta 98H/C clip-on instrument microphone.

Designed as a premium miniature condenser microphone that can be securely mounted to almost any instrument as a self-contained system, the Beta 98 H/C (left) uses a clip-on clamp that still allows for the quick change between instruments. With a high SPL capacity and gain-before-feedback, the miniature cardioid condenser unit is low-profile in design, thereby minimising its stage presence.

The Beta 98H/C also offers a flexible

gooseneck, a locking windscreen for outdoor use and an integrated shock mount that reduces the transmission of instrument "key noise" and other mechanical noise.

For the first time, Shure is now offering "The Instrumentalist" as part of its T and UT Series. Featuring the Beta 98H/C in an affordable package. The microphone is also available both separately and as part of the Shure LX, UC, and UHF series systems.

Shure is distributed by Jands Electronics.

- Jands +61 2 9582 0909
ENTECH Stand T30

DX8

DIGITAL AUDIO MIXER & SIGNAL PROCESSOR

THE AFFORDABLE DIGITAL PROCESSOR FOR INSTALLED SOUND APPLICATIONS



The DX8 Digital Audio Mixer and Signal Processor can replace an entire rack of equipment with a single digital processing system...its powerful software interface is designed to emulate familiar analog controls, so adjustment is easy and intuitive.

In its base configuration, the DX8 includes 8-by-2 stereo or dual mono mixing from mic and/or line inputs, 2-band shelving equalisation on each input, and 2-band sweepable EQ on each output. A variety of optional software plug-ins allow enhanced signal processing including 1/3 octave graphic EQ, five-band parametric EQ, and compressors.

All level settings are stored in on-board, nonvolatile memory and may be changed either by direct PC connection or from the front panel. All settings can be saved and recalled from 16 memory presets. The front panel can be locked out to prevent access by unauthorised persons.

DX-10E EXPANDER FOR THE DX8

...provides expanded Signal Processing: 10 third-octave graphic EQs, 10 five-band parametric EQs, 10 audio delay lines, 18 compressors, 8 gates, 10 crossover filters, 3-band swept EQ on each input. **Mixing:** true crosspoint mixing, 8x10 matrix mixing, 32 control groups to link any pair of elements, 32 presets, 32 mute groups, 10 logic inputs and outputs to trigger functions such as ducking, in priority schemes.



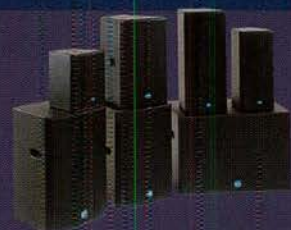
High-grade XDR mic preamps, 24-bit analog/digital converters and 32-bit internal processing ensure studio-quality performance...

Two additional line inputs are provided, which feed the mix buses directly. Direct outputs are provided for inputs 1-8, for interface to external amplifiers, recorders or mixing systems. In addition, 10 Logic outputs are provided. These control points are fully programmable and can interface directly to external devices such as switches and indicator LEDs.

The DX8 offers two RS232 ports for local programming and interface to standard control systems, as well as a proprietary three wire control bus for use with optional remote controls.

THE COMPLETE SOLUTION FOR FIXED AUDIO INSTALLATIONS

Mackie Industrial offers a wide range of professional products for installed sound systems. We've been building state-of-the-art electronics for over a decade. Our RCF production facility in Italy has been building world-class transducers and speaker systems for over 50 years.



VISION SERIES

2-Way Full-Range Loudspeakers

Accurate, full range sound featuring RCF transducers, built-in LICC crossovers, dynamic HF driver protection, Baltic birch plywood construction, and a multitude of mounting options.



ART SERIES

2-Way Active & Passive Loudspeakers

Considered by many to be the best sounding small monitors available. They feature both 12 and 15-inch transducers, active and passive models, plus rugged, resonance-free molded enclosures.



MONITOR SERIES

Compact, Unobtrusive Loudspeakers

Features 5 models, black and white, built-in multi-tap constant voltage transformer (1W, 2.5W, 5W, CWL 20W), and LICC crossover with high frequency dynamic protection.



4000 SERIES

Reliable Integrated Amplifiers

Integrated Mixer/Amplifiers with user-friendly controls and high-current power amplifiers ranging from 60 to 160 watts. Plug multiple microphones, CD or tape player and TV/VCR/DVD audio feeds into the AM range. If you need robust amplification with just volume and EQ controls, the 'UP' range are the no-frills solution.



SOUND PALETTE

Sophisticated Control For The Non-Technical

Creates easy-to-use, multi-zone sound systems with voice prioritising. Features SP2400 2-channel controller amplifier and several compact speaker models.

For more detailed information...

Call (03) 8415 1466

Email industrial@ausaudio.com.au

Visit www.mackieindustrial.com

MACKIE INDUSTRIAL

Australian Audio
S U P P L I E S

Technology Update



Ten goes into two with SONY multimedia matrix switcher

The new Sony PVS-R102 multimedia matrix switcher dramatically simplifies the hassles of routing signals from PCs, DVD players, VTRs in today's multimedia, multiformat presentation systems.

The switcher features 10 inputs and two outputs, and can handle composite and component analogue video, RGB (up to SXGA resolution) plus stereo as well as 5.1 channel surround sound audio.

Six video inputs (4 composite, 2 selectable component/composite) are augmented by a further 4 RGB inputs, and all video inputs are switchable into 2 RGB/component outputs (plus 2 composite).

Reflecting the growing popularity of surround sound material from formats such as DVD, two of the ten audio inputs can accept 5.1 signals, and a 5.1 surround audio output is provided in addition to a stereo out.

For integration with modern A/V presentation system, the PVS-R102 includes parallel as well as serial (RS-232) ports to allow external operation via several popular presentation controllers. The PVS-R102 can also generate an RS-232 control signal for "one touch" switchover between On/Standby modes and input source selection on a range of Sony presentation products including VPL-FX50/PX21/PX31 projectors and the PFM-42B1 flat panel monitor.

Its high quality processing extends effective bandwidth as high as 150MHz, making the PVS-R102 for switching devices with up to SXGA resolution.

- A\$6,050
- Sony, stand T25

Australian Debut for grandMA at Entech 2002

MA Lighting consoles have, for a long time, been available on the European market. While largely unknown in this part of the world, MA have produced lighting control desks in the past that were innovative in their time.

Show Technology recently took up the distribution of this brand in Australia, and have chosen ENTECH to launch the grandMA product range locally. The products in the range are the grandMA, the grandMA light, the grandMA ultra-light, the grandMA replay unit and the grandMA 3D.

grandMA - The grandMA console is the largest console physically, with three colour touch screens and up to two external monitors to make a comfortable programming environment. The desk has twenty motorised faders, build in keyboard, mouse, mouse pad and trackball along with 4 parameter encoders.

grandMA light - With all of the same software, features and channels, the grandMA light is a reduced console only in physical size. Anything that can be programmed on a full grandMA can be played back on a grandMA light while at the same time offering full programming facilities itself. The desk is intended for environments where physical space is at a premium, as well as being an ideal backup to the larger grandMA.

grandMA ultra-light - This small yet highly powerful 1,024 channel console features the same award winning software as the grandMA and grandMA light consoles. A further reduced footprint, a full colour TFT touch screen display along with built-in trackball / mouse and support for an external monitor is included.

grandMA replay unit - This 3U high 19" rack mounting unit is an entire grandMA console in an enclosure. The unit is designed for unattended playback or remote triggering, and features all the inputs and all the outputs of a full grandMA console. This tiny unit has 10 physical playbacks (5 with faders) on the front of the unit so basic manual playback is also possible, unusual for units of this type. As with all grandMA products this unit can be connected to full console via Ethernet as a tracking backup.

grandMA 3D - grandMA 3D is a visualisation software created for the design of three-dimensional stage layouts. A software wizard takes the user through the guided design and set up of any custom stage or scenery layout, using with 2D drawing facilities and a library of basic graphical elements. Multiple windows can be opened and updated at the same time, and all the stage elements can be positioned in X, Y, Z directions and may also be rotated in any axis. The set-up of lanterns, luminaires or moving lights can be simply retrieved from the grandMA console's show file by electronic transfer. There is no need to set DMX lines, DMX addresses or operation modes as these are already pre-adjusted in the grandMA console. The software will be compatible with the whole family of MA Lighting consoles.

The full range of grandMA products will be launched and on display on the Show Technology stand at ENTECH2002.

- Show Technology
+61 2 9748 1122
ENTECH Stand S10



ENTECH

JBL Would Like to Acquaint You With the Newest Development in High Fidelity Business Music Systems.

High Fidelity.



Available in Grey or White

Today, more than ever, businesses need to provide their customers with a memorable shopping or dining experience. Music fidelity plays an increasingly vital role in providing that experience! JBL offers business music systems that are affordable, easy to operate and designed to bring high levels of fidelity to business locations.

SMS1

The elegant *SMS1* self-contained system includes 4 tiny satellite speakers with self-powered subwoofer. A built-in JBL Soundzone controller provides sophisticated fidelity features such as JBL's patented *AutoWarmth*.

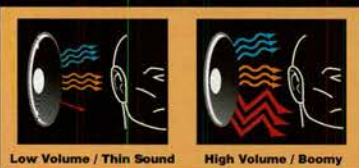
SMS1 is extremely easy to operate, providing full fidelity for medium volume locations.

JBL SOUNDZONE SYSTEMS

Need higher volume or sophisticated priority or zoning features? JBL Pro has these systems too! Full-featured *Soundzone Controllers* with a wide selection of *Control Contractor* loudspeakers and new *Soundzone Accessories*, provide high fidelity for just about any business application.

Don't confuse sheer "output volume" with "fidelity"—only true High Fidelity from JBL *SMS1* and *Soundzone Systems* provides that fabulous experience businesses are searching for!

Typical Sound System



JBL AutoWarmth™ In SMS1 and Soundzone Systems



TREBLE
MIDRANGE
BASS

AutoWarmth - a revolutionary way of automatically adapting to the non-linear way the human auditory system hears low frequencies. *AutoWarmth* ensures full sound fidelity regardless of volume, musical style or dynamics of each musical passage.

**JBL SOUNDZONE MUSIC SYSTEMS.
ULTIMATE PERFORMANCE FOR HIGH
FIDELITY BUSINESS MUSIC SYSTEMS.**



A Harman International Company

NEXO GEO

Nexo's **Mick Anderson** will be in attendance at ENTECH to discuss the new groundbreaking 'GEO' technology. This new technology tackles the problems of combining multiple sound sources without degrading coherency.

Using a Hyperboloid Reflective Wavesource (HRW) to control spherical expansion of acoustic pressure allows the virtual source to be located outside the cabinet, which means that the new GEO series cabinets can be used as horizontal or curved vertical arrays without interference or loss of coherency. The HRW is more accurate than conventional waveguides and is coupled with a Directivity Phase Device (DPD) on the woofer to enable multiple woofers to combine efficiently at higher frequencies, than would be possible using direct radiating cones, enabling a true 'line array' effect using extremely compact enclosures.

A Configurable Directivity Device (CDD) alters the dispersion of the GEO diffraction slot allowing for user configurable dispersion in the non-coupling plane. The system is complete when used with the new Nexo supercardioid sub, the GEO rigging system and NX241 digital controller.

Until now, 'line array' has usually meant a number of generally large cabinets which worked well in specific applications, but the GEO technology making use of acoustic mirrors has allowed for flexibility not seen before in systems of this type. The S830 and S805 are compact, high output full range enclosures and only weigh 11kg each and can both be utilised in a horizontal or curved vertical array.

• **NEXO distributed by Group Technology, Stand P35**



Domain is a-live for summer

Summer in Sydney is not compete without the various concerts held in the Domain through December and January. Chameleon. Touring Systems supply the lighting for all of these events including Homebake, Carols in the Domain, Field Day on New Years Day, Jazz in the Domain, Symphony in the Domain and Opera in the Park.

Francesco Calvi designed the original lighting rig for the *Rams Home Loans Carols* in the Domain concert that was telecast live on Channel 7. The other concerts were adapted from his design. Homebake used the same overhead design with various acts adding the odd piece of equipment. Gavan Swift redesigned the rig for Jazz and Symphony in the Domain using the equipment already in

place.

Francesco designed a practical rig of 20 x Martin MAC500, 23 x MAC600, 8 MAC250, 4 MAC2000 and 20 Studio Due CityColor for a colourful audience wash.

"The Martin MACs are always reliable and basically just do what they are supposed too!" said Francesco. "I see them for colour and movement without the rock'n'roll flash, bang and whizz. They are there to change looks not provide flashy effects.

"The MAC2000 fixtures were a late addition and so, unfortunately, they were not used to their full potential. However I liked their performance and hence I'll be using sixteen of them on the Tamworth Country Music Awards show."

NEW SOUND SYSTEM FOR HOBART CRICKET OVAL

The Bellerive Cricket Oval in Hobart has just had a \$20 million federally-funded upgrade. What was once simply an open oval, with a hired sound system, is now a functional stadium with two grand stands and a sound system.

Installed by **Clive Robertson** of KW McCulloch in Hobart, the system comprises 31 x JBL Marquis MS105 speakers and a combination of Crown CE and CH series amplifiers. A Crown USME10 digital processing unit provides all routing, equalisation, time alignment delay and limiting for the speaker system. The USME10 also allows the system to be reconfigured at the press of a button for different uses, such as speech and

video replay.

The system was designed by KW McCulloch Pty Ltd with assistance from **Jeff Shoosmith** and **Jeff Mackenzie** of Jands Electronics Pty Ltd.

"We're very pleased. We had an ING Cup match and a Pura Cup match, and they worked fantastically. Everyone is very happy with the system," said **Alan Fraser**, Manager for the Tasmanian Cricket Association.

JBL and Crown are distributed by Jands Electronics.

INSTALLATION

ENTECH 2002

THE ULTIMATE
AUDIO & VISUAL INDUSTRY REUNION

TRADE SHOW Mon Feb 4 - Tues Feb 5 - Wed Feb 6

Free trade entry. 10am - 6pm daily. Darling Harbour - Sydney

Travel deals call Stage & Screen Travel, +61 2 9383-4543

ENTECH Enquiries: +61 2 9876 3530

Proudly sponsored by:





SEE YOU AT ENTECH 2002

SHURE

VARI***LITE**



RANE

JANDS

STANTON



CROWN

STAGE
TECHNOLOGIES

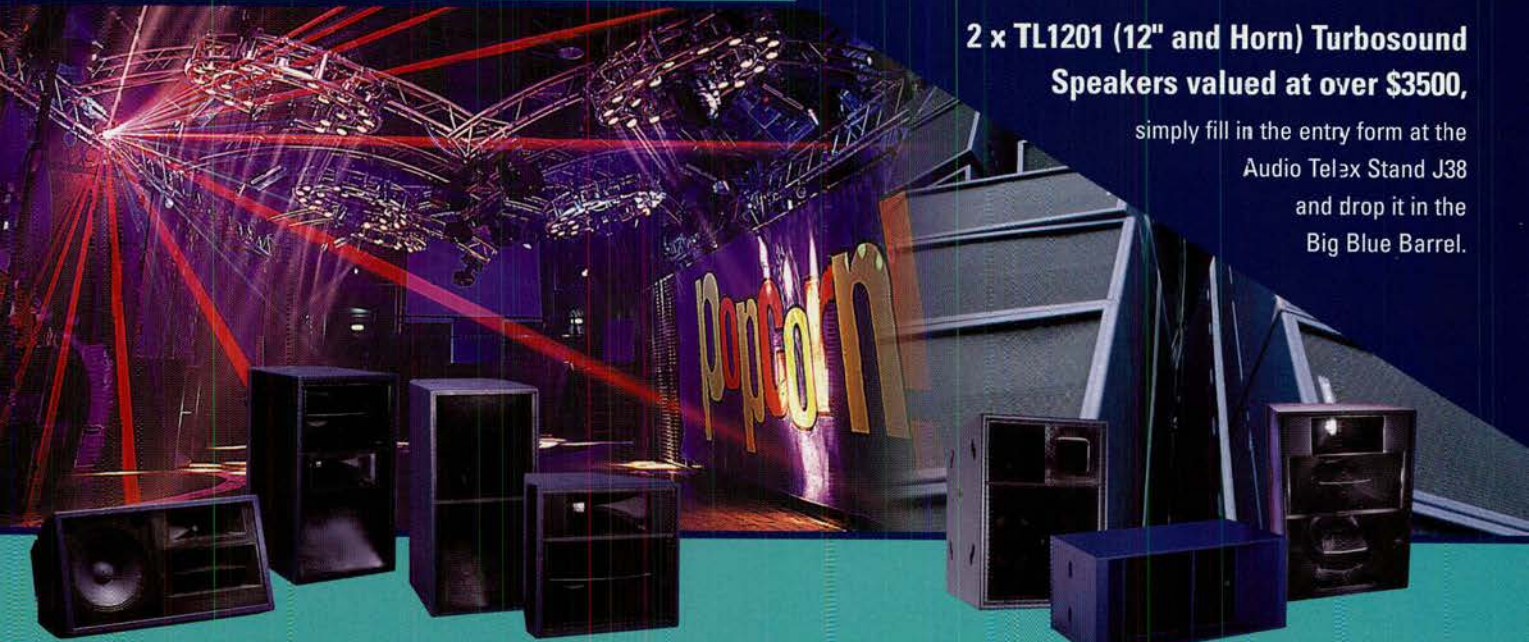
dbx
PROFESSIONAL PRODUCTS

SERAPID
DIGITAL ENGINEERING

FOR YOUR CHANCE TO WIN

**2 x TL1201 (12" and Horn) Turbosound
Speakers valued at over \$3500,**

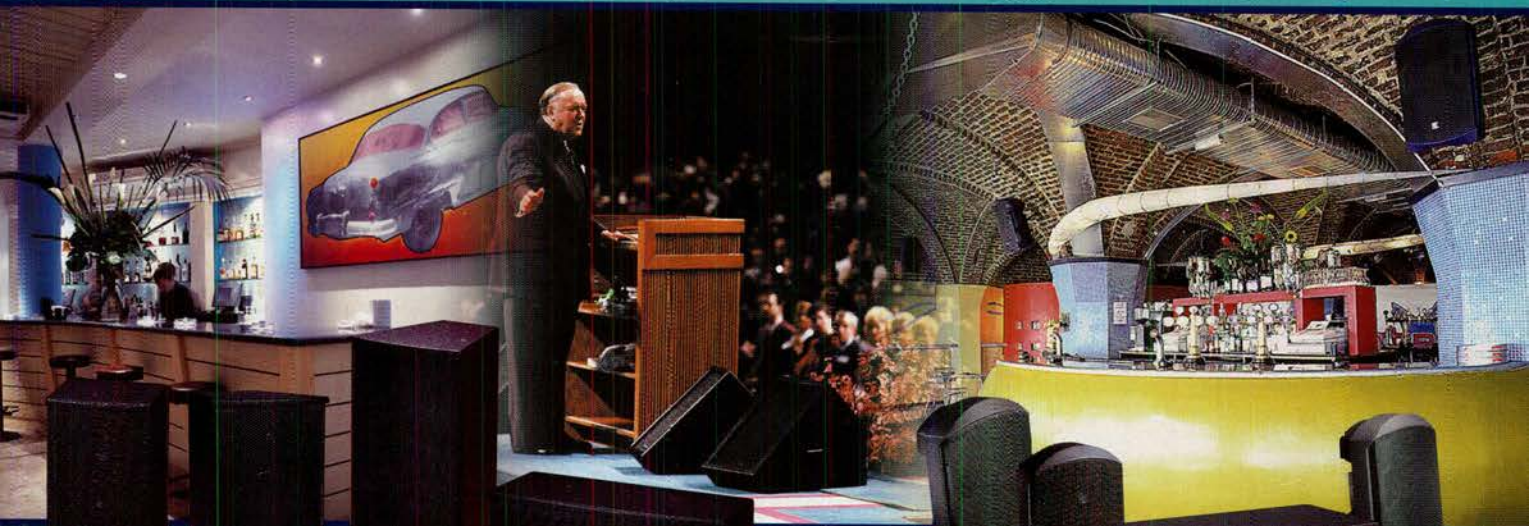
simply fill in the entry form at the
Audio Telex Stand J38
and drop it in the
Big Blue Barrel.



HiLight Series

Flashlight & Floodlight Series

**Every Application.
Every Solution.**



TCS Series

Impact Series

QLight Series

Turbosound®

AUDIO TELEX
COMMUNICATIONS

www.audiotellex.com.au

NSW Tel: (02) 9647 1411 Fax: (02) 9648 3698 VIC Tel: (03) 9890 7477 Fax: (03) 9890 7977 QLD Tel: (07) 3852 1312 Fax: (07) 3252 1237

WA Tel: (08) 9228 4222 Fax: (08) 9228 4233 SA Tel: (08) 8352 4444 Fax: (03) 8352 4488 NZ Tel: (09) 415 9426 Fax: (09) 415 9864

For further information on the Turbosound range, email marketing@audiotellex.com.au or call your nearest Audio Telex office

WHAT IS ENTECH?

- Pro audio
- Pro lighting
- Vision
- Staging

At ENTECH you'll see equipment and services for these markets:

- Live
- Theatre
- Club
- Studio
- Architectural
- Commercial
- Show business
- Film
- TV
- Events
- Touring
- Corporate

.... and anywhere equipment is used!

WHAT ISN'T AT ENTECH.....

We don't really cover the musical instrument market, or the pro image capture and editing market. But we do have large format projection equipment. ENTECH occupies 10,000^m² - or over 100,000 square feet of exhibition space! It's world class!

This is the sixth ENTECH, and our second biennial show. In 1997 we announced we would move this large trade show to an alternate year schedule. That announcement, after several consecutive yearly shows, cemented the future of ENTECH.

Proof of this is another full show in a troubling time for the trade show industry. After the outrage of September 11, the trade show industry became mired in cancellations.

The proprietorship of ENTECH has fallen into solo hands as Julius Grafton takes over the reigns from his former partner and co-founder of ENTECH. It's hoped that the transition will be invisible to you.

A (MAINLY) HEALTHY INDUSTRY!

The professional audio and visual industry remains in reasonably good health at a time of international uncertainty.

Looking at this year's exhibitor list by space sold, professional audio is up, but vision and lighting are slightly down on the last show. The DJ - Club sector is considerably down, reflecting some unreal assessments of the size of this market at the time of previous shows.

Part of the problem in a niche, boutique industry which is tiny in global terms, is that you / we have trouble measuring the gross size of the industry, in terms of commissioning new equipment.

For example, the market for projectors is estimated at 16,000 or 24,000 units yearly in Australia. Depending on who you ask.

But the typical ENTECH guest doesn't have that problem - because the industry is all on show at ENTECH!

It's truly the trading floor - the one place to find virtually everyone offering goods and services. ENTECH allows the chance to put a face to the names, to touch and see new equipment, and meet experts from all

corners of the world.

ENTECH IS A WORLD CLASS SHOW, BECAUSE:-

- Largest of kind in southern hemisphere
- First to outlaw loud, pointless noises
- First to ban hidden costs and fees
- More seating - visitors need to sit!
- We recognise visitors are important!
- We hate long queues too!
- No secret commissions
- First to go biennial, forsaking annual
- We say no to offensive exhibits
- We actually LIKE our trade visitors!
- Free entry after registration
- Seminars are offered at virtual cost

WHAT'S NEW FOR 2002?

Our theme is reunion, as we not only showcase the best of new equipment, but also the oldest in our museum. This is an interactive display that tracks the past thirty years, and includes some neat content courtesy of Colin Baldwin, and Jands in particular. Our thanks go to everyone who has sent us pictures, gear and info for this display.

The show should look better than ever, since more exhibitors are building their own stands instead of using simpler shell scheme.

Seminars and conferences have been totally reborn for 2002, with all new presenters and topics.

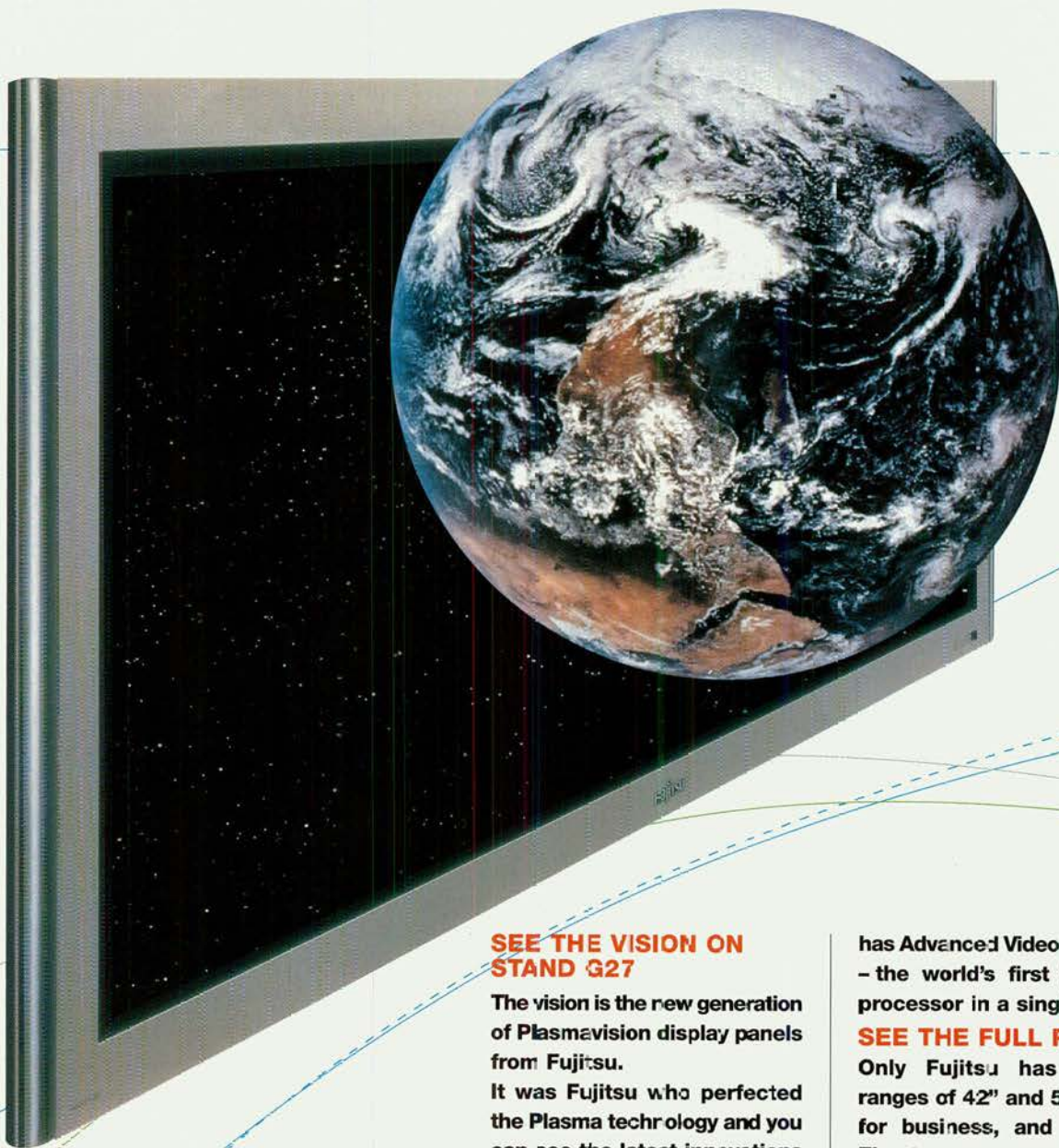
The show will be vibrant!

BEYOND ENTECH

Average trade shows are a dead concept. Very good trade shows will survive, but only if the cost to the exhibitor reduces, while the visiting experience continues to improve for the valued trade visitor. We recognise these factors, and are seriously reviewing a better, newer, less expensive exhibition concept for ENTECH in 2004.

- Julius Grafton, director

The Vision



SEE THE VISION ON STAND G27

The vision is the new generation of Plasmavision display panels from Fujitsu.

It was Fujitsu who perfected the Plasma technology and you can see the latest innovations today at EnTech.

SEE THE DIFFERENCE AVM™ MAKES

Only Plasmavision from Fujitsu

has Advanced Video Movement – the world's first full digital processor in a single chip.

SEE THE FULL RANGE

Only Fujitsu has separate ranges of 42" and 50" PDP's – for business, and for Home Theatre.

Plus you'll see the Fujitsu range of LCD Projectors.

SEE YOU THERE!

Stand G27. EnTech 2002.

FUJITSU

Plasmavision® **W** The Vision

FUJITSU GENERAL (AUSTRALIA) PTY LIMITED

NSW (02) 8322 2500 • VIC/TAS (03) 9543 5899 • QLD (07) 3257 2800 SA/T (08) 8364 0588 • WA (08) 9240 5877
Email: contact@fujitsu-general.com.au • www.fujitsu-general.com.au

Opening Night – party on!

DAY ONE: Monday February 4.

Wind down after the trade show at our official opening night party, sponsored by U.L.A.

It starts as the show closes on Monday, from 6pm.

Held at the newly rebuilt Pumphouse, near the trade show, you'll have the *unique chance* to mingle with the same people you saw

in the trade show hall. Hot damn!

Seriously, it's a terrific social event, loaded with extra attractions that we dare not publish here!

To attend you need to grab an invite from ULA or any participating exhibitor.

ENTECH is more than a trade show - it is a reunion, a networking opportunity, and very educational.

Be there!

ENTECH 2002 Seminar Program

There is a wide variety of seminars being presented at this year's ENTECH. Specialists from all over Australia and the world are scheduled to take part in these unique events. Take a moment to browse through the full descriptions here in the Show Guide, and be sure to book as you register.

Audio Seminars – Page 38

Introducing the Line Array	Monday	10:30am
Digital Live Sound Mixing	Monday	1pm
Stacks and Racks	Monday	3:30pm
Location Sound Recording	Tuesday	10:30am
We Are Surrounded	Tuesday	1pm
The Changing Face of Post Production	Tuesday	3:30pm
Audio Integrators Day	Wednesday	10:30am
DJ/MC Bootcamp	Wednesday	11am

Lighting Seminars – Page 40

Lighting Designer Forum	Monday	2pm
The Art of Designing with Moving Lights	Tuesday	11am
More with Less	Tuesday	2pm
Colour and Projection	Wednesday	11am
Working with LX People	Wednesday	2pm

Venue and Rigging Seminars – Page 41

Venue Design Forum	Monday	11am
Rigging Workshop 1	Monday	2pm
Rigging Workshop 2	Tuesday	2pm
Motor Training School	Monday/Tuesday	10:30am

Audiovisual Seminars – Page 42

The Future of Systems Integration and ProAV Technology	Monday	10:30am
Trends in Facilities	Tuesday	10:30am
Video Conferencing Technology	Wednesday	10:30am

AWARDS DINNER 2002

DAY 2: Tuesday February 5

Join us at The Metro in George St, Sydney for the 2002 ENTECH Awards Dinner. This is an industry event not to be missed, where we recognise the very best in technology and technical excellence.

Our caterer has designed a great 3 course meal, and we have music by Craig Calhoun, Doc Neeson, Mark Williams, Brendan St. Ledger,

Ross Middleton, Rex Goh, Con Settineri and Anastasia - but not the one in the leather pants!

The night ends in the bar, with the band playing until you've had enough. The bar stays open until then.

It's always a HUGE night!

- You need to book ahead, the dinner costs A\$86 inc gst per head. This includes -

- * Welcome drink and mingles at 7.30pm.

- * Great 3 course meal, alternate plated.

- * Access to nice Australian wines and premium beers, at reasonable cost.

- * The AWARDS! presentation - which is never dull. This year's awards are streamlined by our producer, Meri Took. Less awards = more socialising!

- * HOW TO BOOK: online at www.conpub.com.au, or on the phone before the show at 1-800-635-514. Ask at REGISTRATION for tickets, as there are usually limited tickets left just prior.

- * Table sizes: Tables of eight can be booked together if available.

ENTECH visitors enjoy special hotel and air fares courtesy of QANTAS and Stage & Screen Travel. Call them direct: 1-800-670-354



Getting to Darling Harbour:

The most popular trade show venue in the world - and certainly the most popular venue we have staged ENTECH! Located within walking distance of the Sydney CBD, the precinct features over one dozen hotels and numerous entertainment venues.

Since we last staged ENTECH, Star City Casino and Cockle Bay have both opened. Darling Harbour is a vibrant and exciting place to be - and ENTECH is right there.

- From the airport: catch the train to Town Hall station, then walk one kilometre WEST. It's all down hill! A taxi ride from the airport should cost A\$30, and take 25 minutes.
- Or, go to Central Railway Station, and go up to the concourse level and catch a TRAM to Darling Harbour.
- From town, catch the MONORAIL to Darling Harbour.

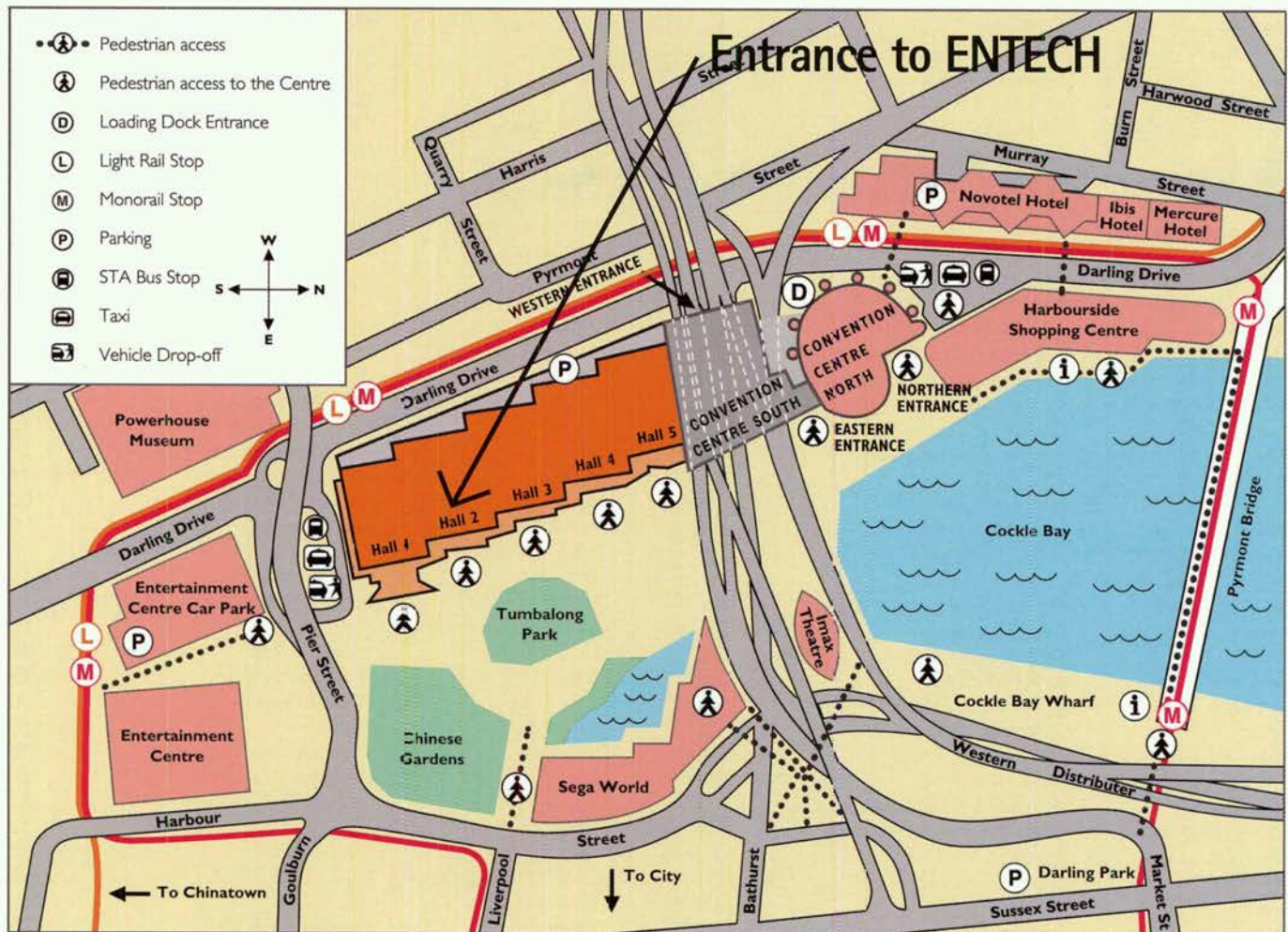
- There are FERRY routes that include Darling Harbour, but most terminate at Circular Quay, across town.
- At unknown cost, you can catch a water taxi from virtually any wharf on the harbour to Darling Harbour. That is a fun experience!
- At Darling Harbour, walk over the Cockle Bay - on the city side, near the old bridge - for quaffing and troughing by the water. Bliss!

INSIDE:

KEEP THIS GUIDE! Overleaf is the start of our BRANDS ON STANDS listing. Used with the EXHIBITOR LISTINGS which follow, you have a who's who, right here. The tradeshow floor map is in the middle.

ENTECH is a production of Connections Publishing Pty Ltd
Australian Company number 058 443 182
ABN 66 058 443 182
6D Villiers Street,
North Parramatta 2151 NSW
Australia
Web: www.conpub.com.au
Email: mail@conpub.com.au
Phone: +61 2 9890-2111
Fax: +61 2 9890-2766

Many thanks to -
Louise Brooks (Marketing, Organisation)
Stig Moore (Floor manager)
John Grimshaw (Seminars)
Jenny Royal (Finance)
Brett Peglar (Composite Displays)
Infosalons (Registration)
Morgans Expo Hire (Furniture)
Pollards Rigging
Lionheart Offset
Superfine Printing
Epping Bottle Shop



The BRAND is what the EXHIBITOR has told us they will be showing. EXHIBITOR LISTINGS start page 14, and are in alpha order. The floor plan is in the centre, so you can locate the exhibit. KEEP THIS GUIDE!

Brand	Exhibitor	Stand No	Brand	Exhibitor	Stand No
Abstract	Universal Lighting and Audio	S19	Capital Karaoke	Capital Karaoke Imports	C9
Accent/Hacoust	Audio Telex Communications	J38	Catweazle	Entertainment Product Services	L11
Acme Effects Abstract	Universal Lighting and Audio	S19	C-Audio	Corporate Audio Services	T38
ADJ	Show Technology	S10	CDG & VCD Karaoke Players	Capital Karaoke Imports	C9
Aeromic Microphones	Aerobic Microphones Aust	L42	Cerwin Vega	Audio Products Aust	J25
Aeromix Audio Mixers	Aerobic Microphones Aust	L42	Chainmaster	Liftket	H4
Aflex Cable	Amphenol Aust	B36	Chameleon	ATT Audio Controls	A35
AKG	Audio Products Aust	J25	Chiayo Electronics	National Audio Systems P/L	C28
Alcorn McBride	EAV Technology	J42	Chief Manufacturing	AV Stumpf Asia Pacific/ITI-Image Group	i9
Alesis	Corporate Audio Services	T38	Cinde	Technical Audio Group	O30
Allen & Heath	Technical Audio Group	O30	Citronic	Universal Lighting and Audio	S19
Altinex	Axis Audio Visual	C25	Clay Paky	Show Technology	S10
Altman Stage Lighting	Chameleon Touring Systems	O4	Climb Cable	Network Entertainment Technology	O11
AMEK	ATT Audio Controls	A35	Clock Audio	Audio Sales & Marketing	A31
American DJ	LSW	H16	Cloud	Syntec International	O38
Amphenol	Amphenol Aust	B36	CM	Lodestar Hoists / PWB Anchor	F4
Amphenol-Tuchel	Amphenol Aust	B36	Coemar	Coemar DeSisti Aust	O16
AMX Control Systems	AV Technology	L16	Colortran	Mediavision Aust	F8
Analog Way	Axis Audio Visual	C25	Columbus McKinnon	Lodestar Hoists / PWB Anchor	F4
Anytronics	Network Entertainment Technology	O11	Computite	Coemar DeSisti Aust	O16
APC Hardware	Network Entertainment Technology	O11	Comrex	Production Audio Services	Q38
Apogee Sound	CMI Professional Products	W38	Contemporary Research	Axis Audio Visual	C25
Ardvars Audio Cards	Innovative Music Aust	C27	Countryman	Production Audio Services	Q38
Artlantis	Vectorworks	C17	Crest Audio	Production Audio Services	Q38
ARX	ARX Systems	A33	Crest Consoles	Production Audio Services	Q38
ARX Systems	The Resource Corporation	A33	Crestron	Crestron	H21
Ashly	Corporate Audio Services	T38	Crown	Jands	T30 & M42
ASPI Digital	Audio Sales & Marketing	A31	DAS	Magna Systems & Engineering	G32
ATC	Technical Audio Group	O30	db Technologies	CMI Professional Products	W38
Atlas Sound	Audio Sales & Marketing	A31	dbx	Jands	T30 & M42
audia	Audio Products Aust	J25	Denon	Audio Products Aust	J25
Audient	Corporate Audio Services	T38	DeSisti	Coemar DeSisti Aust	O16
Audio Control Industrial	ATT Audio Controls	A35	DHA (Devices and Gobos)	Rosco	R1
Audio Technica Microphones	Yamaha	L30	DHA (Devices)	Clearlight Shows	L8
Audio Telex	Audio Telex Communications	J38	Digidesign	Digidesign	O35
Audix Corporation	Production Audio Services	Q38	Digital Audio Labs	Innovative Music Aust	C27
Austn Crewing	The Austn Crewing Company	E11	Digitech	CMI Professional Products	W38
Austn Monitor	Audio Telex Communications	J38	DJ/MC Training Courses	DJCHQ	N1
Autopatch Matrix Switchers	AV Technology	L16	DOD Electronics	CMI Professional Products	W38
AV - Custom AV Manufacturing	Bill Coghill Design	E9	Doepfer - Dance Products	Innovative Music Aust	C27
Avolites	Universal Lighting and Audio	S19	Doughty	Coemar DeSisti Aust	O16
AVR	Universal Lighting and Audio	S19	Draper	ABI - A Brighter Image	L19
B55 audio	ATT Audio Controls	A35	Dynacord	EVI Audio	E35 & C35
Balcar	Mediavision Aust	F8	Dyna-Link	Altronic Distributors	D42
Beacon	Lighting By Design	O1	Dynaudio Acoustics	Amber Technology	L33
Beacon Colour Gobos	Lighting By Design	O1	E/T/C Audiovisual - PIGI	The Electric Canvas	C7
Behringer	DJ Link	J30	Earthworks	Austn Audio Supplies	B31 & B35
Bellari Tube Products	Network Entertainment Technology	O11	Easy Digital	Coemar DeSisti Aust	O16
BGW	Group Technologies	P35	EAW Eastern Acoustic Works	Production Audio Services	Q38
Biamp	EAV Technology	J42	Ebony	Audio Assemblers	H42
biamp	Audio Products Aust	J25	Ebtech	Austn Audio Supplies	B31 & B35
Blackmax	Altronic Distributors	D42	ELC	Clearlight Shows	L8
Bosbox	Sunlec International - Bosbox	Q1	Electro-Voice	EVI Audio	E35 & C35
Bose	Bose	G25	Elektra Lite	Show Technology	S10
Brian Moore Guitars	Syntec International	O38	Elmo	CR Kennedy & Co	E17
Buhl Optical	AV Stumpf Asia Pacific/ITI-Image Group	i9	Eminence Loudspeakers	CMI Professional Products	W38
Bullfrog Loudspeakers	Network Entertainment Technology	O11	Enttec	Enttec	S8
Bytecraft Automation	Bytecraft Entertainment	Q25	Epson	Epson	L21
CAD	Austn Audio Supplies	B31 & B35	Epson EMP Projector Range	Epson	L21
Camco	Group Technologies	P35	ESP Technology	LSW	H16
Canare	Amber Technology	L33	EIA Systems	Production Audio Services	Q38

SxA100/SxA180 POWERED LOUDSPEAKER/POWERED SUBWOOFER

Focus on Performance

No other powered loudspeakers deliver the range and clarity of Electro-Voice®.

If you need clear, full, powerful sound reinforcement — without a truckload of amps and speakers, direct your ears to the Electro-Voice® SxA100 and SxA180. These powered units work well in a wide range of sound reinforcement applications. Used together they offer a complete system that is compact, lightweight and easy to use.

SxA100 powered full-range loudspeaker sets a new standard for powered speakers. Its design provides the user multiple inputs with mix capability, line-out, an easy to use EQ section, and plenty of power in a very attractive package.

SxA180 powered subwoofer is ideal for extended low frequencies to DJ playback, live sound and other applications requiring high quality sound. Designed to add additional impact and increased range to the EV SxA100 powered speaker, a built-in variable active crossover allows the SxA180 to work well with a wide variety of other full-range systems.

Both the SxA100 and SxA180 are built with no-compromise design and construction. Our exclusive tour-proven RMD® Ring-Mode Decoupling technology, and 70 years of Electro-Voice® experience are evident when you hear the performance difference in SxA.

When you need a big sound while travelling light, take along SxA100 and SxA180.



The SxA100 features mic and line level inputs for easy mixing, two-band EQ, and line-level out



Superb sound for so many applications:

the SxA100 and SxA180 go anywhere.

- Bands
- Small clubs
- Mobile DJs
- Acoustic acts
- Coffee Houses
- Churches
- Business presentations
- Hotel and Conference Centres
- Sound system rentals
- Stage and side fill



EVERYWHERE™

For more information contact your Electro-Voice Dealer or EVI Audio (Aust) Pty Ltd.

Head Office: Tel: 02 9648 3455 Fax: 02 9648 5585 Email: sales@eviaudio.com.au

www.eviaudio.com.au

EVI Audio (Aust) Pty Ltd is a division of Telex Communications, Inc.

ENTECH STANDS C35 and E35

Brand	Exhibitor	Stand No	Brand	Exhibitor	Stand No
ETC	Jands	T30 & M42	Leon Audio Mics & DJ Products	Aerobic Microphones Aust	L42
ETEK	Group Technologies	P35	Level Control Systems (LCS)	Production Audio Services	Q38
Euphonix	Technical Audio Group	O30	Liftket	Liftket	H4
Eurocable	The Resource Corporation	A33	Light Emotion	LSW	H16
Euromet	Audio Telex Communications	J38	Lighting by Design	Lighting By Design	O1
Euromodule	Audio Telex Communications	J38	Link	The Resource Corporation	A33
EV - Electro Voice	EVI Audio	E35 & C35	Lite Puter	LSW	H16
FAL	LSW	H16	Lodestar Entertainment Hoists	Lodestar Hoists / PWB Anchor	F4
FBT SPEAKERS	LSW	H16	LSC	LSC Lighting Systems	I8
Fender	Fender Aust	G42	Lumens	ABI - A Brighter Image	L19
Flying Pigs Systems	Universal Lighting and Audio	S19	Luxor	ABI - A Brighter Image	L19
Focus Enhancements	CR Kennedy & Co	E17	MA Lighting	Show Technology	S10
Focusrite	Corporate Audio Services	T38	MACH	Show Technology	S10
Fostex	Syntec International	O38	Mackie	Austrn Audio Supplies	B31 & B35
Fujitsu	Fujitsu	G27	Mackie Digital	Austrn Audio Supplies	B31 & B35
Furman	Audio Sales & Marketing	A31	Mackie Industrial	Austrn Audio Supplies	B31 & B35
Futurelight	Coemar DeSisti Aust	O16	Mad Manufacturing	Mediavision Aust	F8
FX Range	Coemar DeSisti Aust	O16	MAM - Mixers & Processors	Innovative Music Aust	C27
GAM	Coemar DeSisti Aust	O16	Manfrotto Avenger	Coemar DeSisti Aust	O16
Gator Cases	CMI Professional Products	W38	Manley	Syntec International	O38
Gemini	DJ Link	J30	Mann	Group Technologies	P35
Geni	Show Technology	S10	Marantz Professional	Technical Audio Group	O30
Gentner	Production Audio Services	Q38	Mark Gibson Production Assistant Software	Bill Coghill Design	E9
Global Lifting Products	Hoisting Equipment Specialists / Ozblok	E8	Marshall Electronics	Audio Sales & Marketing	A31
Gobos Glass & Steel & Colour	Lighting By Design	O1	Martin Audio	Technical Audio Group	O30
Grand	ABI - A Brighter Image	L19	Martin Professional	Show Technology	S10
Griven Full Range	Universal Lighting and Audio	S19	Mastercut Aust Gobos	Clearlight Shows	L8
H & K Audio	CMI Professional Products	W38	MC2	Corporate Audio Services	T38
Hafler Amplification	Network Entertainment Technology	O11	Medialas Laserproducts	Entertainment Product Services	L11
Hartland Cables	Hartland Cables	E14	MediaMatrix	Audio Telex Communications	J38
HHB	Audio Products Aust	J25	Meyer Sound	Meyer Sound	E30
High End Systems	Universal Lighting and Audio	S19	Midas	EVI Audio	E35 & C35
hk audio	Audio Products Aust	J25	Midi Solutions	Innovative Music Aust	C27
Hughes JVC Technology	JVC Professional Products	O25	Miditech Keyboards	Innovative Music Aust	C27
Ianiro	Mediavision Aust	F8	Minnetonkor ZDTS Enrodors	Innovative Music Aust	C27
Image	ABI - A Brighter Image	L19	Mipro	Audio Telex Communications	J38
Infinity	Universal Lighting and Audio	S19	Misco	Audio Telex Communications	J38
Inline	AV Technology	L16	Mixrak Studio Furniture	Network Entertainment Technology	O11
Innovason	Production Audio Services	Q38	MOBIL TECH	LSW	H16
Insurance Services	Aon Risk Services Aust	C13	MOBOLAZER	LSW	H16
Intelix	EAV Technology	J42	Modular Stage Boxes	Penn Fabrication	E19
Interactive Technologies	Bytecraft Entertainment	Q25	Mogami Cable	Network Entertainment Technology	O11
InterM	Magna Systems & Engineering	G32	Mole-Richardson	Mole-Richardson Co	C15
Intimidation	LSW	H16	Monivision	ABI - A Brighter Image	L19
Jam Loudspeakers	Network Entertainment Technology	O11	MTS Cases	Network Entertainment Technology	O11
James Thomas Engineering	Clearlight Shows	L8	NEAR	Amber Technology	L33
Jands	Jands	T30 & M42	Nebula	Group Technologies	P35
JBL	Jands	T30 & M42	Neumann	Amber Technology	L33
Jeil	Audio Products Aust	J25	Neutrik	Amber Technology	L33
JEM	Show Technology	S10	Nexo	Group Technologies	P35
Jomox - Dance Products	Innovative Music Aust	C27	Nocturn	Network Entertainment Technology	O11
JVC (SV22 & MV303)	Capital Karaoke Imports	C9	Nocturn UV Effects	Bytecraft Entertainment	Q25
JVC Professional	JVC Professional Products	O25	Novation - Keyboards	Innovative Music Aust	C27
Klark Teknik	EVI Audio	E35 & C35	Nu Light Systems	Mediavision Aust	F8
Klipsch Loudspeakers	Network Entertainment Technology	O11	Numark	Show Technology	S10
Klotz Cables	Technical Audio Group	O30	Oktava	ATT Audio Controls	A35
Konig & Meyer	The Resource Corporation	A33	OMP	LSW	H16
Korg	DJ Link	J30	Onkyo	Amber Technology	L33
Kramer Video & Audio Products	AV Technology	L16	Optikinetics	Universal Lighting and Audio	S19
Kupo	Show Technology	S10	OpusOne	Altronic Distributors	D42
Kustom	Amber Technology	L33	Ortofon	Entertainment Product Services	L11
LA Audio	Technical Audio Group	O30	Osram Lamps	Osram Aust	L9
L-ACOUSTICS	Random Audio	C38	Otari	Amber Technology	L33
LaserPRO International	Entertainment Product Services	L11	OZ Blok	Hoisting Equipment Specialists / Ozblok	E8
Lectret Microphones	Aerobic Microphones Aust	L42	Oze-DJ	Entertainment Product Services	L11
Lectrosomics	Audio Sales & Marketing	A31	P Audio	P Audio System Co Ltd	J33
Lee Filters	Mediavision Aust	F8	Panasonic	ABI - A Brighter Image	L19
LEEM Electronics	CMI Professional Products	W38	Pangolin Laser Systems	Entertainment Product Services	L11
Lemaitre	Universal Lighting and Audio	S19	PANI	Coemar DeSisti Aust	O16

...everyone else has
MEYER SOUND

Meyer Sound Australia

ACN 079 632 787

PO Box 595, Albion Qld 4010

4 Gordon St., Newstead Qld 4006

Web site

www.meyersound.com.au

sales@meyersound.com.au

Direct

T: 07 3252 4493

F: 07 3319 6016

Toll Free

Australia: 1800 4 MEYER

New Zealand: 0800 3 MEYER



Brand	Exhibitor	Stand No	Brand	Exhibitor	Stand No
Peak Audio (Aust)	CMI Professional Products	W38	Stanton	Jands	T30 & M42
Peaston Aust	Hartland Cables	E14	Stardraw	Coemar DeSisti Aust	016
Peavey Architectural Acoustics	Audio Telex Communications	J38	STK Electronics	Network Entertainment Technology	011
Penn Fabrication Hardware	Penn Fabrication	E19	STK Loudspeakers	Network Entertainment Technology	011
Penn Fabrication Lighting	Penn Fabrication	E19	Strand Lighting	Bytcraft Entertainment	Q25
Penn Fabrication Trussing	Penn Fabrication	E19	Studer	ATT Audio Controls	A35
Phase 4	Altronic Distributors	D42	Studio Due	Show Technology	S10
Philips (Communications)	MC Communications	B38	Studio Master	Network Entertainment Technology	011
Philips (Electronics)	CR Kennedy & Co	E17	Stumpfl Screens	AV Stumpfl Asia Pacific/ITI-Image Group	i9
Phonic Ear	Audio Telex Communications	J38	Stumpfl Show Control Technology	AV Stumpfl Asia Pacific/ITI-Image Group	i9
Plus	Amber Technology	L33	Sunlite	Entertainment Product Services	L11
Presonus	Austn Audio Supplies	B31 & B35	Superscope Technologies	Technical Audio Group	030
Pro-Co	Audio Sales & Marketing	A31	Superscope Technologies	Technical Audio Group	030
Prodata Cables	Innovative Music Aust	C27	Swefog	Clearlight Shows	L8
Proel Speakers & Stands	CMI Professional Products	W38	Switchcraft	Audio Telex Communications	J38
Prolinx	The Resource Corporation	A33	Symetrix	Audio Telex Communications	J38
Pro-Stage	Pro-Stage Aust	i20	Synthax - Dance Products	Innovative Music Aust	C27
Pulse	Corporate Audio Services	T38	Tannoy	Syntec International	038
Pure Path	ATT Audio Controls	A35	Taperwire	Audio Sales & Marketing	A31
QSC Audio	Technical Audio Group	030	Tascam	Tascam	G38
Quam Nichols	Production Audio Services	Q38	TC Electronic	Amber Technology	L33
Quantegy	Tascam	G38	Teac	Tascam	G38
Quested	ATT Audio Controls	A35	Technics	Universal Lighting and Audio	S19
Radio Design Labs RDL	Production Audio Services	Q38	Technosarus - Dance Products	Innovative Music Aust	C27
Rane	Jands	T30 & M42	Telex	EVI Audio	E35 & C35
RAT Music Stands	Bytcraft Entertainment	Q25	The Effects Co.	Mediavision Aust	F8
RCF	Production Audio Services	Q38	Theatre Commander	Command Systems/Command Integration	F16
Re'an	Amber Technology	L33	Thiele Chain	Hoisting Equipment Specialists / Ozblok	E8
Redback	Altronic Distributors	D42	Toa	Audio Products Aust	J25
Reel EFX	Coemar DeSisti Aust	016	Trantec	The Resource Corporation	A33
Renderworks	Vectorworks	C17	Travel & Freight Services	Stage & Screen Travel	K1
Renkus Heinz	Audio Sales & Marketing	A31	Tube-Tech	Amber Technology	L33
RentalPoint Software	RentalPoint Software Inc	C14	Turbosound	Audio Telex Communications	J38
RFX Effects	Network Entertainment Technology	011	UXL Stands	CMI Professional Products	W38
RME Audio Cards	Innovative Music Aust	C27	Vari-lite	Jands	T30 & M42
RME Converters	Innovative Music Aust	C27	Vectorworks	Vectorworks	C17
Robert Juliat	Bytcraft Entertainment	Q25	Vestax	DJ Link	J30
Rockustics	Audio Sales & Marketing	A31	Video Commander	Command Systems/Command Integration	F16
Rolls Rack Products	Network Entertainment Technology	011	Videonics - Video Editing & Display Equipment	CR Kennedy & Co	E17
Rosco	Rosco	R1	Vinten	Amber Technology	L33
Royer	Austn Audio Supplies	B31 & B35	Vity Technology	Audio Sales & Marketing	A31
Sabine	Audio Telex Communications	J38	Weircliffe	Amber Technology	L33
Sagitter	Universal Lighting and Audio	S19	Whirlwind/US Audio	Audio Sales & Marketing	A31
Samplitude	Innovative Music Aust	C27	White Instruments	Audio Sales & Marketing	A31
Samson	Corporate Audio Services	T38	White Light	Chameleon Touring Systems	04
SC Systems	The Resource Corporation	A33	Wholehog	Jands	T30 & M42
Selecon	Selecon New Zealand	L5	Wildfire	Network Entertainment Technology	011
Selenium Loudspeakers	Network Entertainment Technology	011	Wilson & Gilkes	Wilson & Gilkes	F13
Sennheiser	Syntec International	038	Win Commander	Coemar DeSisti Aust	016
Setwear	Connections Magazine	019	Wybron	Wybron	P1
SGM	Universal Lighting and Audio	S19	Wybron (reseller)	Chameleon Touring Systems	04
SHOW	LSW	H16	WYSIWYG by Cast Lighting	Jands	T30 & M42
Show Magic	Universal Lighting and Audio	S19	XTA	Production Audio Services	Q38
ShowCAD	Coemar DeSisti Aust	016	Yamaha Professional Audio	Yamaha	L30
Shure	Jands	T30 & M42	Zeck Audio	Audio Sales & Marketing	A31
Smoke Design	Network Entertainment Technology	011	Zero 88 Lighting	Clearlight Shows	L8
Socapex	Amphenol Aust	B36	Zomax Hardware	Network Entertainment Technology	011
Sony	Sony	T25			
Soundcraft	Jands	T30 & M42			
Soundsphere	Audio Telex Communications	J38			
Soundtech	Audio Telex Communications	J38			
Soundtracs	Audio Telex Communications	J38			
SoundTube	Production Audio Services	Q38			
Soundweb	ATT Audio Controls	A35			
Space Cannon	Coemar DeSisti Aust	016			
Spirit	Jands	T30 & M42			
Spotlight (CAD Software)	Vectorworks	C17			
Spotlight (Lighting Fixtures)	Mediavision Aust	F8			
Squier	Fender Aust	G42			

Production Audio Services

Stand Q38

EAW
EASTERN ACOUSTIC WORKS
Tour, Installation & Music Industry Speakers

CREST AUDIO
Amplifiers & Mixers

Gentner
Matrix Mixers & Conferencing



Power conditioning products.



Level Control Systems



Loudspeaker Components

AUDIX
Vocal, Instrument & Installation Microphones



Countryman Microphones

RDL
Radio Design Labs
Miniature High Quality
Audio & Video Modules



Audio analysis software

innova SON

the New Way
to Watch Sound
Digital live mixing consoles

COMREX
POTS, ISDN and GSM Codecs

xta
Digital signal processing



Soundtube
Installation Speakers

Showcasing the new
EAW KF760 Line Array
and the new
**Innova SON Grand Live
Digital Console**



Production Audio Services Pty Ltd

Email : sales@productionaudio.com.au

Website : www.productionaudio.com.au

Phone : 61-3-9415-1585 Fax : 61-3-9415-1595

6-8 Elizabeth Street Richmond Victoria 3121 Australia

ENTECH Exhibitor Listing

Who is exhibiting at ENTECH, and what you will find on their stand?

A Brighter Image (ABI)

Stand No: L19
ABI is a wholesale-only, Australian-owned company that imports and manufactures a range of audiovisual products for distribution throughout Australia. Main product groups include Projection Screens, Multimedia Projectors, Plasma, Trolleys, PC Peripherals, Lecterns, PA systems and UHF Microphones, OHPs, Electronic Whiteboards, and a range of A/V accessories. The stand will exhibit a range of DRAPER staging and wall/mobile screens, XGA Multimedia projectors, IMAGE PA systems, IMAGE Lecterns and IMAGE/Endura trolleys.
Tel: +61 2 9938 6866

Fax: +61 2 9938 6899
www.abimage.com.au
6/16 Ada Ave
Brookvale NSW 2100, Australia

Adams Platform

Stand No: E25
Adams Platform is a revolutionary compression technology that reduces the bit rate of audio and visual data for device and transmission. This technology enables sound and/or images to be transferred over a standard phone line to a speaker and/or display apparatus in real time with exceptional clarity. The platform delivers over an ordinary copper wire line at 28.8k with quality of 44 kHz stereo audio and can be accompanied by full motion broadcast quality video

images (25 frames per second, 768x576 resolution PAL and NTSC). The applications and products for this technology are endless. Visit our stand to discover how you can license this technology for use within your products.
Tel: +61 3 9694 4644
Fax: +61 3 9682 9621
Email: enquiries@apmg.com.au
P.O. Box 618
Port Melbourne VIC 3207, Australia

Aerobic Microphones

Stand No: L42
On display at ENTECH will be Aeromic Microphones (Sydney) and Transmitter Pouchbelts (Melbourne), Aeromix Audio Mixers (Melbourne), Leon Audio Microphones and DI Boxes

(Adelaide) and the AMA selection of Singapore made Headset and Tie Clip Microphones.

Tel: +61 2 9313 4995
Fax: +61 2 9313 5569
www.aeromic.com.au
Unit 6/221 O'Riordan Street
Mascot NSW 2020, Australia

Altronic Distributors

Stand No: D42
On our display at Entech will be our NEW RANGE of audio products including the NEW 8 x 8-matrix switcher, NEW 1/2 rack audio solutions, New 1RU 8-channel mixers, New 100V amplifiers, NEW CATALOGUE!
Tel: 1300 780 999
Fax: 1300 790 999
www.altronic.com.au
Unit B, 3-7 Highgate Street

AON Risk Services

AUSTRALIA LIMITED
ACN 000 434 720

ENTECH STAND C13

Entertainment Protection Plus

<p>INSURANCE FOR</p> <p>ALL</p> <p>YOUR</p> <p>ENTERTAINMENT</p> <p>RISKS</p> <p>Email:</p> <p>ken.killen@aon.com.au</p>	<ul style="list-style-type: none"> • Equipment • Travel • Non appearance • Cancellation or abandonment • Public liability • Personal accident • Vehicles • Workers' Compensation
---	--

Call Ken Killen or Natasha Drysdale

TOLL FREE 1800 806 584

for free quotations & advice

Level 27, AON Tower, 201 Kent Street, SYDNEY, 2000 Tel (02) 9253 7570

Aerobic Microphones Australia



Specialist Microphone Wholesaler

Distributors of...

- Aeromic™ – The Sweat Resistant Microphone plus headset & tieclip vocal mics
- Aeromix – Voice Over Music Stereo Mixers
- Aeropower – Stereo Power Amplifiers
- AMA - Neoprene Pouchbelts for all wireless Tx's
- AMA – Headworn & Tieclip Mics
- AMA – Battery powered Personal PA
- Califone - commercial CD Boom Boxes
- Leon Audio – Microphones and DI Boxes
- SportZ Grip™ and Disc Grip™ Pouchbelts
- Portable PA Systems for Aerobics & Aqua
- A large range of microphone accessories

Phone: 02 9313 4995 Fax: 02 9313 5569
PO Box 321 Alexandria NSW 1435

www.aeromic.com.au



**'WE CAN'T KEEP THESE A
SECRET ANY
LONGER!'**



evolution
500 SER ES



SENNHEISER



Guideport System

PRODUCTS

- Evolution Handheld mics
- Evolution Radio Mic & IEM systems
- Tourguide narrowband RF system, 6 freqs
- Infrared system
- NEW! Guideport system for museums, galleries etc

CLOUD

PRODUCTS

- Zone Mixers
- Integrated Mixer amps
- Multichannel amps
- Stereo compressor/limiter
- Stereo 2 way/3way crossover
- Fitness centre headphone system
- Full range of accessories & modules



CXM Mixer



Z4 & Z3
Multi Zone Mixers

T12



TANNOY®

CMS 50



PRODUCTS

- Ceiling speakers
- Wall mount speakers
- Medium to high power installation speakers

SEE US AT ENTECH 2002
CALL FOR OUR LATEST CONTRACTING CATALOGUE

Syntec International Pty Ltd 60 GibbesSt, Chatswood NSW Australia 2067
Ph: (02) 9417 4700 Fax: (02) 9417 6136 Email: contracting@syntec.com.au Web:www.syntec.com.au

AUBURN NSW 2144

Amber Technology

Stand No: L33

At Entech 2002, the Amber stand will feature a huge range of leading-edge professional audio & A/V equipment. Highlights will include the AIR Series intelligent studio monitor systems from Dynaudio Acoustics, TC's stunning System 6000 multi-channel digital audio processor, PLUS ultra-compact, high-output video & data projectors as well as all the latest from leading Names such as Neutrik, Canare, Vinten, Otari, AVC and Tube-Tech.
Tel: +61 2 9452 8600
Fax: +61 2 9975 1368
www.ambertech.com.au
Unit B, 5 Skyline Place
Frenchs Forest NSW 2086

Amphenol Australia

Stand No: B36

Amphenol Australia Pty Ltd based in Melbourne is a subsidiary of Amphenol Corporation, a worldwide manufacturer and supplier of connector and interconnects products. We have been designing, manufacturing and marketing professional audio connectors for the world market since 1955. The new "Entertainment Interconnect" catalogue was recently released and features an easy to read format featuring full product shots for quick identification. Available in hard copy, CD-ROM or downloadable from our website. Please ask for your free copy. New products include the XLR "A" type connectors for PCB applications, 1/4" phono plugs and sockets, RCA and BNC 75 Ohm connectors.
Tel: +61 3 8796 8888
Fax: +61 3 8796 8801
www.amphenol.com.au
2 Fiveways Blvd
Keysborough VIC 3173, Australia

Aon Entertainment Insurances

Stand No: C13

Aon Risk services is one of the largest and oldest Insurance Broking and Risk Management companies in the world. Aon's Entertainment Division is the market leader in Australia and specialises in all facets and

classes of insurance for the Entertainment Industry and related businesses and enthusiasts. Come and talk to our friendly brokers at Stand C13 for obligation free quotes and advice.

Tel: +61 2 9253 7000

Fax: +61 2 9253 7267

www.aon.com.au

Level 27, Aon Tower 21 Kent St, Sydney NSW 2000, Australia

ARX - The Resource

Corporation

Stand No: A33

ARX, in conjunction with distributors The Resource Corp, will have a wide range of products on display at ENTECH 2002, including; The Complete SPL self powered loudspeaker range, the new SPL 8 and SPL 28, the ZA series of multi channel amplifiers, the new BarMIX multi-zone installation mixer plus many more favourites. On hand to answer all your questions will be ARX directors Colin Park, Duncan Fry, and David Park, plus The Resource Corp and Ian Ross, from WA distributors Audio Source.

Tel: +61 3 9555 7859

Fax: +61 3 9555 6747

www.arx.com.au

33 Advantage Rd
Highett VIC 3190, Australia

Att Audio Controls

Stand No: A35

On display for Amek will be all the current rack mount devices plus several new releases, also a Media 51 fully featured mixing console. A full range of BSS Audio and Soundweb products and some new initiatives will be on display. The Chameleon range of power amplifiers and devices will be launched at the show. The Oktava microphone range will be on display including the new Ribbon and Valve products. The Pure Path range by Mr. Rupert Neve the designer will be featured, as will a selection of Studio Monitors from Quested. A representation of Studer will also be featured.
Tel: +61 3 9379 1511
Fax: +61 3 9379 9081
www.attaudiocontrols.com
452 Gaffney St
Pascoe Vale VIC 3044, Australia

Audio Assemblers

Stand No: H42

Our display at ENTECH 2002 will feature the widest range of EBONY product. Portable public address, 100 volt line amplifiers and mixer amplifiers, dual supply 100 volt line amplifiers and mixer amplifiers, power amplifiers, speaker systems, powered foldback speakers, powered speaker systems, and the EBONY range of bass guitar amplifiers.

Tel: +61 3 9357 8595

Fax: +61 3 9357 8572

6 Adrian Rd,
Campbellfield VIC 3061,
Australia

Audio Products Australia

Stand No: J25

Audio Products Australia is proud to announce a number and new ranges to its product portfolio, including the Cerwin-Vega range of professional loud speakers from the US; a unique new range of active professional speaker systems from Germany called HK Audio; Biamp; which is a US company and a leader of quality software based, state of the art mixers, preamplifiers, sound processors, echo cancellers and ambient noise compensators; Audia, which provides network DSP processing with unbelievable capacity and functionality, is cobra-net5 compatible and remote controllable. All of these new ranges will be on display as well as a vast array of new products from market leaders AKG, Denon Professional, HHB, TOA and more.
Tel: 1800 642 992
Fax: 1800 246 262
www.audioproducts.com.au
67 O'Riordan St
Alexandria NSW 2015, Australia

Audio Sales & Marketing

Stand No: A31

Audio Sales & Marketing distributors of premium audio and video products Renkus-Heinz, ASPI Digital, Clockaudio, Whirlwind, Intercom, Atlas Sound, Furman, Rockustics, ProCo, Octasound. At ENTECH our international visitors are; Karl Brunvoll (Vice President, sales - Renkus Heinz); Gordon Moore (Vice President, sales - Lectrosonics); Paul Depeasshmidt (Vice President,

sales - ASPI Digital & Interkom); Nico Mreches (CEO)
Tel: +61 2 9585 1011
Fax: +61 2 9585 1317
www.asmaust.com
12 Barry Ave
Mortdale NSW 2223, Australia

Audio Technology Magazine

Stand No: AA4

Asia Pacific and Australia/NZ. The magazine for sound engineers and recording musicians is now available in two editions. The Australian/NZ edition continues to service Australian and New Zealand audio professionals and enthusiasts, while the new Asia Pacific edition is especially tailored to the needs of that region.

Tel: +61 2 9984 8801

Fax: +61 2 9984 8802

www.audiotechnology.biz

33/84 Dee Why Parade

Dee Why NSW 2099, Australia

Audio Telex

Communications Pty Ltd

Stand No: J38

'All that's new for 2002' is the theme for arguably Australia's largest professional audio distributor, Audio Telex. Audio Telex will be featuring a huge array of new products from globally respected brands such as Turbosound, Sabine, Symetrix, Peavey AA, Media Matrix, Australian Monitor, SoundTech, Mipro and more. The new Turbosound QLight additions and the new Sabine 2.4Ghz Spread Spectrum Wireless Microphone System are among the highlights. New amplifiers and zone paging systems from the now internationally renowned Australian Monitor Installation Series will also be on the Audio Telex stand. Special international guests Bill Woods from Turbosound, Leon Pieters from Ampetronic, and Doran Oster from Sabine will be on the stand to answer your questions.
Tel: +61 2 9647 1411
Fax: +61 2 9648 3698
www.audiotelex.com.au
149 Beaconsfield Street
Silverwater NSW 2128, Australia

Australasian Special Events/EventPix

Stand No: AA8

Australasian Special Events is

WITH NORTH SYDNEY TAFE!

Technical Training

Industry recognised induction courses for new technicians! See us at ENTECH

Condensed, fast stream learning, hands on and theory, all in one week. Includes OHS and Safety, equipment recognition, setup, use, handling and operation. These courses are the new standard for industry entry.

CERTIFICATE IN LIGHTING

Featuring -

- i. Industry safety and OHS
- ii. Mechanical safety
- iii. Introduction to lighting
- iv. Analyse objectives
- v. How to design basic systems
- vi. Equipment familiarisation
- vi. Choosing equipment
- vii. Handling equipment
- viii. Colour and intensity
- x. DMX essentials
- xi. Moving light essentials
- xii. Control desk essentials
- xiii. Interpreting plans

CERTIFICATE IN LIVE AUDIO

Featuring -

- i. Industry safety and OHS
- ii. (Very) basic audio theory
- iii. Equipment recognition
- iiiv. Equipment selection & budgets
- v. Patching & setup
- vi. Operation and signal chain
- vii. Avoiding feedback, lectern mic's
- viii. Accessories and effects
- viii. Interconnecting, splits, recording
- ix. Stage monitors
- x. Health, liability
- xi. Working with others
- xii. Mixing

Do these courses in a five day block, or one weeknight for nine weeks. Each course runs for 36 hours face to face, with a strong practical component.

This is hands-on learning, taught by industry specialists and supervised by me. I've been planning this for years, and have done my Training Certificate IV so I can properly assess all trainees. *You must pass safety and OHS assessment to complete the course.*

I offer affordable, accurate and time efficient training.

- Julius Grafton
Connections Founder

Call 1-800-635-514 or +61 2 9890-2111 . www.conpub.com.au

the internet portal to the Australian event industry. The site features an industry directory and a monthly online magazine. Photography coverage of ENTECH exhibition and social events is by EventPix. Using the latest in digital and internet technology EventPix photos will be available online within 24 hours for exhibitors and visitors to view and order. Check out your photos at www.eventpix.com.au/entech.html

Tel: +61 2 9331 0706

Fax: +61 2 9361 4567

PO Box 253

Earlwood NSW 2206, Australia

Australian Audio Supplies

Stand No: B31

Featured at ENTECH will be the new Mackie Industrial range which offers a total solution for installed sound systems.

Products displayed include the DX8 Digital Processor, Sound Palette, 4000 Series Integrated Amplifiers, Vision Loudspeakers, ART Loudspeakers and Monitor Series Speakers. Other brands displayed will be Mackie Designs including the second generation of FR Series Power Amplifiers and Fussion High Resolution Active Speakers, CAD Microphones, PreSonus Processors, Entech Electronics, Earthworks Microphones, Royer Ribbon Microphones and QMix Headphone Mixing solutions.

Tel: +61 2 4388 4666 / +61 3 8415 1466

Fax: +61 2 4388 4688 / +61 3 8415 1488

www.ausaudio.com.au

Head Office: Unit 1/8 Ketch Close, Berkeley Vale NSW 2258
Sales Office: 121 Hoddle Street, Richmond VIC 3121

Australian Crewing Company

Stand No: E11

Come and see us at ENTECH 2002 and discuss your Entertainment, Event and Exhibition staffing requirements. We provide skilled personnel from Loaders & Stagehands to Technicians, Operators & Event/Production Management.

Tel: +61 2 9565 5716

Fax: +61 2 9565 5934

www.australiancrewing.com

1 Larkin St,

Camperdown NSW 2050, Australia

Australian Screen Sound Guild

Stand No: F42

The Australian Screen Sound Guild (ASSG) represents the profession of Screen Sound in film, television, and other related audio industries in Australia. Formed in 1988, the ASSG aims to recognise and promote original and creative work, encourage high standards and to facilitate research into the techniques and technology of screen sound production.

Members include: Sound Recorders, Sound Editors, Sound Mixers and Music Editors, for film and television.
Tel: 0500 55 2774

Fax: +61 2 9906 4128

Email: assg@ozemail.com.au
Suite 360, 3 Holtermann Street
Crows Nest 2065 NSW, Australia

AV Stumpfl/ITI-Image Group

Stand No. i9

Av Stumpfl Asia Pacific/ITI-Image Group are suppliers of the Stumpfl MonoBlox Mobile screens, Stumpfl Control Technology and Software, Buhl lenses, Comm-Tec Systems and Chief Manufacturing. Stumpfl products are distributed by AV Stumpfl Asia Pacific all over Asia. Stumpfl MonoBlox screens represent the first innovation in Mobilke screens in 40 years. On display will be MonoBlox Screens, System 32/64 screens, Stumpfl Software and Control Systems. We expect Reinhold Stumpfl, designer and owner of Stumpfl Corp. to join us at ENTECH 2002.

Tel: +61 2 9477 5709

Fax: +61 2 9476 3276

www.iti-imagegroup.com.au

P.O. Box 3159

Asquith NSW 2077

AV Technology

Stand No: L16

AV Technology represents AMX, Autopatch Inline and Kramer in Australia and New Zealand. AMX (manufacturer of remote control systems) - we will be showing wired & wireless touch screens from 4 - 18 inch & the internet enabled NetlinxTM control system. Autopatch (high quality Audio, Video and

Data Matrix switchers). From the Half-Y series to the Epica TM 256 by 256 matrix, Autopatch have a switcher for all applications. Some models feature Digital Volume control. Inline (manufacturer of high resolution video equipment) - we will have the new range of Cat-5 twisted pair Video and Audio transmitters and receivers on show & the new DVI/DFP transmission products. Kramer make Video and Audio products inc. distribution amplifiers, switchers, matrix switchers, signal converters, signal generators for all video formats including Composite, S-Video, YUV, RGBHV and SDI.
Tel: +61 7 5531 3103
Fax: +61 7 5531 0006
www.avtechnology.com.au
5 Commercial Drive,
Southport QLD 4215, Australia

Avalon Design / Studio Projects

Stand No: K42

Mixmasters Productions stand will feature the AVALON DESIGN no-compromise range of pure Class A, discrete, and vacuum tube microphone pre-amps, equalisers and compressors. Also on display will be the complete range of STUDIO PROJECTS Condenser Microphones

Tel: +61 8 8278 8506

Fax: +61 8 8278 6295

www.mixmasters.com.au

21 Darwin Ave

Hawthorndene, South Australia
5051

AXIS Audio Visual

Stand No: C25

Axis Audio Visual are the Australian distributors for Altinex, Analog Way and Contemporary Research. In addition to the regular range of VGA/RGB cables, switching, distribution, matrix and conversion video products, new for 2002 include. From Altinex, V-Matrix, a unique mission critical matrix system for sizes 8x8 to 128x128. Multitasker, a card frame based product, which takes system integration to a whole new level of flexibility. Analog Way will feature Graphic Switcher II, the next generation in RGB vision mixing. Also on show, new scalars for home theatre and

integration. New from Contemporary Research will be there IC series media control system.

Tel: +61 3 9761 2688

Fax: +61 3 9761 1091

www.axisav.com.au

4/178 Boronia Rd
Boronia VIC 3155, Australia

Bill Coghill Design

Stand No: E9

On display at ENTECH will be our range of innovative and cost effective Audio Visual equipment solutions for installers, contractors and system integrators together with details of our custom manufacturing service. We will also be demonstrating Production Assistant software, a series of software modules specifically designed to help the small business owner. Equipment hire, sales, quoting, invoicing, labour hire, scheduling, contact management & more.

Customisable, modular system. 100% Australian owned, made & supported. Realistically priced software for the small business owner. Take control of your business today!

Tel: +61 2 9500 8090

Fax: +61 2 8569 1000

www.bcd.cx

Suite 244, 353 King Street,
Newtown
NSW 2042, Australia

Bose

Stand No: G25

Bose is excited to launch the new additions to its range of Professional & Business music products. New products to be released at ENTECH 2002 include the new Installed Anywhere Panaray 402II Loudspeaker and the Panaray 802II Loudspeaker, the Panaray Digital System Controller, the Panaray MA12 Modular Line Array Loudspeaker and the Panaray MB4 Modular Bass Loudspeaker. Visit the Bose stand for more information or visit www.pro.bose.com

Tel: +61 2 8737 9999

Fax: +61 2 8737 9922

www.bose.com

Unit 3, 2 Holker St

Newington NSW, Australia

Bytecraft Entertainment

Stand No: Q25

Bytecraft Entertainment provide quality Lighting

a brighter future.

ENTECH 2012
See us at stand H16

Since 1991, we have grown at an average rate of over 50% per annum and have become one of the most prominent distributors in our field.

We started primarily in the supply of Mobile DJ and Club equipment, and now distribute a definitive range of sound, lighting, special effects and security products for applications including Mobile & Pro DJs, venue installations, Pro Audio Studio, Lighting Control, Stage & Theatre, Public Address and Small Business.

With 20,000 square feet of warehouses over 3 buildings and a recent move to our landmark showrooms, offices and warehouse complex, we continue our policy of reinvestment in order to offer you the best stock availability and better quality of service.



Our staff have extensive experience in the retail and installation sectors so we know exactly what kind of service you should expect from us.

We have maintained our growth and service in the face of fierce competition and world wide economic recession. LSW prides itself on delivering affordable, professional and unique products.

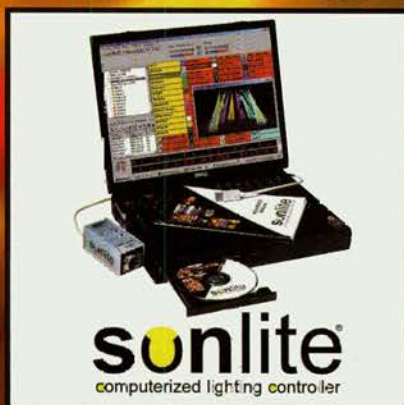
We strive to offer the most competitive value in the industry today. We've never been the kind of people to 'blow our own trumpet' but maybe it's about time we did. We'll let you decide!

If you're in business and would like to create your own profitable enterprise with our products why not consider an LSW partnership. Contact us now for the latest LSW product information and dealership opportunities in your area.



LSW enter a new era with a bold, invigorating new look emphasising ongoing commitment to

value • innovation • performance



Showrooms: 631-635 Parramatta Rd Leichhardt NSW

Ph: (02) 9568 2100 Fax: (02) 9568 2300

Exhibitors Listing

Products & Services including; Distribution of entertainment lighting products to theatres, film and television studios, schools and other entertainment venues including casinos, hotels and clubs. Rental of lighting equipment to theatre, television, film, touring shows, major entertainment venues and corporate events including the provision of operation and maintenance crew. Implementation of show control systems for major venues and theme parks. Operation & maintenance of major entertainment lighting

Bytecraft Entertainment can provide all your lighting needs from artistic design, technical design, supply (sale or hire) of equipment, installation, operation & maintenance.
Tel: +61 3 8710 2555 / +61 2 8344 3800
Fax: +61 3 8710 2599/ +61 2 8344 3801

www.bytecraftentertainment.com
Address: 2 Monterey Road, Dandenong South. VIC 3175
Unit 4 / 1 - 15 Rosebery Ave, Rosebery 2018, Australia

Capital Karaoke Imports

Stand No: C9
Capital Karaoke Imports are Australia's largest distributor of karaoke software, supplying all karaoke formats (CD+G, VCD, DVD & Laserdisc). We pride ourselves on our friendly and

efficient overnight service. We stock the entire ranges of all the karaoke manufacturers worldwide and produce all the major Australian Artists on our CK range. We also supply karaoke hardware and accessories - karaoke players, amplifiers, speakers and microphones etc. from many of the major manufacturers such as JVC, Panasonic and Pioneer. If your company is currently involved in karaoke or is considering adding a karaoke rig to your lineup, then call in at our stand at ENTECH 2002 and see how we can assist you with all your karaoke needs.

Tel: +61 7 5477 6977
Fax: +61 7 5478 0087
www.capitalkaraoke.com.au
Capital House, Mooloolah Island
Minyama QLD 4575, Australia

Centre Stage Australia

Stand No: E25
As well as providing excellence in event presentation, audio & AV hire, Centre Stage Australia has successfully completed many high profile audio installations in some of Melbourne's leading pubs & clubs - not mention the Hard Rock Cafes in Sydney & Melbourne. Recently Stephen "Stig" Moor, previously of SMP, has joined Centre Stage Australia as a Director to

provide total event management, presentation & audio installation solutions. Come and speak to the team who manage the logistics here at Entech 2002.

Tel: +61 3 9645 3233
Fax: +61 3 9645 1848
www.centrestage.com.au
P.O. Box 618
Port Melbourne VIC 3207, Australia

Chameleon Touring Systems

Stand No: 04
Chameleon Touring Systems is a specialist lighting production company providing lighting equipment, rigging and full production services to the entertainment industry and corporate sector. Our extensive inventory comprises intelligent lights, theatrical fixtures, control systems, dimmers, searchlights, effects lighting as well as trussing and motors. Products represented include Altman, Clay Paky, ETC, Jands, LSC, Martin and Vari-Lite. Offices in Sydney & Brisbane.
Tel: +61 2 9310 5222
Fax: +61 2 9310 5511
www.chameleon-touring.com.au
2 Huntley Street (PO Box 206)
Alexandria NSW 2015, Australia

Clearlight Shows Pty Ltd

Stand No: L8
At Entech 2002 Clearlight

Shows Pty. Ltd. will have: Julie Harper from DHA to demonstrate DHA Double Rotation Indexers and YoYo ++(double Yoyo). Graham Eales from Zero 88 will be demonstrating the BullFrog console. ELC control equipment including the Show Store, Focus Brain and Dam 44 Audio Matrix Controller. We will also be exhibiting for the first time in Australia the NEW ELC dmXLAN for DMX distribution over ethernet with multiple access to DMX channels and fixtures from multiple consoles. Swefog split DMX controlled hazers for total control of machine noise in theatre. James Thomas Engineering cyc floods and the range of IP Rated outdoor fixtures.
Tel: +61 3 9553 1688
Fax: +61 3 9553 4401
www.clearlight.com.au
9 Horscroft Place
Moorabbin VIC 3189 Australia

Clifton Productions

Stand No: 016
Clifton Production Pty Ltd. provides rigging and lighting production for all aspects of the entertainment and exhibition industry Australia wide. With an extensive hire stock we have all areas covered including specialised rigging, lighting, drapes and staging. Clifton Productions Pty Ltd. can also offer transportation and

BYTECRAFT® ENTERTAINMENT PTY LTD

Sales & Hire of Lighting Solutions
for the Entertainment Industry

Entech Stand Q25

EMAIL - entertainment@bytecraftentertainment.com
WEBSITE - http://www.bytecraftentertainment.com

VIC - 2 Monterey Road Dandenong South 3175
Tel: 03 8710 2555 Fax: 03 8710 2599

NSW - 4/1-15 Rosebery Avenue Rosebery 2018
Tel: 02 8344 3800 Fax: 02 8344 3801



A.B.N. 33 556 876 566

Entech
Stand G25



NEW

Panaray MA12



NEW

Panaray 802III



NEW

Panaray 402II



NEW

Panaray Digital
System Controller

BOSE[®]
Better sound through research[®]

Build The Bass You Need Block By Block.

The MB4 loudspeaker tailors bass to the needs of your project. A single MB4 speaker provides punch and definition to low-end bass for smaller venues. For bigger jobs, simply add more units to get the bass you need. They can be stacked or used in arrays for targeted bass.

— Accurate, detailed bass response.

— Extended bandwidth from 40Hz to 300Hz.

— Compatible with the full line of Panaray loudspeakers.

— Interlocking feet for reliable stacking and reinforced end caps for protection from constant setup and teardown.



NEW

Bose[®] Panaray[®] MB4 Modular Bass Loudspeaker

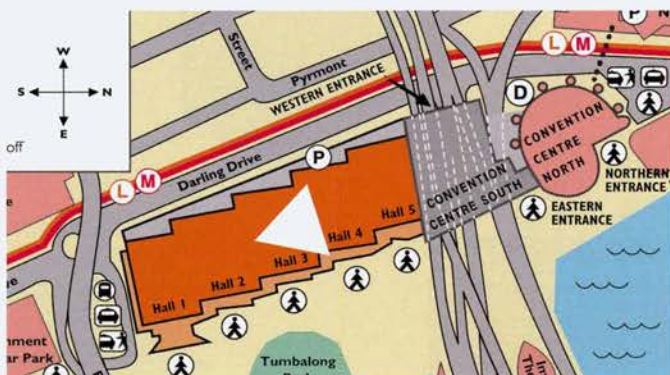
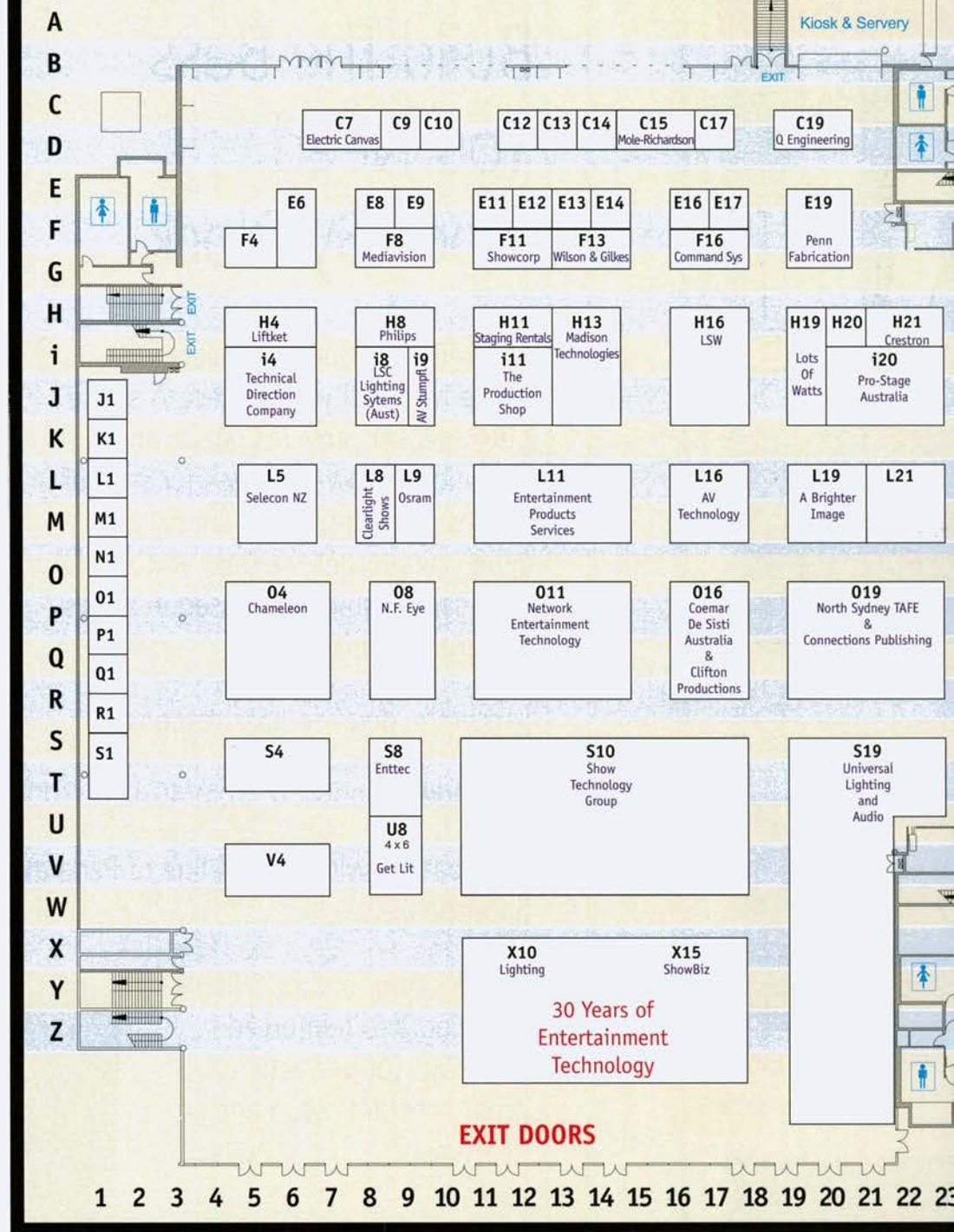
For more information call
1800-659-433

pro.bose.com

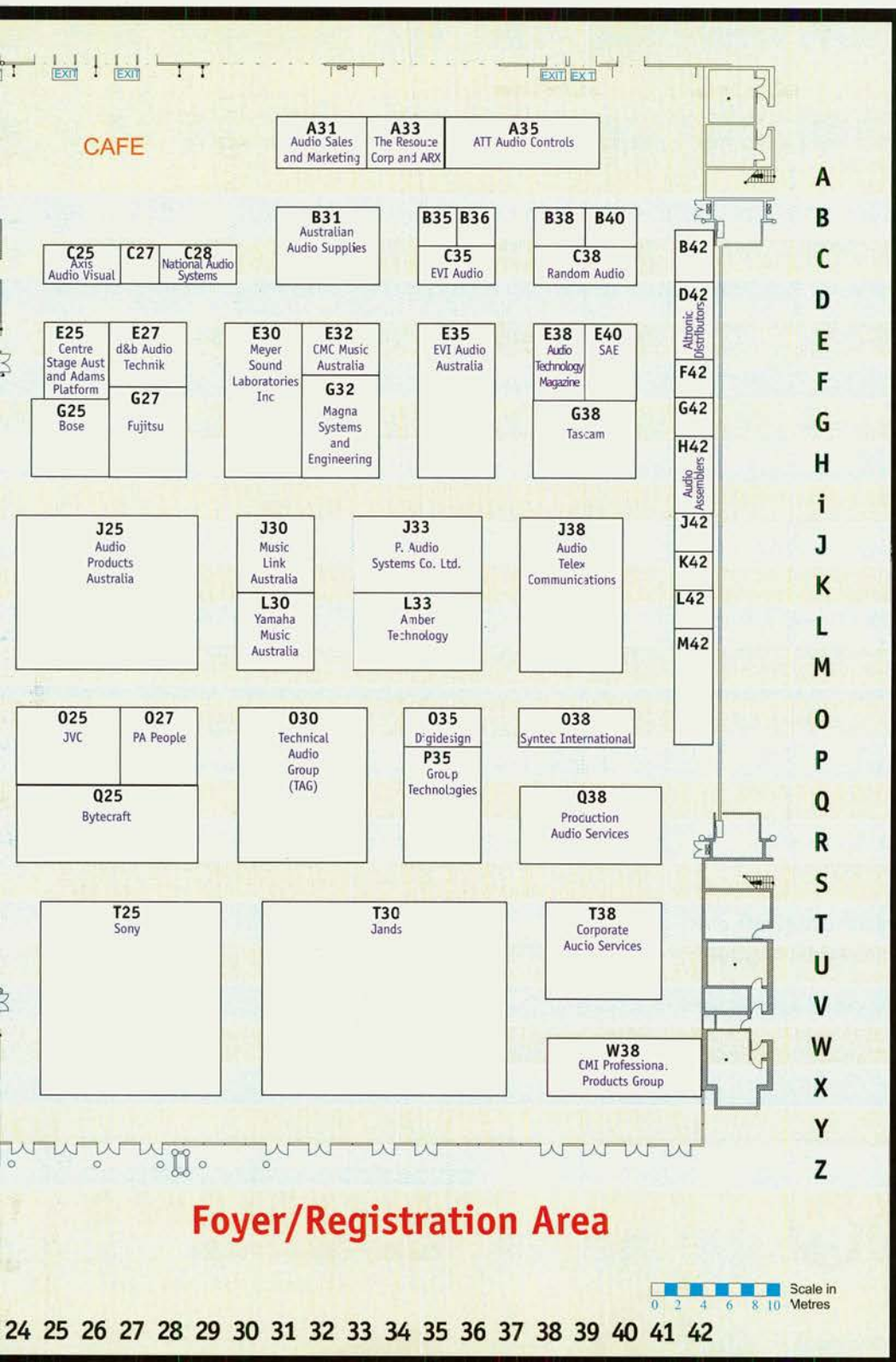
Sydney Convention and Exhibition Centre

Halls 1 and 2, Darling Harbour

Sydney Australia



- | | | | |
|-------------------------------|-----|-------------------------------|----------|
| ABI - A Brighter Image | L19 | Audio Telex Communications | J38 |
| Adams Platform | E25 | Aust Special Events/ISES | E12 |
| Aerobic Microphones Australia | L42 | Australian Audio Supplies | B31, B35 |
| Altronic Distributors | D42 | The Aust Crewing Company | E11 |
| Amber Technology | L33 | Australian Screen Sound Guild | F42 |
| Amphenol Australia | B36 | AV Stumpfl Asia Pacific/ | |
| Aon Risk Services Australia | C13 | ITI-Image Group | i9 |
| ARX Systems | A33 | AV Technology | L16 |
| ATT Audio Controls | A35 | Axis Audio Visual | C25 |
| Audio Assemblers | H42 | Bill Coghill Design | E9 |
| Audio Products Australia | J25 | Bose | G25 |
| Audio Sales & Marketing | A31 | Bytecraft Entertainment | Q25 |
| Audio Technology Magazine | E38 | Capital Karaoke Imports | C9 |



- Madison Technologies H13
- Magna Systems & Engineering G32
- Major Music Wholesale G38
- MC Communications B38
- Mediavision Australia F8
- Meyer Sound E30
- Avalon Design / Studio Projects K42
- Mole-Richardson Co C15
- Total Production E6
- mondo*dr E6
- DJ Link J30
- N.F. Eye O8
- National Audio Systems P/L C28
- Network Entertainment Technology O11
- Osram Australia L9
- Vectorworks C17
- P Audio System Co Ltd J33
- Penn Fabrication E19
- Philips H8
- Premier Lighting C10
- Pro Music B42
- Pro Sound News J1
- Production Audio Services Q38
- Pro-Stage Australia i20
- Lodestar Hoists / PWB Anchor F4
- Q Engineering C19
- Quantegy International Inc G38
- Random Audio C38
- RentalPoint Software Inc C14
- Rosco R1
- SAE E40
- Schenker International P/L L1
- Selecon New Zealand L5
- Show Technology S10
- Showcorp F11
- Sony T25
- Stage & Screen Travel K1
- Staging Rentals H11
- Sunlec International - Bosbox Q1
- Syntec International O38
- Tascam G38
- Tascam G38
- Technical Audio Group O30
- Technical Direction Company i4
- The Electric Canvas C7
- The PA People O27
- The Production Shop i11
- The Resource Corporation A33
- GETLIT U8
- Treotham Trading C12
- Universal Lighting and Audio S19
- Weifa Stage Roof Factory H20
- Wilson & Gilkes F13
- Wybron P1
- Yamaha L30

Foyer/Registration Area



24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42

- | | | |
|---|------------------------------------|--|
| Centre Stage Australia E25 | Crestron H21 | JVC Professional Products O25 |
| CMI Professional Products W38 | Digidesign O35 | Hartland Cables E14 |
| Chameleon Touring Systems 04 | DJCHQ N1 | Herkes Electrical Supplies M1 |
| Clearlight Shows L8 | EAV Technology J42 | Liftket H4 |
| Clifton Productions O16 | Entertainment Product Services L11 | Hoisting Equipment Specialists / Ozblok E8 |
| Phonic E32 | Enttec S8 | ICIA E13 |
| Coemar DeSisti Australia O16 | Epson L21 | Innovative Music Australia C27 |
| Command Systems/Command Integration F16 | etnow.com O19 | Jands T30 & M42 |
| Connections Magazine O19 | EVI Audio E35 & C35 | Lighting By Design O1 |
| Corporate Audio Services T38 | Fender Australia G42 | LSW H16 |
| CR Kennedy & Co E17 | Flame FX S1 | Lots of Watts H19 |
| | Fujitsu G27 | LSC Lighting Systems i8 |
| | Group Technologies P35 | |

Exhibitors Listing

elevated work platforms for production and tours. New services now include hire and sales. Our experienced staff can help with all areas of design and manufacture to suit customer's specific requirements from truss installation to custom stage and metal fabrication.

Tel: +61 3 9484 0844
Fax: +61 3 9484 8166
Email:
info@cliftonproductions.com.au
84-88 Chifley Drive
Preston VIC 3072, Australia

CMI Professional Products Group

Stand No: W38
CMI has been in marketing and distributing products to the Entertainment industry for over 24 years. CMI's Professional Products Group are proud to represent the following stable of products, DOD / DIGITECH Audio processors & Multi effect devices, dB TECHNOLOGIES Self Powered Speaker Enclosures, Radio Mics and Electronics., EMINENCE World leaders in Speaker technology, ETEK Signal Processing & Mixing Consoles, GATOR Cases & Equipment Racks. LEEM Self Powered Mixing Consoles & Speaker enclosures PEAK AUDIO Australian made Speaker enclosures plus Power Amplifiers, Mixing consoles and

Equalizers, PROEL Self powered Speaker enclosures & huge array of Audio Accessories, Stands & Insulation product. Tel. +61 3 9315 2244 Fax. +61 3 9315 2115 www.cmi.com.au 36-38 Export Drive Brooklyn VIC 3025, Australia

Coemar De Sisti Aust P/L

Stand No: 016
Visit Coemar De Sisti Australia at stand 016. This year we are displaying our largest ever range of brand new fixtures from our large stable of products. These include the new i-Spot and LX range from Coemar, comprising of no less than 10 completely new products. Stardraw.com will be giving hands-on demonstrations of their range of design software. Also, featured will be the new Compulite Rave console, FX Range fixtures and many other exciting innovations.

Tel: +61 3 9467 8666
Fax: +61 3 9467 8667
www.cdaust.com.au
36A Clements Ave
Bundoora VIC 3083, Australia

Command Systems and Command Integration

Stand No: F16
Command Systems has been researching and developing leading edge technology for

the past 25 years. Manufacturers of the Video Commander system (an Audio Visual Media Retrieval System - AVMS) and Theatre Commander control systems, Command Systems is the only company in the world who can send audio, video and control over Cat3 or Cat5 cable over such long distances, which will be demonstrated on the stand. Entech will be the launch pad for new products, including the Joey touchscreen remote control, a new image and the introduction of Command Integration, an Australian company of engineers and installers of audio-visual systems who specialise in Command Systems products. Tel: +61 2 9938 4811 Fax: +61 2 9905 6153 www.commandsys.com.au Unit 13, 84 Old Pittwater Road Brookvale NSW 2100, Australia

Connections

Stand No: 019
Publishers of Connections Magazine for the Entertainment Technology industry. Connections introduces Technical Training courses for 2002. Visit our stand and talk about your training needs - give us feedback!
Inside an average monthly issue of Connections, you will find news and features on shows, equipment and people

that work with Pro-Audio, Lighting, AV and Staging. Connections also hosts a new news service - Connect@conpub, a free subscription service to provide industry news, previews of Connections, and ENTECH updates as they occur. Come to our stand, or check out the website (www.conpub.com.au) for details.

Tel: +61 2 9890 2111
Fax: +61 2 9890 2766
www.conpub.com.au
6d Villiers St
North Parramatta NSW 2151, Australia

Corporate Audio Services

Stand No: T38
Officially launching at ENTECH will be our new range of contractor installation cabinets, FORMULA BLUE. Designed by leading Australian cabinet designer James Verrenkamp, FORMULA BLUE feature Russian birch construction throughout, are loaded with fully imported components and have a variety of fly points as standard. There are thirteen models in the range to meet just about any installation requirement - from a 100watt 5" + tweeter satellite cabinet (FB-10) to a 15"+1.5" 800watt trapezoidal unit (FB-60). The first 3 models feature switchable impedance settings (4,8 or 16ohms) to

ZERO[®] 88

Fat Frog

- 24/48 Control channels (48 in wide mode)
- The ability to control 12 moving lights
- An effects generator
- A fixture library
- 9 pages of 12 submasters
- Softpatch to 512 DMX channels
- Onboard LCD menus
- Floppy disk drive
- Up to 999 Memories
- Super user functions
- Twin isolated DMX Outlets
- Monitor output & keyboard input



\$7250
inc. GST

www.clearlight.com.au



Clearlight Shows Pty Ltd

P: 03 9553 1688 F: 03 9553 4401



**ENTECH
STAND L8**

maximise options in matching amplifier loads to speakers needed within a variety of installation requirements.

Tel: +61 3 9474 1066

Fax: +61 3 9474 1070

www.corporateaudio.com.au

188 Plenty Road

Preston. VIC. 3072, Australia

CR Kennedy

Stand No: E17

CR Kennedy is the national distributor of many fine AV products such as ELMO Projectors and document cameras, Videonics video editing products, Focus Enhancements scan converters, Philips Audio discussion systems.

Tel: Melb + 61 3 9823 1555 /

Syd + 61 2 9 518 9500

Fax: +61 3 9827 7216

www.crkennedy.com.au

663 Chapel St

South Yarra VIC 3127, Australia

Crestron

Stand No: H21

For almost 30yrs, Crestron Electronics has designed & manufactured the world's most advanced remote control systems. Found world-wide in tens of thousands of corporate boardrooms, training and conference rooms, videoconferencing and distance learning centres, entertainment facilities and high tech homes, they allow operation of a wide range of electronic equipment as a single, integrated system. Audio, Video, Projection, Lighting, Screens, Shades and Blinds, Security and Communications Systems can all be operated with the touch of a finger using Crestron remote controls. Crestron launched it's new Australian office on January 1st, 2002. This further reinforces Crestron's commitment to our Australian customers. Our office is based in Melbourne Australia. Our new office supports advanced training, demonstration and meeting facilities, and product distribution. We look forward to mutual growth of business with the finest integrators in Australia.

Tel: +61 3 9480 2999

Fax: +61 3 9480 2988

www.crestron.com.au

62a Albert St,

Preston VIC 3071, Australia

Da-Lite-Gilkon

Stand No: F13

Wilson & Gilkes is the exclusive Australian distributor for Da-Lite, the world's leading projection screen company. On display is a new Da-Lite "Delux Fast Fold Screen". This new generation screens of will soon become the preferred choice of the AV industry. Wilson & Gilkes also manufacture and distribute Gilkon brand audio visual products. The Gilkon projector and plasma mounting systems are also on display. These mounts are designed in consultation with Australian installers.

Tel: +61 2 9914 0900

Fax: +61 2 9914 0901

www.gilkon.com.au

337-349 Newbridge Rd

Moorebank NSW 2170, Australia

Digidesign

Stand No: O35

Digidesign, a division of Avid Technology, is the world's leading manufacturer of digital audio production systems and the winner of the 2001 Technical Grammy Award.

Digidesign the professional music, film, video, multimedia, and radio broadcast industries with tools for digital recording, midi sequencing, editing, signal processing and surround mixing. For more information visit www.digidesign.com

Tel: +61 3 5428 7780

Fax: +61 3 5428 7781

www.digidesign.com

P.O. Box 272

Riddell VIC 3431, Australia

DJ Central HQ &

DJ/MC Bootcamp

Stand No: N1

DJ Central HQ is a world first facility catering to the education (DJ/MC Bootcamp and Universal Beat Mixing schools) and practice needs of both amateur and semi-pro DJs and MCs. Co-Owners, Donté D'one and Caroline Fitzmaurice also produced the recent inaugural DJ EXPO in Sydney, planned as an annual event. While DJ Central HQ offers a variety of courses in Sydney, many courses are scheduled to appear nationally at sponsored locations. DJCHQ offers dedicated classrooms and

personalized practice facilities to students, plus permanently set-up turntable/CD systems for Public Hire from as little as \$10 per hour. DJCHQ, it's da bomb!

Tel: +61 2 9267 3655

Fax: +61 2 9267 5411

www.djbootcamp.com.au

Rear Lane, Level 2, 363A Pitt St.

Sydney NSW 2000, Australia

DJ Link

Stand No: J30

At ENTECH, Musiclink will be demonstrating the long awaited Vestax VRX-200C Vinyl Cutter. DJ KC will be performing showcases on the world famous Vestax turntables and mixers. There will be new release products from Vestax on display, along with the new Pickering range of DJ phono cartridges and accessories. Korg's full Electricbe series of dance production hardware and the Kaoss Pad and Kaoss Mixer will be showcased. Behringer DX series of DJ mixers will be on display, complimented by the superb 203C Truth Monitors and the B300 15" powered speakers. Gemiri's full range of budget to professional DJ equipment will also be on display. See it all at the DJ LINK stand. (J30)

Tel: +61 3 9765 6580

Fax: +61 3 9765 6566

www.musiclink.com.au

PO BOX 650

Ferntree Gully VIC 3156,

Australia

EAV Technology

Stand No: J42

Equipment on display will include audio/video matrix switchers/mixers from Intelix (USA). Video/Audio replay equipment from Alcorn McBride (USA) and the "Instant Replay" Audio Spot Player from 360 systems (USA).

Tel: +61 3 9417 1835

Fax: +61 3 9417 7704

www.eavtech.com.au

19 Peel St

Collingwood VIC 3066, Australia

Entertainment Product Services

Stand No: L11

Entertainment Product Services (EPS) is a young, dynamic wholesaler of Laser, Lighting and DJ Audio products and

accessories from the following manufacturers: LaserPRO International presents a range of compact entertainment laser systems. EPS also distributes Medialas Laser components, and the Lasershow Designer 2000 software, from Pangolin Laser Systems. Nightclub lighting, controllers and accessories from Oze-DJ, Sunlite DMX control Software, and the popular Ortofon turntable cartridges are all on display. ENTECH 2002 is the world wide launch of Spin DJ Technology, a new brand of DJ audio products designed around the principles of sound quality, reliability and innovative features. See the impressive new Spin DJ Technology range for yourself alongside our other leading brands at stand L11. Tel: +61 2 9666 1935 Fax: +61 2 9666 1934 www.epsdj.com 10 Clevedon St Botany NSW 2019, Australia

Enttec

Stand No: S8

This year ENTTEC will be showing its new light desk the EVO. The EVO is the evolution in lighting control, based on new technologies it is geared towards ethernet networking and new lighting systems. The EVO has a large backlit LCD with touch-screen, motorised faders and a very powerful effects engine. Combined with the DMXEtherGate also displayed on the show the EVO can output up to 2048 DMX channels. ENTTEC will also have on display the DMXPlayBack, the low cost DMX show recorder already used around the world in many unattended light shows. Combined with the Remote the DMXPlayBack is your solution to unattended DMX light shows.

Tel: +61 3 9819 2433

Fax: +61 3 9819 2733

www.enttec.com.au

110 Auburn Rd, Hawthorne VIC

3122

Epson Australia

Stand No: L21

On display will be EPSON's extensive range of portable, desktop & installation data projectors.

Tel: +61 2 9903 9080

Exhibitors Listing

Fax: +61 2 9903 9177
www.epson.com.au
70 Gibbes Street
Chatswood NSW 2067

etnow.com

Stand 019
etnow.com is part of Entertainment Technology Press Ltd, the leading European industry resource. Headed by John Offord, this is the place for who's who, for equipment and distributor listings, and worldwide industry news.
Tel: +44 1763 247088
Fax: +44 1763 247108
www.etnow.com
1 Kiln House Yard, Baldock Street,
Royston, Herts SG8 5AY

EVI Audio

Stand No: E35 & C35
Midas-Legend 3000 mixing console combines Midas sound and reliability with unprecedented affordability. New innovative features makes it particularly attractive for all users. Also displayed will be:

Midas Venice mixing, Dynacord-ELA-Promatrix speakers, Little Max, Power Max and AM12 Powered Wedge; Electro-Voice Powered SxA100/SxA180 speakers, QRX speakers, EVID surface mount speakers, EVID 12.1 dual input subwoofer, EV microphones; new Cobalt Radio microphones, RE1 Frequency Agile radio system, FRI speaker systems, X-Line Concert line Array system, Eliminator KW; Klark Teknik-DN9848 system controller, DN1248 active mic splitter, DN9824 system controller; Telex-Telex headsets, new RadioCom BTR 800/BTR 700 wireless intercoms.
Tel: +61 2 9648 3455
Fax: +61 2 9648 5585
www.eviaudio.com.au
Unit 23, Slough Business Park,
Slough Ave
Silverwater NSW 2128, Australia

Fender Australia

Stand No: G42
Fender Australia will be

featuring the Passport range of pro-audio products including wireless mic systems, speaker stands, the P-150 and P-250 complete systems, DC-DC converter, powered and unpowered monitors and releasing a new version of the successful Passport Pro Audio system - Still a leader in its field and totally unique.

Tel: +61 2 9666 5077
Fax: +61 2 9316 7475
www.fender.com.au
P.O. Box 74
Botany NSW 2019, Australia

Flame FX

Stand No: S1
FLAME FX offer the most comprehensive range of 'genuine simulated flame effect' products for Sale & Rental throughout Australia, New Zealand and Asia. On Display will be the SOURCE INTERNATIONAL range of DIABLO FLAME PRODUCTS featuring: Large Flame Machines offering flame heights of 4', 7' & 11'. Basic

Wall Mounted & Freestanding Fittings with a variety of designs (custom finishes now available) Tall Freestanding Bowls on Stands. AT LAST...Basic Flame Generator Inserts for use in custom projects & set designs. New Products this year will include a 20' Flame Machine, an increased range of Wall and Hanging Fittings plus battery operated Table Centrepieces.
Tel: (Syd) +61 2 9550 3002
(Perth) +61 8 9228 3000
Fax: (Syd) +61 2 9550 3102
(Perth) +61 8 9228 4007
www.flamefx.com.au
SYDNEY: 4 / 10-14 Lilian Fowler Place, Marrickville, NSW 2204
PERTH: 11 Old Aberdeen Place, West Perth , W.A. 6005

Fujitsu

Stand No: G27
Fujitsu General's strength lies in the electronics incorporated in each of the plasma displays panels produced. Not only does Fujitsu hold hundreds of

Its time for you to discover why more retailers across Australia being supplied by Entertainment Product Services



Entertainment Product Services is proud to present our comprehensive range of laser products. Manufactured by LaserPRO International, we have a wide range of compact diode laser projectors, such as the LPi-P2 projector, plus large frame gas lasers and accessories for all Entertainment and Advertising applications. EPS is the Australian distributor for Medialas Laserproducts, manufacturers of Catweazle laser componentry. We also distribute the laser control software package that is widely regarded as the industry standard worldwide, Lasershow Designer 2000, by Pangolin Laser Systems.



For nightclub lighting fixtures and accessories, Entertainment Product Services has a wide range of effect lighting. Par cans, Mirrorballs, stands and accessories, manufactured by Oze-DJ.

The range has been expanded this year by the addition of several new lights, which are all on display here at Entech 2002.

For DMX Control packages it is very hard to look past the flexible Sunlite Suite 2000 software, which is also on display here at Entech.



Our line up of DJ Audio products has undergone a major overhaul for Entech 2002. We are extremely proud to unveil at Entech 2002 the Spin DJ Technology range of DJ Audio Products.

To complement our DJ Audio range, EPS is a distributor for Ortofon Turntable cartridges and accessories, widely regarded as the best product of their kind available today.

With our comprehensive product range, Customer oriented service and retailer friendly pricing structure, you should call us today, speak to one of our friendly staff and experience the EPS difference.



ENTERTAINMENT PRODUCT SERVICES

10 CLEVEDON STREET
BOTANY NSW 2019
AUSTRALIA
PH: +61 2 9666 1935
FAX: +61 2 9666 1934

See us at ENTECH 2002, Stand L11
or view our online product database at

www.epsdj.com

patents on the glass technology, we also have over 300 patents pending for the electronic circuitry used to drive the glass substrate. This is what separates Fujitsu General from the competition. Our new one-chip digital video processor (AVM "Advanced Video Movement") virtually eliminates motion artefacts and flicker, improves vertical resolution and reproduces natural movement with ease. The processor also has a built-in line doubler, which converts video signals using different methods of processing for moving and still pictures. The result is smoother images with more natural movement and without visible scan lines.

Tel: +61 2 8822 2500
Fax: +61 2 8822 2501
www.fujitsugeneral.com.au
100 Holbeche Rd
Arndell Park NSW 2148,
Australia

Getlit

Stand No: U8
Australian Distributor of intelligent lighting and professional show equipment. Our products are chosen for their competitive nature both in performance and price. GETLIT is proud to boast the arrival of the "G" range of moving light fixtures and accessories as well as the Ultralight staging system to Australia. Come and experience the GETLIT difference at stand U8 Entech 2002. GETLIT - suppliers of intelligent lighting and professional show equipment. Our products are chosen for their competitive nature both in performance and price. GETLIT is proud to boast the arrival of the "G" range of moving light fixtures and accessories as well as the Ultralight staging system to Australia. Come and experience the GETLIT difference at stand U8 Entech 2002.

Tel: +61 2 9648 3945
Fax: +612 9647 2857
www.totalconceptprojects.com.au
34-36 Adderley Street
Silverwater NSW 2141, Australia

Group Technologies

Stand No: P35
Australian distributors of Nexo, Camco and Quest engineering

products. International guests at ENTECH 2002 include Mick Anderson - Sales & Marketing Manager for Nexo and Reinhard Steger from Camco. On display will be new products from these innovative market leaders and a chance to meet two industry identities at the vanguard of leading edge technology. New offers from Quest Engineering will be previewed that will set a new standard of price vs performance in powered boxes and amplification.

Tel: +61 3 9381 4911
Fax: +61 3 9381 4922
www.gtaust.com
217-219 Albert street
Brunswick VIC 3056, Australia

Hartland Cables

Stand No: E14
Hartland cables is an accredited quality endorsed company. We have been manufacturing cables in Australia for over 50 years. Our cables are manufacturing in many areas of the computer, audio, video, control and instrumentation industries. We also manufacture a wide range of lighting products, moulded plug and leads, appliance connectors, IEC style connectors, heavy duty battery and earthing braids and leads, retractable curly cords, electronic audio and data cable assemblies.

Tel: +61 2 9807 6155
Fax: +61 2 9808 2033
www.cmil.com.au
18-20 Railway Rd
Meadowbank NSW 2114,
Australia

Herkes

Stand No: M1
Herkes have been servicing the needs of the NSW lighting and electrical industries for many years. With a vast range of stock items and specialist expertise, we provide a comprehensive service to schools, theatres, architectural, entertainment and exhibition industries. With a commitment to quality products and service, we are proud to offer top of the range stage and architectural display luminaires, lighting control systems and associated equipment. With a wide range of prestigious projects including The Sydney Opera House, The Powerhouse Museum

amongst others, we look forward to the opportunity of working with you to meet your needs.

Tel: +61 2 9319 5133
Fax: +61 2 9698 3264
www.herkes.com.au
P.O. Box 1213
Waterloo DC NSW 2017,
Australia

Hoisting Equipment Specialists/OZ Blok

Stand No: E8
Hoisting Equipment Specialists have been servicing and supplying the best of rigging, lifting and materials handling equipment to the entertainment industry for more than 16 years. A large range of this gear will be at ENTECH 2002 for you to see. So, come and take a look at the following quality items such as; chain motors, chain blocks, wire rope slings, shackles, climbing rope, harnesses, karabiners, laser levels, spansets and much more.

Tel: +61 2 9584 1177
Fax: +61 2 9584 1201
www.ozblok.com.au
12/63 Norman St
Peakhurst NSW 2210

InfoComm

Stand No: E13
The International Communications Industries Association (ICIA) are the preeminent provider of educational products to the Audio Visual Industry through the InfoComm Academy. The ICIA also provides its members free access to the most comprehensive database of Audio Visual product through its InfoComm IQ service. With over 90,000 products listed from over 700 manufacturers, and the flexibility to create online e-catalogues, InfoComm's IQ service can revolutionise your business. Please come and see us on stand E13 for more information.

Tel: +61 2 9785 4577
Fax: +61 2 9785 4578
www.infocomm.org
P.O. Box 643
Padstow NSW 2211, Australia

Innovative Music

Stand No: C27
One of Australia's Leading Computer Music Specialist

Wholesalers, Innovative Music has been at the forefront of music technology and product innovation for more than 20 years. Innovative Music specialises in bringing "niche" High Tech Music product to the Australian market. Innovative Music is the national Distributor for music technology products that include; RME, Novation Synthesizers, Doepfer, Aardvark, Jomox, MAM, Minnetonka Software, Samplitude, Synthax, Digital Audio Labs, Miditech and Martin Audio. Innovative is also a computer hardware supplier, offering Australian Music Stores a "Turn Key" music solution to on-sell to their customers - complete systems specifically for music requirements.

Tel: +61 3 9540 0658
Fax: +61 3 9562 9374
www.innovativemusic.com.au
Unit 63, 170 Forster Road
Mount Waverley VIC 3149, Australia

Jands

Stand No: T30
On display on the Jands stand will be the latest from ETC, Vari-Lite, Jands, Shure, Soundcraft, Clear-Com, Stage Technologies, dbx, Rane, Crown, JBL, and Stanton. Also on hand will be factory representatives from ETC, Vari-Lite, JBL, Shure, Crown, dbx and Stage Technologies.
Tel: +61 2 9582 0909
Fax: +61 2 9582 0999
www.jands.com.au
40 Kent Road
Mascot NSW 2020, Australia

JVC Professional

Stand No: O25
JVC Professional is showcasing their range of innovative A/V and Presentation products including visual presenters, D-ILA™ projectors, plasma displays, industrial monitors and hard disc based video recorders. JVC have been at the forefront of technology advances in the A/V and Presentation markets for more than seven years. JVC are the pioneers of D-ILA™ projector technology. An amazing projector technology that is able to produce uncompressed SXGA images with silky smooth

Exhibitors Listing

clarity and virtually no pixel structure. Widely recognized as the best projectors for HDTV projection this is a stand A/V and Presentation professional do not want to miss.

Tel: +61 2 9370 8888
Fax: +61 2 9370 8848
www.jvc-australia.com
104 Vanessa St
Kingsgrove NSW 2218

Liftket

Stand No: H4

Liftket produce a wide range of electric chain hoists for stage applications from 125kg up to 12,500kg. They follow the German standard BG V C 1 or VBG 70 for use above people. Also available are variable speed hoists and all sorts of control equipment. Everything is manufactured in Germany and can be tailored to the customers specific needs.

Tel: +49 3425 89240
Fax: +49 3425 892499
www.liftket.de
Dresdener Strasse 67/72
Wurzen 04808, Germany

Lighting By Design

Stand No: 01

An Australian manufacturer of quality gobos. Lighting By Design is Australasia's only manufacturer of full colour gobos, supplying competitors, lighting companies, lighting professionals and end users, with quick service and superb quality. Our gobos have been used at many high profile events such as illuminating the Opera House during the Olympics, the Goodwill Games, and recently the exterior of the Melbourne Museum. Our glass gobos utilise the Beacon process and substrates, standard in Martins range of fixtures. In addition to glass gobos we also manufacture stainless steel gobos and have a catalogue range to suit most fixtures.

Tel: +61 7 5537 7002
Fax: +61 7 5529 2226
www.LBD.com.au
41 Anchorage Way
Runaway Bay QLD 4216,

Australia

Lots of Watts Pty Ltd

Stand No: H19

Lots of Watts turns 10 years old this month. In that time we have grown from a hire company employing 3 people to a hire, sales, installation and service company employing 22. Situated in Rydalmere, near Parramatta, our air-conditioned showroom is always stocked with the latest gear as we represent most of the leading suppliers of pro audio and lighting equipment. We have our own manufacturing facilities that enable us to custom manufacture cases, racks, trolleys, brackets etc. Our hire department can assist you with all your production requirements whether it's for a backyard party or a large concert.

Tel: +61 2 9638 0302
Fax: +61 2 9638 0331
www.lotsofwatts.com.au
2 Bridge Street
Rydalmere NSW 2116, Australia

LSC Lighting Systems

Stand No: i8

LSC will display its new range of maXim lighting controllers including the innovative PATPAD moving light module. The i-series and e-series of dimmers and patch panels will also be displayed along with LSC's now famous DMX distribution products.

Tel: +61 3 9561 5255
Fax: +61 3 9561 5277
www.lslighting.com.au
7 University Place
Clayton VIC 3168, Australia

LSW

Stand No: H16

LSW offers key exclusive brands such as; American DJ, LightEmotion, FBT speakers, ESP Speaker Systems, FAL Lighting, Antari smoke machines & foggers, SHOW 100 line volt products, BOTEX & MOBILAZER lasers as well as a wide range of speciality lighting and effects products.

Tel: +61 2 9568 2300
Fax: +61 2 9568 2300



The advertisement features a collection of audio equipment against a blue sky background. On the left, there is a stack of three silver-faced components: a CD player, a tuner/amplifier with a digital display showing '58.0', and a cassette deck. In the center, two black power amplifiers are shown, labeled 'M500' and 'M1000'. To the right, there are several black speakers of various sizes, including a large floor monitor and several smaller portable speakers. The 'MAGNA SYSTEMS & ENGINEERING' logo is prominently displayed in the upper right, and the 'D.A.S.' logo is on a small white box in the lower right.

SEE US AT ENTECH STAND G32

Magna Systems & Engineering
2/28 Smith St, Chatswood NSW 2067
Tel: (02) 9417 1111
Fax: (02) 9417 2394
Web: www.magnasys.com.au

www.lightsounds.com
 635 Parramatta Rd
 Leichhardt NSW 2040, Australia

Madison Technologies

Stand No: H13
 Tel: +61 7 3890 1733
 Fax: +61 7 3890 1156
 75 Proprietary St
 Tingalpa QLD 4173, Australia

Magna Systems & Engineering

Stand No: G32
 Magna Systems and Engineering imports and distributes a number of major commercial audio products. Chief amongst these are Inter-m and DAS. We have a number of new and exciting products currently on display at stand Number G32 from DAS the new (Compact 1) a fully integrated three-way, self-powered loudspeaker featuring state of the art class "D" amplifier and from Inter-M their new MEQ-200024/9 Multimode Equalizer. You are also invited to hear our new LM series Loop Amplifiers amongst a host of other new and interesting products, see us at stand Number G32.
 Tel: +61 2 9417 1111
 Fax: +61 2 9417 2394
 www.magnasys.au
 2/28 Smith St
 Chatswood NSW 2067, Australia

Major Music Wholesale

Stand No: G38
 Featuring a comprehensive range of professional digital audio product for all recording and production requirements. Products will include: Antares AutoTune and the NEW AVP-1 Vocal Producer which includes AutoTune / Mic Modeller / Dynamics Effects; Lucid Technology AD/DA Convertors and Synchronisation Devices; Creamw@re Professional DSP Soundcards; Digigram Professional Soundcards; Also on the stand will be software from BIAS, Syntrillium & Live
 Tel: +61 2 9545 3540
 Fax: +61 2 9545 3584
 www.majormusic.com.au
 P.O. BOX 366
 Gympie, NSW 2227, Australia

MC Communications

Stand No: B38
 Australian distributors for Philips Communications, security and imaging covering

public address, sound reinforcement, conference and congress and intercom systems. To be launched at ENTECH 2002 will be the new Plena range of P.A. equipment, the new version of profecta digital feedback suppressor and the CCS800 conference system. On the stand will be Michael Pun and Malcolm Briggs.

Tel: 0412 522 100
 Fax: +61 2 9607 2497
 www.philipscsi.com
 P.O. Box 638
 Liverpool NSW 1871, Australia

Mediavision Australia

Stand No: F8
 Specialising in Theatre and Television lighting equipment, Mediavision Australia is the Australian importer and distributor for the following world renowned suppliers; Balcar studio and location Fluorescent Lightning, Colortran Lighting, Control and Dimming Equipment, Ianiro location and studio lighting, Lee Filters lighting filter for Colour Effect and light control, Glass Dichroic Filters and Gobos, Mad Manufacturing entertainment and architectural moving lights, Nu-Light Graphic Laser Systems, and Spotlight theatre and architectural lighting equipment.
 Tel: +61 3 9816 4055
 Fax: +61 3 9816 1661
 www.mediavision.com.au
 4 Monash Rd
 Gladesville NSW 2111, Australia

Meyer Sound Laboratories Inc

Stand No: E30
 For 23 years Meyer Sound has designed and manufactured high quality loudspeaker systems, monitors, equalizers, and sound measurement tools for the professional audio industry. Founded in 1979, the company is a leading supplier of self-powered loudspeaker systems for theatres, arenas, theme parks, stadiums, houses of worship and touring companies. Meyer Sound Australia is the local outlet for sales and service of product.
 Tel: +61 7 3252 4493
 Fax: +61 7 3319 6016
 www.meyersound.com.au
 4 Gordon street

Newstead QLD 4006 Australia

Mole-Richardson Co.

Stand No: C15
 Manufacturers of motion picture television and still photographic lighting equipment. Located in Hollywood, CA for 75 years. Also power distribution, generators and full-service production supply store at www.studiodepot.com.
 Tel: +323 851 0111
 Fax: +323 851 5593
 www.mole.com
 937 North Sycamore Ave
 Hollywood, CA 90038, USA

mondo*dr

Stand No: E6
 Mondo is a group of international publications that target 3 main industry areas. mondo*dr looks at not only the discotheque industry, but any aspect of the increasingly hybrid entertainment technology market. mondo*arc is dedicated to the architectural, retail and corporate lighting sector and as with all the mondo titles, features stunning photography, in depth articles and multi-lingual translations. mondo*stadia tackles the global proliferation of state of the art stadium audio and video installations. The comprehensive coverage of each publication is unrivalled, featuring European and Asian translations and is distributed worldwide to dealers, distributors, manufacturers installers & end users.
 Tel: +44 16 1480 3344
 Fax: +44 161 480 8896
 www.mondiale.co.uk
 Waterloo Place, Watson Square
 Stockport, UK, SK1 3AZ

National Audio Systems

Stand No: C28
 National Audio Systems are importers and distributors of audio products for use in the professional audio field. They are a major supplier of wireless microphone products and Portable PA's and have a large range of microphones, amplifiers, speakers, signal processing equipment and specialty products. Products represented include Amptec, Chiayo, d&b audiotechnik, JMP, JTS, Listen, Maxcable, McLelland, Sound Advance, Soundex and

Wavecom New products to be released at Entech include the Australian release of d&b audiotechnik's range of speaker and amplifier systems. The d&b audiotechnik range is very well established throughout Germany, Great Britain and Europe and will be available here for the first time in 2002. National Audio Systems are based in Melbourne and are contactable on 03 9434 1888.
 Tel: +61 3 9434 1888
 Fax: +61 3 9434 1866
 www.nationalaudio.com.au
 4-6 Bannockburn Road
 Viewbank VIC 3084, Australia

Network Entertainment Technology

Stand No: O11
 Network Entertainment Technology P/L (NET) is a premier wholesaler of Professional Audio, Home Audio, and Effects Lighting Products to the Entertainment Industry. NET was incorporated in March 2001, as a result of a management buy-out of the wholesale division of Greater Union Entertainment Technology (GUET). New products for ENTECH 2002 will include the new model beyerdynamic OPUS microphones, Celestion Cxi and Millenium Loudspeakers, ART Tube and EQ products, Anytronics Smartdim, CLS Compact Lighting Controllers, and PSL Effects Lighting.
 Tel: +61 2 9905 5997 / +61 3 9795 8300
 Fax: +61 2 9905 9440 / +61 3 9795 9377
 www.network-et.com
 Sydney: Unit 2/98 Old Pittwater Rd, Brookvale NSW 2100
 Melbourne: 12 Overseas Drive, Noble Park VIC 3174

N.F. EYE

Stand No: O8
 N.F. Eye is a Melbourne based wholesaler, directly importing reasonably priced Disco & Stage illumination products from high quality / low cost manufacturers based in China & Taiwan. The lighting effects are marketed under the N.F. Eye brand which is synonymous with value for money and innovation N.F. Eye's objective is to continue to supply the best equipment and service to

Exhibitors Listing

clients at affordable price points, and to constantly foster satisfaction of end users. Products: Intelligent Lighting, Effect Light (Low & Regular Voltage), Smoke Machines, Accessories, Controllers (analogue and DMX), Projectors, Scanners, Strobes, Laser, "O" Clamps, Crank stands & Trussing, Disco Sets, Mirror Balls, etc. suitable for mobile, DJ, pub and club situations. N.F. Eye is releasing over 75 new products at Entech 2002 and will be represented by Ms Carla Rigoni and Mr Michael. Tel: +61 3 9417 7630 Fax: +61 3 9417 7631 1st Floor, 140-142 Langridge St Collingwood VIC 3066, Australia

Osram

Stand No: L9
This year our stand will be set up as a Lamp Education Centre. We are running two 1 hour sessions covering discharge lamps and Xenon short arc technology. In attendance will be Peter Jarvis from VIC, Terry Lynch from NSW and Warner Lulofs from QLD. Tel: +61 2 9481 8399 Fax: +61 2 9481 9468 www.osram.com.au 423 Pennant Hills Rd Pennant Hills NSW 2120, Australia

P Audio System Co Ltd

Stand No: J33
Tel: +66 2 811 8880 Fax: +66 2 811 8896 www.paudiosystem.com 98/57-60, 3rd Floor, Moo 11, Buddhamonthon Road Nakornpa 73210 Thailand

The PA People

Stand No: 027
The P.A. People are specialist

contractors in the areas of Sound Reinforcement, Performance Lighting, Audio Visual Systems and Communications. Over the past 35 years our Company has developed a reputation as one of the leaders in these fields in the industry. The PA People deliver innovative client-focused systems for a broad range of organisations including churches, convention facilities, sporting venues, and educational institutions. Our systems can be found in locations as diverse as the Sydney Opera House, Stadium Australia, Brisbane Convention and Exhibition Centre, and the Victorian Parliament. Tel: +61 2 9642 5344 Fax: +61 2 642 5738 www.papeople.com.au 432 Liverpool Rd Enfield NSW 2136, Australia

Penn Fabrication Pty Ltd

Stand No: E19
Penn products on display will include the world's number 1 range of roadcase and speaker box hardware, stage lighting, aluminium trussing, 19" rackmounting equipment and the all new n-case range of case components. Tel: +61 3 9335 6455 Fax: +61 3 9335 6466 www.pennfabrication.com 15 silicon place Tullamarine VIC 3043

Philips

Stand No: H8
Philips Lighting is a leader in high intensity discharge and halogen lamps for the entertainment industry, with a commitment to delivering high quality/ high performance

lamps to the market. On display at the Philips stand will be some of Philips latest product offerings and technologies in SSTV lamps, such as P3 - Philips Pinch Protection, which is guaranteed to create some interest for the lighting professionals. Further products on display include the MSR Short Arc lamps, which are used in the computer-controlled, moving head spotlights, the CDM Short Arc lamps plus more. We hope to see you during the fair. Tel: 1300 304 404 Fax: 02 9947 0325 www.lighting.philips.com Philips House, 65 Epping Rd North Ryde NSW 2113, Australia

Phonic

Stand No: E32
Phonic Corp. has made huge strides in recent years to become a major player worldwide in professional audio. Many new products will be released at ENTech 2002, demonstrating the growth of Phonic. Tel: +61 2 9905 2511 Fax: +61 2 9905 0189 www.cmcmusic.com.au PO Box 1119 Brookvale NSW 2100, Australia

Premier Lighting

Stand No: C10
Hire - An extensive range of equipment in our hire inventory catering to film, theater, corporate and touring. Production - Provide crew and operators from small fashion parades to major TV productions or national concert tours. Audio Visual - venue management specialists with branches from Melbourne to Cairns and

with the latest range of AV equipment and professional venue staff and management software to do the job right. Sales - importers and distributors of Navigator Eclipse, Rental desk, Waves, Pro Color and almost any industry product required. Manufacture - DMX Wire-Less transmitters and receivers. Eliminates the need for DMX cabling between desks and fixtures. Tel: +61 3 9646 4522 Fax: +61 3 9646 5020 www.premierlighting.com.au 433 Graham Street Port Melbourne VIC 3207, Australia

Pro Music

Stand No: B42
Pro Music's original charter, in 1978, was to service the retail industry with a comprehensive range of accessory lines whilst focusing on high quality service. Whilst customer service remains a key element, the company, recognised as a leading national distributor of General Musical Instruments, is now also able to offer an extensive range of PA products. Leading international brands exclusively distributed by Pro Music include Laney, Nady and SKB as well as a comprehensive range of accessories. Pro Music remains true to its wholesale origins and is totally committed to the support and development of musical instrument and PA retailers throughout Australia. Tel: +61 7 3375 6400 Fax: +61 7 3375 6233 www.promusicaustralia.com 12 Enterprise St Richlands QLD 4077, Australia

PHONIC

Come and see the latest in new, affordable pro audio equipment on Stand E32 at Entech 2002.

CMC Music Ph: (02) 9905 2511 Fax: (02) 9905 0189 Email: cmcmusic@cmcmusic.com.au Web: www.cmcmusic.com.au

Connections

PROFESSIONAL AUDIO & VISUAL TECHNOLOGY

TECHNICAL BOOK SALE ; 50% OFF RETAIL – ALL TITLES!

Please join us on stand 019 – with North Sydney TAFE – where you can find our huge book sale, give us news and feedback, arrange subscriptions or dealer bulk sales. We look forward to seeing you!

Exhibitors Listing

Pro Sound News Asia

Stand No: J1

Pro Sound News Asia is a leading trade publication for the professional audio industry across Asia and Australasia. The title is committed to bringing its readers the latest developments in the world of recording and post production, mastering and media, broadcast and sound reinforcement. As well as an extensive news section, Pro Sound News Asia also explores the industry's larger issues in a series of special reports, company profiles and in-depth features.

Tel: +44 20 7940 8500

Fax: +44 20 7579 4011

www.prosoundasia.com

Ludgate House, 245 Blackfriars Rd,

London SE1 9UR, UK

Production Audio

Services P/L

Stand No: Q38

Production Audio will feature International representatives answering all your technical questions on exciting new products such as; KF760 Line Array from EAW, amplifiers, mixers and speakers from Crest Audio and Grand Live digital mixing console from InnovaSON. Also exhibiting Audix microphones for Studio, Live and Installation applications, Countryman's miniature

E6 earset microphone and Gentner's digital video & audio conferencing products and matrix mixers. These are only a small selection of the many products able to provide a solution to your audio requirements.

Tel: +61 3 9415 1585

Fax: +61 3 9415 1595

www.productionaudio.com.au

6-8 Elizabeth Street
Richmond VIC 3121, Australia

The Production Shop

Stand No: i11

The Production Shop is one of Queensland's leading suppliers of sound & lighting equipment and consumables for theatre, film and television. We are the sole QLD distributor for Selecon, among others. We have a high level of stock holdings in our warehouse and showroom, and our friendly and experienced staff are dedicated to providing the best possible customer service. The Production Shop - all you production needs in one place. Key staff at ENTECH - Graeme Hicks - Managing Director, Peter McKenzie - General Sales Manager.

Tel: +61 7 3216 1340

Fax: +61 7 3261 1376

www.productionshop.com.au

82 Berwick St

Fortitude Valley QLD 4006,

Australia

Pro-Stage Australia

Stand No: i20

Pro-Stage Australia is rapidly becoming one of Australia's leading theatrical engineering firms. Since its release in 1999, the Pro-Stage System has established itself as the new benchmark in flexible staging, offering an integrated range which caters for everything from quick-fit podiums to major arena staging. With the introduction of the celebrated Concertina Seating System, Pro-Stage now offers the first dual purpose staging / seating system of its kind. Our high-light at Entech 2002 will be the release of the MATRIX, our unique ground support and trussing system, which is sure to raise a few eyebrows.

Tel: +61 8 8351 4700

Fax: +61 8 8351 4711

www.pro-stage.com.au

28 Maple Ave

Forestville SA 5035, Australia

PWB Anchor

Stand No: F4

PWB Anchor is proud to be the exclusive Australian agents for CM Lodestar & CM Rigging Products. As Australia's leading manufacturer of chain and a leading stockist and distributor of hoisting and rigging equipment. PWB has been a leading supplier to the entertainment industry for

more than 30 years. We have supplied entertainment rigging companies for venues and events including theatres, tours, corporate presentations and concert productions. Be sure not to miss the world recognised CM Motor Training Schools conducted by Raymond Bowman from Columbus McKinnon of the US and sponsored by PWB Anchor, or visit Ray at our stand.

Tel: +61 3 9473 8208

Fax: +61 3 9467 7290

www.pwbanchor.com

441 Grimshaw St

Bundoora VIC 3083, Australia

Q Engineering

Stand No: C19

Tel: +61 2 9938 6311

Fax: +61 2 9938 3575

www.qengineering.com.au

577 Pittwater Rd

Brookvale NSW 2100

Quantegy International Inc

Stand No: G38

Quantegy Professional Media Products will showcase their Products designed for the Professional Recording Industry.

Tel: +61 2 9869 0600

Fax: +61 2 9868 5775

www.quantegy.com

51 Rawson St

Epping NSW, 2121, Australia

Random Audio

Stand No: C38

On display at ENTECH will be a

MANLEY
Klanggarden

SLAM! stand for "Stereo Limiter And Micpre" and it pretty much describes what it will do to most VU meters. We had to put a switch on this limiter to drop its internal VU meters down 3 & 6dB to keep the poor little needles from bending. It'll get LOUD fast (hence the exclamation mark). And on top of being an amazing pair of (actually four) Limiters, and Class A tube mic preamps, it also has masters degrees in DI AtoD and DtoA, VU and PPM but that was too much for an acronym.



The productionshop

CNC



82 Berwick St

Fortitude Valley 4006

Ph: (07) 3216 1340 Fax: (07) 3216 1376

The **NEW CNC Magic Bullet** is the newest par lamp to be added to the Cinemills lighting arsenal. The Magic Bullet features an aluminum casting body that is rugged, lightweight, and serves as a heat sink to distribute and dissipate heat more efficiently. The new design provides a dramatic increase in foot-candle output through an improved parabolic reflector, features easy access for relamping and servicing, and accommodates standard 7.25" diameter accessories.



For orders: sales@productionshop • For website details: www.productionshop.com.au

comprehensive range of L-ACOUSTICS loudspeakers, each designed for multiple applications. L-ACOUSTICS products offer both Designers and Engineers many exciting ways of providing system solutions to any kind of audio application. The range will comprise of ARCS cabinets that incorporate Wavefront Sculpture Technology (WST) by loading the high frequency drivers with the patented "DOCS" waveguide. There is also the multi-purpose MTD108a, MTD112 and MTD115 loaded with coaxial transducers and the dedicated 115FM floor monitor along with the dV-SUB, SB115, MTD118 and SB218 sub bass cabinets.
Tel: +61 408 679 387
Email:

sales@randomaudio.com.au
www.l-acoustics.com
PO Box 2085
Taren Point NSW 2229, Australia

RentalPoint Software

Stand No: C14
At ENTECH 2002 will be the Australian release of the new "ENTERPRISE" version of RentalPoint Software for the VERY serious companies who want to run anywhere from 15 to 500 users in an SQL environment. Come over and see the new version or come over and just discuss, what RentalPoint can now do, to make you company more profitable by better tracking of your inventory, Professional looking documentation or to have some custom Crystal Reports written for your company. So YOU can see the information that you want to see, from your data files.

Tel: +61 0500 895 896
Fax: +61 03 9761 7226
www.rentalpoint.com.au
Australia : PO Box 632,
Bayswater, VIC 3153, Australia
Head Office : PO Box 20030,
Pioneer Park Postal Outlet,
Kitchener, Ontario N2P 2B4,
Canada

Rosco Australia

Stand No: R1
Rosco markets worldwide a range of products for lighting, projection and special effects in club, theatre and television. The new E-Colour+ range of

coated colours together with the Rosco Supergel the preferred standard range of gels, to make a Rosco palette of 532 colours. The Rosco 1700 fog machine is on show for the first time at Entech. Also on show for the first time are the ImagePro gobo system, and the I-Cue moving light adapter. Rosco celebrates 21 years in Australia with products that include theatrical and specialised paints, UV paints, Dichroic glass filters, large photographic backdrops and materials.
Tel: +61 2 9906 6262
Fax: +61 2 9906 3430
www.rosco.com
42 Sawyer Lane,
Artarmon NSW 2064, Australia

SAE Technology College

Stand No: E40
SAE Technology College was established in 1976 in Sydney, and has grown to become the largest Audio Engineering Multimedia and Digital Film College in the world. There are currently 30 campuses worldwide. SAE is truly an international college. Today more than ever before, solid training, careful practice, and creative thinking can give you the leading edge in the multimedia and audio industries. These qualities are the hallmarks of SAE courses, and the main reason why students across the nation and around the globe choose SAE as the best place to study. SAE offers innovative teaching techniques, the best range of state-of-the-art equipment, and a complete package of courses. Above all, SAE graduates have the large SAE college network to support them in finding employment and making contacts in the industry.

Tel: +61 2 9211 3711
Fax: +61 2 9211 3308
www.sae.edu
55-57 Wentworth Ave
Surry Hills NSW 2010, Australia

Schenker International

Stand No: L1
Schenker Australia was established in 1962 in Sydney and provides a complete range of international air and sea freight forwarding services, and logistics services with its own offices in Sydney, Melbourne,

Adelaide, Brisbane and Perth. For ENTECH 2002 Schenker Australia has been appointed as the Official Freight Forwarder and exclusive on-site handling contractor. With annual sales of Euro 6 billion, nearly 32,000 employees and 1 000 offices around the world, the Stinnes subsidiary Schenker is one of the world's leading providers of integrated logistics services, offering land transport, air and sea freight as well as comprehensive logistics solutions and global supply chain management from a single source. For further information or visit our website at
www.schenker.com.au or visit us at our stand L1.

Tel: +61 2 93330333
Fax: +61 2 9333 0496
70-80 Bourke Road
Alexandria NSW 2015, Australia

Selecon NZ

Stand No: L5
New products on the stand will be the hot restrike 575 MSR Pacific complete with DMX 512 mechanical douser. The Pacific range will be on display including production models of the 80V power system. Test focus the Acclaim Axial. Catch up with the Selecon M.D. Jeremy Collins and UK sales manager Nick Gale, as well as representatives from the Australian dealer network & Selecon New Zealand.
Tel: +64 9 360 1718
Fax: +643 360 1719
www.seleconlight.com
26 Putiki St
Grey Lynn Auckland NZ

Show Technology

Stand No: S10
Show Technology will be presenting over fifty new products at ENTECH. Witness amazing new technology from Martin, Clay Paky, MA Lighting, Geni, Elekralite, Studio Due, Kupo and Numark. Show Technology staff and key international guests will be on hand to guide you through this wealth of products. For the first time ever in Australia get your hands on the complete grandMA range of lighting consoles, assess the new Martin MAC2000 Performance, judge the Clay Paky Golden fixtures, check out the stunning range

from Geni... we could fill this entire Show Guide, but we're limited to 100 words!
Tel: +61 2 9748 1122
Fax: +61 2 9748 1499
www.showtech.com.au
102 Derby Street, Silverwater
NSW 2128, Australia

The Showcorp Group

Stand No: F11
The Showcorp Group consists of three specialist entities that work independently or as a team, depending on specific requirements. Showcorp Production Services, an accomplished special event production company providing speciality production services for all aspects of events, exhibitions and technical productions. The Great Outdoor Lighting Company produces and manages large-scale multimedia productions using automated search lights, digital sound, large format projections, high powered lasers and pyrotechnics. Showcorp Video Solutions utilises the latest digital technology to create shoot-and-edit packages that include multi-media and multi-faceted slide show production, for all corporate video requirements.

Tel: +61 2 9889 8600
Fax: +61 2 9889 8500
www.showcorp.com.au
Unit 3, 31-33 Chaplin Drive
Lane Cove NSW 2066

Sony

Stand No: T25
Sony's stand will feature all the latest Display and Pro-Audio products. A range of new Plasma monitors, ultra-portable, portable and installable projectors, including some with network features, will be displayed. Pro-Audio products on show will include the DMX-R100 Digital Mixer with the latest software updates and a range of new install-oriented products. A feature of the Sony Stand will be regular demonstrations of Sony's new E-Conference systems, for easy presentations in a networked world. Come and see the latest advances in corporate meeting technology at Sony.
Tel: +61 2 9887 6666
Fax: +61 2 9887 4351
www.sony.com.au

33-39 Talavera Rd,
North Ryde NSW 2113, Australia

Stage & Screen Travel

Stand No: K1
Stage & Screen Travel & Freight is the leading provider for the entertainment and creative industries. Owned by Flight Centre with enormous buying power, we have negotiated special entertainment rates for airfares, accommodation and car hire & other travel related services. Our offices are in Sydney, Melbourne, Brisbane, Auckland & Los Angeles.
Tel: +61 2 9383 4544
Fax: +61 2 9383 4577
www.stageandscreen.com.au
Fox Studios Aust, Bldg 23, 28 Driver Ave
Moore Park NSW 1363, Australia

Staging Rentals

Stand No: H11
Staging Rentals is your complete staging services, providing products and services to the event & exhibition market in four main areas 1.) rental of set and environment equipment, 2.) set construction, 3.) production management and 4.) crewing. Included in the rental products are drapes, staging and rigging, mobile stages, revolving stages, flats, lecterns, bars, dancefloors, bollards, cycloramas and star cloths. We also provide professional design, coordination and installation services and our woodwork and metalwork shops can build anything. New products include unique "no mess" snow machines, scissor-lift stage and new telescopes.
Tel: +61 2 9519 6300
Fax: +61 2 9519 6489
www.stagingrentals.com.au
1 Pyrmont Bridge Road
Camperdown NSW 2050, Australia

Sunlec International - Bosbox

Stand No: Q1
BOSBOX now solves the problem of providing safe, temporary power to the workplace. Whether it's for building sites, offshore mining, industrial or recreational use,

Bosbox will do the job. All Bosbox modules are made from heavy duty 10mm rubber to stand up to rugged on-site treatment - offering protection against UV, heat, oil, acid, water and dust - and all in accordance with protection category IP 66. Available in a variety of sizes, each Bosbox offers a range of combinations to suit your individual needs. And for multi-level, cascading coverage, several Bosboxes can easily be linked together. Each Bosbox is manufactured in Australia to exacting standards, including AS3000 wiring rules. And if you need a Bosbox with special plugs, sockets, switches, or even a transformer for specific voltages, we'll build you one. Fast.
Tel: +61 8 9434 1933
Fax: +61 8 9418 4800
www.bosbox.com
31 Port Pirie St
Bibra Lake WA 6163, Australia

Syntec

Stand No: 038
We can't keep these products a secret any longer. We want ENTECH visitors to know how proud we are of our quality installation and sound reinforcement range. Cloud (UK made): installation zone mixers, integrated mixer amps, fitness centre audio, with modules and accessories for all products. Tannoy: ceiling, wall mount, in wall and SRF speakers. Sennheiser RF and InfraRed products and introducing GuidePort, their latest innovative information system for museums, galleries and theme parks. All these brands are well established world wide, and are renowned for value, reliability and performance. Also available will be our latest comprehensive catalogue, 'Syntec Contracting 2002'
Tel: +61 2 9417 4700
Fax: +61 2 9417 6136
www.syntec.com.au
60 Gibbes St
Chatswood NSW 2067, Australia

TAFE, North Sydney College of

Stand No: 019
The North Sydney college of

TAFE Film and Television Section stand will showcase the diversity of training on offer. It will include input from our major sponsors and display how their support has allowed us to take our position on the leading edge of training for today's film, television and sound industries. Our expert staff will be on hand to discuss your training needs whether you are a major organisation or a keen individual. Detailed information on our mainstream and short courses will be available.
Tel: +61 9942 0695
Fax: +61 2 9942 0686
www.filmandtvcourse.info
213 Pacific Hwy
Gore Hill, 2065, NSW

TAG
Stand No: 030
Flying dominantly above the Technical Audio Group stand is the all-new Martin Audio Wavefront Line Array - Martins consolidation of their vertical component stacking and LongThrow experience in a Line Array format. A&H have added further to their flagship ML Series with display of the new ML3000 as well as the larger ML5000. A wall of MixWizards is a must see! QSC are unveiling their first 8-channel amplifier as well as additions to the RMX and ISA. Euphonix have chosen Entech to break some very high profile news and are displaying the remarkable R-1 48 track 96kHz Hard Disc recorder. Also at TAG don't miss Australia's first glimpse of the Marantz portable CD Recorder, LA Audio's PubMix, Klotz Tour-Lock MultiCore system, Belgium waffles and Italian coffee.

Tel: +61 2 9810 5300
Fax: +61 2 9810 5355
www.tag.au.com
558 Darling Street
Balmain NSW 2041, Australia

Tascam

Stand No: G38
TASCAM will be launching the SX-1, Intergrated Audio Production Station: in no doubt, one of the first affordable products that is designed as an all-in one solution to

meet the demands of professional-quality music production and film/video post production, without the need for a dedicated computer with all its disadvantages. TASCAM will also preview the new DM-24, the World's most powerful Digital mixing console in conjunction with the Award Winning MX2424, 24-track recorder with the new VERSION 2.1 Software with 9-pin control and the long awaited MX View.
Tel: +61 3 9672 2400
Fax: +61 3 9672 2499
www.tascam.com.au
280 William Street,
Melbourne, VIC, 3000 , Australia

Technical Direction Company

Stand No: i4
Technical Direction Company, suppliers of Superior Audio Visual solutions for Corporate Events. Specialists in Data Projection, Switchers, Videowalls, Plasma and LED technology. ICIA accredited company with over 20yrs experience.
Tel: +61 2 9698 5588
Fax: +61 2 9698 5533
Web: www.tdc.com.au
36-42 Chippen Street
CHIPPENDALE NSW 2008

The Electric Canvas

Stand No: C7
Australia's specialist large-format projection company offering the French PIGI system capable of projecting high quality stills and scrolling images onto buildings, structures and screens varying in size from 15m to 100m or more. The company is based in Sydney and has a permanent art department to design and produce images for all large-format projectors including PANI. The Electric Canvas has been engaged on many notable events both public and corporate including the Opening and Closing Ceremonies of both the Sydney Olympics and Paralympics. On display at Entech will be the new PIGI-S, a 2.5 kW HMI projector with double scrolling film-strips and dichroic colour-changing, designed specifically

for the theatrical and corporate markets.

Tel: +61 2 9437 9588

Fax: +61 2 9437 9984

www.theelectriccanvas.com.au
27 Cleg St

Artarmon NSW 2064, Australia

The Resource Corporation

Stand No: A33

Featured Products: ARX

Professional Sound Reinforcement Products, K & M Stands, Eurocable High Quality Professional Cable, Link Multipins & Connectors, Prolinx Custom Made Cable Systems, Sergio Cazzolaro Staging Systems, Trantec UHF Systems. The Resource Corporation not only Imports and Distributes an impressive array of high quality products such as the German König & Meyer Stands, but is also able to provide Turn-Key connector, cabling or stand solutions to most areas of the Music Industry, be it recording, pre and post production, broadcast or live. Distributing such well respected brands as

ARX, Eurocable, K&M Stands, Link, Trantec and Sergio Cazzolaro, has earned TRC the reputation as a "Can Do Company" This coupled with the in-house hand made custom cable building service (Prolinx) ensures that our Customers always get the best quality solutions at a competitive price.

Tel: +61 3 9877 8233

Fax: +61 3 9877 8244

www.trc.com.au

6 King Street,
Blackburn Victoria 3130

Total Production

Stand No: E6

Launched in 1998 and now published twelve times a year, Total Production is the definitive magazine for the international live event production industry. The magazine, which is distributed worldwide to a professional readership across ninety countries, primarily covers applications of sound, lighting, video and staging technology in concert touring,

theatre and special events. Key to the success of the title has been the often exclusive nature of its production reports, supported by some of the best photography in the business. Readership ranges from production/artist management and front of house technicians, to show designers and technology innovators.

Tel: +44 16 1480 3344

Fax: +44 16 1480 8896

Waterloo Place, Watson Square
Stockport, UK, SK1 3AZ

Treotham Trading

Stand No: C12

Treotham Trading will be exhibiting a large range of rectangular and circular multipole connectors from various quality European manufacturers. An alternative to the Jacob's Ladder style cable management on light trusses is the new IGUS zig zag energy chains, drop by and look for yourself. We also have a large range of flexible cables tailored

to the stage and lighting industry. Treotham Trading are the exclusive Australian agents for ILME Multipole connectors, HELUKABEL flexible cables, HUMMEL cable glands, IGUS energy chain systems and polymer bearings, PMA flexible conduit, Schleicher and PILZ safety relay's and WENGLOR sensors.

Tel: +61 2 9907 1788

Fax: +61 2 9907 1778

www.treotham.com.au

38/9 Powells Rd

Brookvale NSW 2100, Australia

ULA

Stand No: S19

Presenting the worlds leading entertainment lighting products - ULA shows-off the best from High End Systems, SGM, Griven, Avolites, AVR, Abstract, Optikinetics, Sagitter, LeMaitre, Citronic, Infinity, Litecraft and Technics. The world's two leading manufacturers of touring lighting consoles present their latest. From

ENTECH

2002

THE OPENING PARTY! MONDAY FEBRUARY 4TH

Invitation only! Get yours FREE, at the show on Monday

Brought to you by:



Exhibitors Listing

Avolites Diamond4, and Flying Pig Systems WholeHog3. Representatives from both companies will be on hand to demonstrate these exciting new consoles in full. Franco Zaghini of SGM will present the Giotto400 spot and wash fixtures which have received wide acclaim, and New from Sagitter is the MiniScan2001 MSD250W moving mirror. X.Spot and Studio Beam will feature in the High End display, High End's Leigh Anne Aitken will show the fantastic possibilities of these products. Griven's Danilo Bettinazzi will show off the company's comprehensive range of outdoor colour changing fixtures. Optikinetics and AVR complete the ArchiVision Zone. The full range of SoundiVision products will be on show including many new releases from Infinity and Citronic, building on the success of the this concept. Tel: 1800 648 111, Qld +61 7 5510 1333, Vic +61 3 9310 4999. Fax: Qld +61 7 5510 1344, Vic +61 3 9310 4655 www.ula.com.au Qld (Head Office): 11 Distribution Ave, Nerang, Qld 4211 Victoria: 2/40 Assembly Drive, Tullamarine, Vic 3043

Vectorworks

Stand No: C17
ENTECH 2002 will provide the first public presentation in Australia of VectorWorks SPOTLIGHT, the preferred CAD solution for lighting designers and people in the entertainment industry. SPOTLIGHT adds an advanced feature set to VectorWorks making it easy to create light plots, visualise design concepts and automate paperwork. Coupled with RenderWorks, the photorealistic rendering add-on, SPOTLIGHT can produce stunning 3D renderings of your designs. To learn more, visit stand C17 and sit in on one of our presentations. Tel: +61 2 8338 8622 Fax: +61 2 8338 8655 www.ozcad.com.au PO Box 726 Rosebery NSW 2018, Australia

Weifa Stage Roof Factory

Stand No: H20
Contact XIE RUN ZHONG or EDWIN.

Tel: +86 20 84775956
Fax: +86 20 84715218
www.weifa.com.cn
105 National Way, Section of Xiegun Highway No. 45 Panyu District, Guangzhou Guangdong P.R. China

Wybron

Stand No: P1
From the first scrolling color changer in 1980, which pushed forward the boundaries of lighting design, Wybron has invented and manufactured high-tech lighting products for the entertainment lighting industry. Wybron's innovative approach to lighting has produced a continuous stream of products and services that have become the industry standards. The invention of the scrolling color changer has led to the development of other products that dominate the stages of the world - such as the Wybron CXI, the Coloram II and the Forerunner. Constant innovation has led to the formulation of new products like the ColorExpress Gelstring, Eclipse Iris Dowser, Goboram II and Autopilot II. Tel: +719 548 9774 Fax: +719 548 0432 www.wybron.com 4830 List Drive Colorado Springs CO 80919 USA

Yamaha

Stand No: L30
Yamaha will display the brand new DM2000 digital mixer - the first true 24 bit 96KHz digital mixer featuring surround mixing and monitoring, 96 mix inputs, DAW control, full automation, machine control, built in surround effects and plug-in KS waves effects. Alongside will be PM1D running the latest firmware revision, the updated DME32 digital engine and the AW range of digital workstations. New Analog products include additions to our range of powered speakers and powered mixers, dedicated installation mixers & amplifiers and the Audio Technica range of live and installation microphones. Tel: +61 3 9693 5111 Fax: +61 3 9696 4579 www.global.yamaha.com PO Box 268 South Melbourne VIC 3206, Australia

Late exhibitors and amendments will be noted on an insert sheet available at the show.

HOW TO REGISTER!

REGISTRATION OPENS AN HOUR BEFORE THE SHOW.

ENTECH is open 10am to 6pm,

Monday Feb 4, Tuesday Feb 5, Wednesday Feb 6th, 2002.

Entry is free after trade registration.

- Register online at www.conpub.com.au, or walk up and register on the day.

*This is a private event. The organisers reserve the right to refuse entry to anyone, for any reason.

Gloves and Accessories for the Entertainment Industry



Gloves
should
fit like a
glove...

Setwear
understands
that there are
different sized
hands, and that
you want a glove to last

Ezy-fit (pictured) and Pro-Leather Gloves
Sizes from Sml to XXL

*Also available - HiHeat Gloves - to
withstand temperatures approaching 1000°C



Setwear gloves are available from Connections on Stand O19 at ENTECH



You can select and pay for your seminar as you register to attend Entech. If you have already registered, simply re-register and include the seminar information. Pre-register at www.conpub.com.au • Or, call 1-800-635-514

Seminar Schedule:

Introducing the Line Array						
90 seats	\$18	Code: A1	Monday	10:30am	Dur: 1.5hrs	Room: SR 1
Digital Live Sound Mixing						
90 seats	\$18	Code: A2	Monday	1pm	Dur: 1.5hrs	Room: SR 1
Stacks and Racks						
90 seats	\$18	Code: A3	Monday	3:30pm	Dur: 1.5hrs	Room: SR 1
Location Sound Recording						
90 seats	\$18	Code: A4	Tuesday	10:30am	Dur: 1.5hrs	Room: SR 1
We Are Surrounded						
90 seats	\$18	Code: A5	Tuesday	1pm	Dur: 1.5hrs	Room: SR 1
The Changing Face of Post Production						
90 seats	\$18	Code: A6	Tuesday	3:30pm	Dur: 1.5hrs	Room: SR 1
Audio Integrators Day						
90 seats	\$54	Code: A7	Wednesday	10:30am	Dur: All Day	Room: SR 1
DJ/MC Bootcamp						
40 seats	\$54	Code: DJ	Wednesday	11am	Dur: 2x 2hr	Room: UH1

Introducing the Line Array

Cut through the hype to hear about where and how to use (and not to use) line array technology.

In this seminar, Glenn Leembruggen will take you through the definition of what a line array is and how they can be extremely handy tools in delivering constant frequency response and levels to all listeners in a venue. Hear the theory, and then find out about the products. Representatives from some of the Line Array speaker manufacturers will then be invited to talk about the acoustic properties of their products. Glen will then lead a question time with the representatives on hand.

Digital Live Sound Mixing

Digital mixing is making its way into live sound mixing. This seminar takes a look at who is doing what in this field and how it is done.

This seminar will look at some of the equipment currently available for Digital Live Sound Mixing – so what is this mixing? Full digital control over audio, INCLUDING conversion of audio from analogue to digital (A to D) then back again (D to A) for conventional line level outputs. Full recall ability of every parameter, instant 'snap' resets by cue. Some may offer timed or 'dynamic' automation where fades are all automated. Topics to be discussed in this seminar include what mixer options are currently in the marketplace, and what are the main differences between them; why the HUGE price difference between Large and Small format; 24 bit processing explained; how redundant are these desks?; What are the advantages?; What about digital control over analogue audio, (as done by Cadac)?; is there REALLY a latency (processing time makes a delay) issue – and how to defeat the problem.

Stacks and Racks

Talking turkey' about what they use and why. PA systems, amplifiers and signal processors will all be under the microscope.

"We've now got the Line Array. Is the conventional point source distributed sound system dead? Far from it! This seminar examines latest equipment and trends: we will ask some questions of some speaker cabinet experts. Things you can expect to find out include:

STACKS-

- What is the 'Q' or optimal distribution of various speaker cabinets?

- Which frequency is the centre frequency for the 'Q' of a given model?
- How wide is the frequency band that can be accurately distributed?
- How hard is it to control 'spill', especially bass?
- Are there directional bass cabinets? (How do they work?)
- Can a bass dispersion be controlled electronically?
- How do various model boxes from one vendor work together - if at all?
- What determines which models can be used together in an array?
- What are the lessons we can learn in arraying boxes? Things to do, not to do...
- What are the benefits of acoustic coupling some models in an array?
- What is comb filtering and how can some arrays not work well together?
- What are the major advances in cabinet design for each manufacturer?

RACKS-
From 600 watts to 5000 watts. How has amplifier design improved?

How much reliance do we place on electronic processing today?

Is there a speaker cabinet that can be used with a basic electronic crossover?
STACKS AND RACKS

What is the optimum amplifier configuration for the leading speaker cabinet from each manufacturer? Are there any hidden benefits in selecting one amp brand over another?

Location Sound Recording

Microphone techniques, choice and tricks for capturing sound on location. Recording location sound for film and television presents many challenges for the sound recording team. From achieving the best microphone placement, without the microphones being seen, to deciding when to use radio mics instead of an overhead boom. What are the roles of the sound recordist and boom operator on set and what are the politics of working on a film set? We will look at some of the equipment required on today's shoots, including communications systems. Hear some of the industry's leading location recordists pass on some of their knowledge and handy hints. Presented by the Australian Screener Sound Guild.

We Are Surrounded

Mixing for Surround is becoming a common necessity. This seminar looks at the art of good surround mixing with tips and hints.

The Sound Mixer is increasingly called upon to produce a soundtrack which envelops the listener, and takes advantage of the available Surround Reproduction Systems. This seminar examines the challenge of mixing for the surround environment, and compares the approach taken across the various applications of Film, TV and Music. This seminar will be led by Chris McKeith from the Australian Film, Television and Radio School, and will feature discussions and Q&A with some leading mixers in the Film, TV and Music areas.

The Changing Face of Post Production

The evolution of sound production technology is changing the roles of the sound editor and mixer. This panel discussion led by Scott Watkins-Sully will include some leading people in the industry as they investigate what is happening in Australia and abroad, and look at where we are heading.

As sound postproduction technology is rapidly and constantly changing, are the roles of sound editor and mixer as clearly defined as they were in the past? How are these roles defined in Australia in comparison to other countries? How are the roles effected by developments in release and broadcast formats? Scott Watkins-Sully from North Sydney College of TAFE Film and television, chairs a panel of experts that will broach the topic. The panel will include representatives from the sound editing and mixing disciplines as well as educators and representatives of major manufacturers of postproduction equipment.

Audio Integrators Day

It used to be easy. 100v line installations still underpin commercial audio, but now we have dsp control, hearing loops, and precise 'measurement and test' software. This is a whole day series of seminars, specifically for the audio installation community.

"This day will be a collection of seminars for people wanting to get the latest on audio integration in all its variations. The sessions include all about INDUCTION LOOPS (for the hearing impaired), some new and unusual loudspeaker concepts, large scale DSP control of audio, and routing & controlling audio.

Basic operation of an Induction Loop -

Why Induction Loops? - Where are they used - How do we specify systems - The problems with traditional approaches - How do we install systems - Technical capabilities of modern loop systems - some underlying technology for achieving these modern systems - Interference and debugging.

There are some neat new ways to distribute audio with loudspeakers. We will ask a few manufacturers to show some of the 'alternative' speaker applications.

With the large scale DSP control of audio, we investigate the latest developments with Peavey Media Matrix, Yamaha DME 32 and Mackie Sound Palette.

Routing and controlling audio is becoming a very complex field. We will take a look at some of the options from Creston, AMX, QSC & RAVE (audio over Cat 5 cable) and CROWN IQ (Smart control of amps)

Finally, we will take a look at some miscellaneous interesting devices and systems. This day will be a must for anyone serious about integrated audio.

DJ/MC Bootcamp

For the new and aspiring DJ. Donte talks about laws, fees, marketing, equipment techniques beat and drop mixing. For venue, radio, and mobile DJs.

"So you want 2 B a DJ? What type? Where Do U Start? / Pro's and Con's and 10 steps on how to B the Best! Choose your weapons, the latest in DJ Equipment from the Big Boys plus surprise guest speakers such as Current DMC Champ Samira and former 2 time DMC Champ Kuya, plus reps from Denon, Technics, Citronics, Numark, Nightlife Music Video, SBA/Pulse Music
The second session: (3pm to 5pm) is preparation for Club work, Club MCing Pros and cons, Intro to radio, Intro to Producing, Beat Mixing (myths and truths), Mobile lighting Set-up and Show, Nightlife and SBA Music DVD/VCD Demos, Q & A and come meet your local and interstate DJ equipment retailer. The Bootcamp will include Door Prizes and Boot Show bags filled with free stuff from Numark, Stanton/Shure, Gemini, SBA/Pulse Music, Central Station, Night Life Music Video, Sanity Dance Arena and Many more!"



You can select and pay for your seminar as you register to attend Entech. If you have already registered, simply re-register and include the seminar information. Pre-register at www.conpub.com.au for quick entry to the show.
 • Or, call 1-800-635-514

Lighting Designer Forum

Television, theatrical & architectural lighting design specialists talk about the different approaches & requirements for each industry...

Is lighting for theatre so very different these days from lighting for television and for buildings? What have these disciplines learned from each other? This seminar will have a panel of representatives from various parts of the industry. Graham Walne, long time theatre LD will host this seminar with guests Dale Martin and Gordon Richmond.

The Art of Designing with Moving Lights

Designing with moving lights is not as simple as it sounds. LDs will take you through some of their tradecraft to show how to make the most of the technology...

Straight theatre hasn't yet embraced the use

of moving lights in significant quantities but surely this time must come? Equally, as competition in the production and rental of these devices grows they must also become more affordable to smaller groups. This session, with contributions from suppliers & users, both explores the latest developments and explains the techniques of designing with these devices. If one instrument can replace several in conventional rigs are they more affordable? Are they quiet enough for small venues & quieter works? Come & find out.

More with Less

Tricks of the trade for designing lights with few resources. LDs talk about economy of rigs, & how shows can be well done with less...

There is a view that lighting in big venues and with a big rig is easier than in a small venue and with a small rig. In these latter circumstances sometimes the throws are too short for the beams to blend, sometimes there is insufficient equipment to even cover the stage. In small rigs each instrument has to count. Come and talk to some designers who have experience in this area and find out how to make a limited rig go further.

Colour and Projection

A look at traditional lighting effects including colour, gobo and effects projection and how to put them to their best use...

Few aspects of lighting have as much effect, and give emergent designers as much trouble, as the use of colour. In this seminar designers will explain their techniques for the choice and use of colour and its effect upon emotions, costume, set and music. In addition this seminar will also incorporate guidance on the use of effects and scenic projection and will illustrate both the latest techniques and some simple ideas too.

Working with LX People

The roles of lighting technicians and designers have evolved with the growth of technology. This seminar looks at what is appropriate training for designers and technicians, where is the division of responsibility is shifting, and various other issues relating to the future of working with lighting...

The roles of lighting technicians and designers have evolved with the growth of technology, as this changes what does the future hold? This seminar will ask the leading lighting teachers and ongoing education of designers and technicians. Important questions include how technical should an LD be? With so many technicians also doing lighting is the division blurring...what do other trades think of lighting people, especially set designers...should set designers have more training in lighting...what influence on theatre lighting people has rock and roll been...how do LDs and technicians see the industry going? What is likely to be the growing influence of cheaper and better video projection...will this do away with scenery?

Seminar Schedule:

Lighting Designer Forum

90 seats \$18 Ccde: L1 Monday 2pm Dur: 1.5hrs Room: SR 3

The Art of Designing with Moving Lights

90 seats \$18 Ccde: L2 Tuesday 11am Dur: 1.5hrs Room: SR 3

More with Less

90 seats \$18 Ccde: L3 Tuesday 2pm Dur: 1.5hrs Room: SR 3

Colour and Projection

90 seats \$18 Ccde: L4 Wednesday 11am Dur: 1.5hrs Room: SR 3

Working with LX People

90 seats \$18 Ccde: L5 Wednesday 2pm Dur: 1.5hrs Room: SR 3

Venue Design Forum

Anyone interested in knowing about the ins and outs of designing production spaces and buildings should come to this panel discussion, and hear the leading consultants talk about their tradecraft.

The panellists confirmed so far are Denis Irving (Legend), Tony Youlden (NIDA), Andrew Nichol (Arup Acoustics) and host Graham Walne (Theatre Consultant). The discussion will look at why we have been building theatres for 4000 years yet every new one is different. Important issues like 'what lessons can the past teach us', and 'what should we anticipate in the future' will also be addressed.

Rigging Workshop 1

For venue techs, festival directors, and anyone else that needs an update on the laws governing this skill.

This seminar is for venue techs, festival directors, production managers, etc - people who are exposed to risk management OH&S and have heard all the myths but want the facts. The session will start with a lecture by Tiny Good (one of Australia's most experienced riggers and manager of Showtech Rigging). Also speaking will be Ian Messner/Roger Cameron. This will be followed by a Q&A where you can sort out those rigging safety questions that have been unsolvable until now.

Rigging Workshop 2

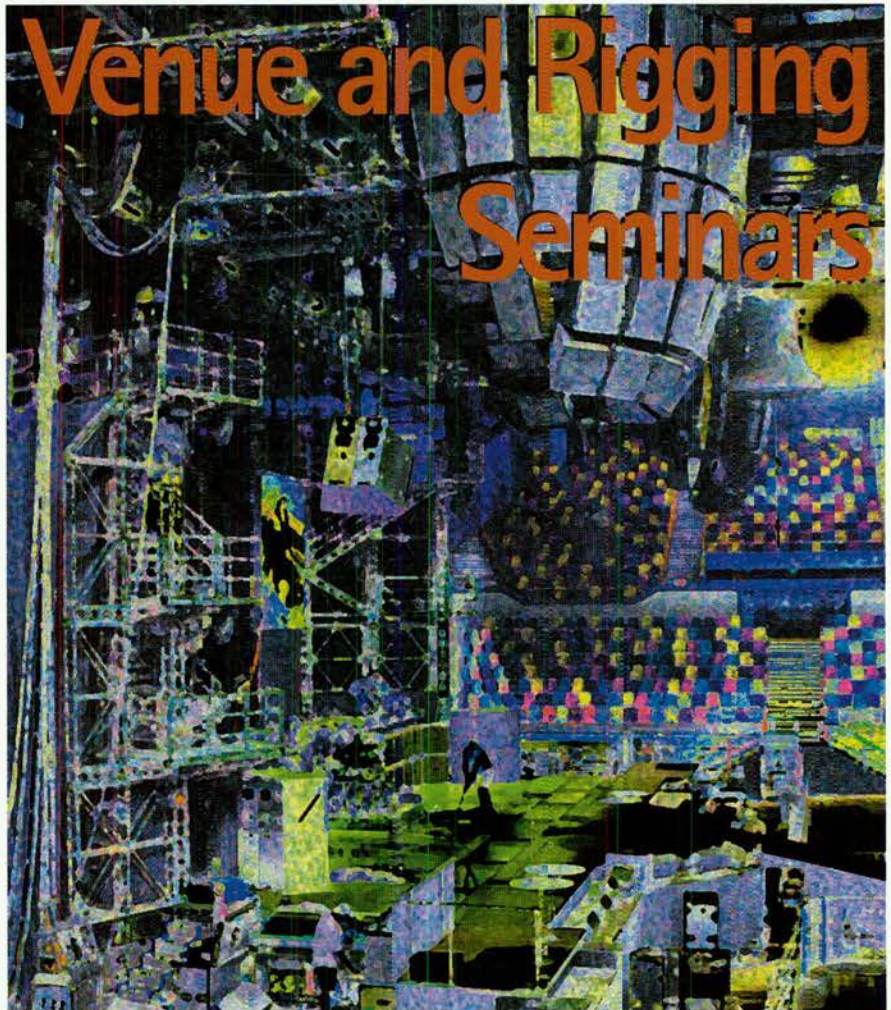
For production companies, riggers, operations crew etc. Discuss problems and trends.

This session will be a panel discussion and forum to discuss where we are going (and where we should be going) as an industry - the regulations, the insurance, licensing, training, etc. Ideal for lighting, sound, touring companies, riggers, venue operations people and OH&S managers. The discussion panel will include riggers, and overseas distributors with Tiny Good (Showtech Australia) chairing the discussion. The panellists will present ideas, new technologies and products, and discuss testing, inspecting, and alterations to standards both here in Australia and around the world. Some key issues will be- Steel vs. Synthetic, hoists and secondaries, fall protection, routine maintenance and inspection, and licensing. If you rig, design, or manage a venue, you need to be here

Motor Training School

Hands on disassembly and re-assembly of a CM Lodestar chain hoist to demo trouble shooting. Proper use of chain motors.

This two-day intensive training session is a comprehensive workshop style presentation of the dismantling and reassembly of a CM Loadstar "L" Model Loadstar 1 ton chain motor.

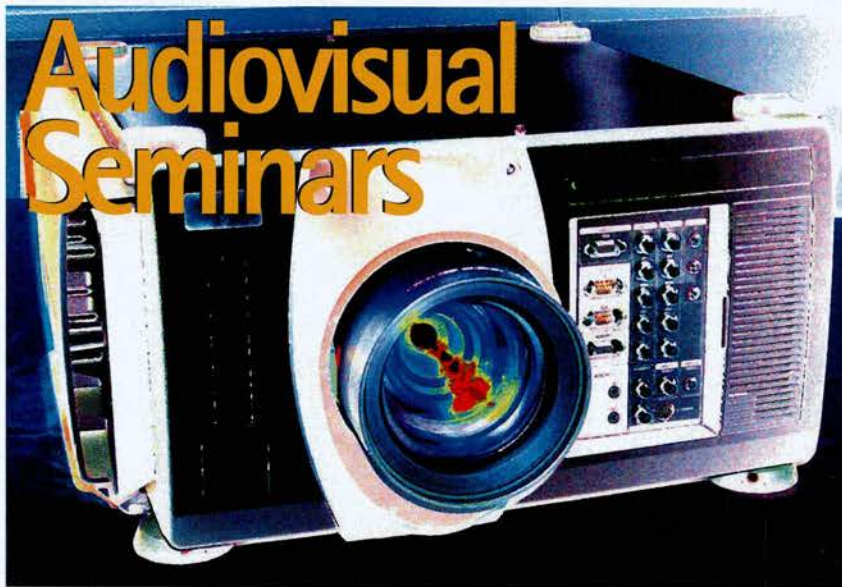


The session is world recognised and involves a small class of 24 people or less so that individuals can have personal hands-on experience. The workshop will be supervised by Raymond Bowman from Columbus McKinnon - one of the world's largest suppliers of entertainment chain motors and rigging products. After successfully completing the full program, each attendee will receive a Columbus McKinnon endorsed certification of completion of the course as well as a Columbus McKinnon Package that including full product binder. Tools will be provided. (general canteen type lunch services are available on the ENTTECH Trade Show floor)

You can select and pay for your seminar as you register to attend Entech. If you have already registered, simply re-register and include the seminar information. Pre-register at www.conpub.com.au for quick entry to the show.

Seminar Schedule:

Venue Design Forum	90 seats	\$1E	Code: G1	Monday	11am	Dur: 1.5hrs	Rcom: SF 3
Rigging Workshop 1	90 seats	\$1E	Code: R1	Monday	2pm	Dur: 1.5hrs	Rcom: SF 2
Rigging Workshop 2	90 seats	\$1E	Code: R2	Tuesday	2pm	Dur: 1.5hrs	Rcom: SF 2
Two Day Motor Training School	24 seats	\$1E9	Code: Motor	Mon/Tues	All day from 10:30am		Rcom: LHI



Audiovisual Seminars

You can select and pay for your seminar as you register to attend Entech. If you have already registered, simply re-register and include the seminar information. Pre-register at: www.conpub.com.au for quick entry to the show.
 • Or, call 1-800-635-514

The Future of Systems Integration and ProAV Technology

A look at where AV technology is headed, and what to expect in the near future. This seminar will be hosted by leading international AV consultant Gary Kaaye.

The ProAV market is in the midst of a transformation from Analog to Digital, from Boxes to Systems, from complexity to simplicity. Gary Kaaye, founder of Kaaye Consulting, a ProAV marketing and technology consulting firm, editor of KNews and writer for Wirec Magazine provides a unique perspective into where he believes the ProAV market is headed and how dealer sales and technical teams can benefit. This two-hour session will provide you with a look into the future of integration from: wired to wireless, analog to digital, and everything in between.

Trends in Facilities

A look at the latest trends in systems and communication services.

"Conference, training and meeting rooms are now very different to the rooms of the last decade. The tools and services required are more diverse, and the rooms must also function as powerful remote communication facilities, in addition to supporting local presentations. This presentation will look at the basics of modern presentation facility design, and survey the

newest trends in systems and communication services. Topics will include :

- Projection and display facilities, rear projection, front projection, plasma display panels
- Audio systems, microphones, echo cancellation
- Control systems, touch screens & management systems
- Video and audio teleconference services
- Systems integration and installation approaches
- Real ways to integrate WEB & IP information links

The latest trends will trickle down to all, and this presentation will use real world examples from working Australian sites. As the designer of some of Australia's most innovative and powerful facilities Neil is able to draw on 20yrs of facility design & engineering expertise. Key products and technologies will be identified as the levers to facility success. Recommended for facility managers, architects, designers, AV sales, support and service staff. Neil Langford of Space Age Communications will be hosting this seminar.

Video Conferencing Technology

Teleconferencing, tools & events scheduling issues.

"Scheduling and managing resources in a complex and costly problem for Australian service providers. Sites with multiple rooms have (in the past) relied upon low grade tools to manage rooms, AV equipment, catering, and service costs. The growth in tele-conferencing has complicated the task, with users and service providers often needing to book multiple rooms in multiple locations. To date this has been handled with numerous email and telephone requests, and can often take days to resolve instead of minutes. New tools are now available to provide complete business process control, and task management, for both corporate and commercial conference facilities.

Neil Langford will look at the opportunities provided by common tools such as Microsoft Outlook, and then focus on the benefits provided by the new generation software tools. Most importantly, all users want to throw away the paper based schedules and get the information onto the network where it can be shared. A good system should :

- Deliver information on room setup options, AV equipment and other resources
- Allocate AV, IT and catering charges to cost centres.
- Be accessible via web browser.
- Support multiple staff work concurrently on the database, and NEVER double book a space !
- Allow you to schedule events in Sydney, Melbourne and Hong Kong concurrently, in real time.
- Support allocation of portable AV equipment, knowing that real world stocks will be acknowledged, and that system won't be over-booked.

- Provide extensive reporting and monitoring facilities for AV, catering, reception and management teams.

Progress will see these tools interfaced to AMX & Crestron controllers in the individual rooms, providing real time updates on room activities, call costs and room status. With the events of last September clearly in our minds, many corporations are wanting to tighten up access to all areas, and keep a closer track on visitors. Neil will demonstrate a scheduling system that manages the meet and greet process at reception whilst also printing badges for visitors and supporting an organisation's access control protocols. The market for these products will be surveyed, and one high performance product will be demonstrated in detail. Neil Langford of Space Age Communications will be hosting this seminar."

Seminar Schedule:

The Future of Systems Integration and ProAV Technology

90 seats \$18 Code: V1 Monday 10:30am Dur: 2hrs Room: SR 2

Trends in Facilities

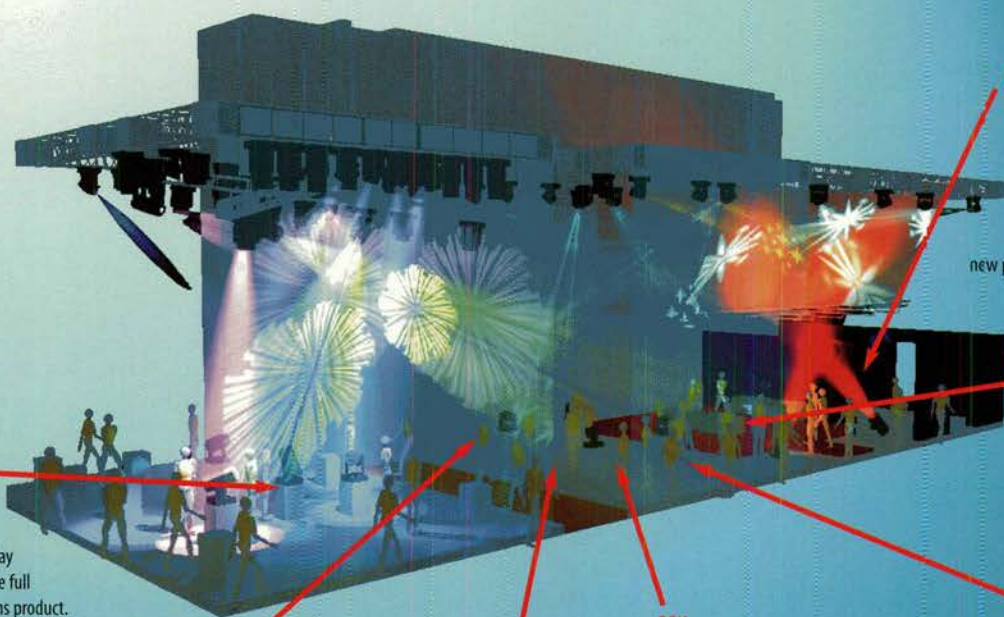
90 seats \$18 Code: V2 Tuesday 10:30am Dur: 1.5hrs Room: SR 2

Video Conferencing Technology

90 seats \$18 Code: V3 Wednesday 10:30am Dur: 1.5hrs Room: SR 2

The world's leading entertainment technology all in one place.

Brought to you exclusively by ULA. **Stand S19**



SOUNDVISION CONCEPT STORE

The market leading concept for DJ lighting and sound equipment. A full range of SoundiVision products from **Avolites**, **Entony**, **Climate**, **Ultrawatt**, **KuEure** & **Technics**. Huge range of new products, new catalogue and more.

ARCHITECTURAL ILLUMINATION

The world's leading architectural lighting products. Walk down the red carpet like a star with **Avolites**, paint with light inside and out with **Griven** and **AVR** while projecting your image with **OptiMedia**.

HIGH END SYSTEMS

Taking the world by storm - **x.Spot** and **Studio Beam** are on display in force, together with the full range of High End Systems product. The **Catalyst Video in Motion** system which is turning video projectors into digital moving lights. High Performance lighting control. **WholehogII**, **Hogpc** and the new **Wholehog3** live demonstrations.

SAGITTER

Innovative and popular moving light solutions. The new **Miriscan 2001**, plus the ever popular **Moving Spot 250 & 575**

LE MAITRE

The standard in smoke, **LSG** and low fogger demos.

SGM

Rapidly becoming the fixture of choice for professionals everywhere. **Giotto Spot 250 & 400** plus the new release **Giotto Wash 400**

AVOLITES

Award-winning control that is the standard in touring. **Azure**, **Pearl**, **Sapphire** and **Diamond**. Special presentations on the new **Diamond 4**

Highlights

- **Avolites Diamond4** training each day
- **High End Systems'** Intelligent Light show every 40 minutes featuring **x.Spot & Studio Beam**
- Continuous **SoundiVision** lighting presentations in the showroom with top DJs playing live each day featuring the new **Technics SL-1210MK3D**
- **SGM Giotto** Presentation every 40 minutes
- **Griven** in action - the full range of **Griven Outdoor** lighting on display
- **Sagitter** Moving Light shows every 40 minutes
- Painting with light - innovative uses for **AVR ColorMaster**
- **Flying Pig Systems WholeHog3** demonstrations each day
- **Catalyst** demonstrations each day



Technics



Litecraft Sagitter

For more information and your free invite

Freephone: 1800-648-111

Email: entech2002@ula.com.au

Web: www.entech2002.ula.com.au





PAST-PRESENT-FUTURE

CELEBRATING 30 YEARS OF TECHNOLOGY



AON Risk Services

AUSTRALIA LIMITED
ACN 000 432 720

presents

Entertainment Protection Plus

- INSURANCE FOR ALL YOUR ENTERTAINMENT RISKS**
- Equipment
 - Travel
 - Non appearance
 - Cancellation or abandonment
 - Public liability
 - Personal accident
 - Vehicles
 - Workers' Compensation
- Email: ken.killen@aon.com.au

Call Ken Killen or Jason Holmes
TOLL FREE 1800 806 584
for free quotations & advice

Level 27, AON Tower, 201 Kent Street, SYDNEY, 2000 Tel (02) 9253 7570

What do Spice Girls, Disneyland, Slade, Kid Creole, The English National Opera, Radiohead, Singing In The Rain, Salisbury Cathedral, & "Who Wants To Be A Millionaire" have in common ?



TRANTEC SYSTEMS



trc

6 King Street Blackburn, VIC 3130
Ph: 03 9877 8233 Fax: 03 9877 8244
e.mail: sales@trc.com.au

HIGHER INTELLIGENCE

USA-1600
USA-1600
USA-1600
USA-1600



A close encounter of the affordable kind.

For more info visit the Australian distributor's web site at www.cmi.com.au or phone CMI on 03 9315 2244

Technology Update

New Additions to the Coemar iSpot range

Coemar DeSisti Australia have announced the introduction of two new compact moving yokes - the iSpot 250 and iSpot 575. The iSpot 250 offers a host of features including 6 gobos, motorised focusing, on-board dimmer and a colour wheel with 11 dichroic colours.

The iSpot575 is a compact moving yoke and utilises either a MSR/2 or MSD 575 lamp. Features include 12 gobos on two gobo wheels, and 14 dichroic colours on two colour wheels. Other features include an iris, motorised focusing, rotating prism.

- **Coemar DeSisti Australia**
+61 3 9467 8666
ENTECH Stand 016



Philips intro new products and new partner

Philips CSI is a global supplier of products & systems for on site communications comprising Congress, PA, Paging, Intercom & dedicated specialty communication.

A new range of products are now rolling off the production line of Europe's largest electronics company with Global sales in excess \$34 Billion US.

A new product range includes Plena Amplifiers, boasts features such as multi microphone connection with priority announcements, music mixing from CD, tuner or auxiliary sources to create sound message combinations.

The Plena range is capable of solving modest announcement solutions to fully featured multi zone solutions.

Plena has been designed with the building block concept in mind with a fully integrated range that includes mixer amplifiers, universal & system pre-amplifiers, booster amplifiers, CD player/Tuners, Call Stations all with plug & play connections.

To complement Philips new range of products & image, product distribution, system design, product support in Australia is being provided through MC Communications.

In addition to the Philips range they will be displaying & demonstrating the range of Toshiba Data & Video projectors with built-in document camera & accessories.

Meet with Michael Pun at stand B38 at ENTECH 2002 or contact them on:
Mobile 0412 522100.

DMX Isolation and Replication

Jands Introduce Flexible 8 Way Opto-Isolator With Both 5-Pin And 3-Pin Connectors

Jands Electronics has announced the release of a unique product that addresses the need to interface USITT DMX512/1990 standard equipment with equipment using non-standard DMX wiring and connectors.

The DD6-2 is an Opto-isolated DMX splitter with six 5-pin AXR output connectors and two 3-pin AXR output connectors, with a phase reverse switch for each of the 3-pin outputs. The unit was designed for applications where mixtures of standard and non-standard devices are used, such as rental houses and club installations.

The Jands DD6-2 will be on display at ENTECH 2002.

- **Jands Electronics Pty Ltd**
+61 2 9582 0909
ENTECH Stand T30



CHAMELEON TOURING SYSTEMS

L I G H T I N G P R O D U C T I O N & H I R E

- ▶ **LUMINAIRES** Strand, ETC, Altman, Selecon
- ▶ **CONTROL SYSTEMS** Jands, ETC, LSC, Strand
- ▶ **MOVING LIGHTS** Martin, Clay Paky, High End, Vari-Lite
- ▶ **SEARCHLIGHTS** and more!

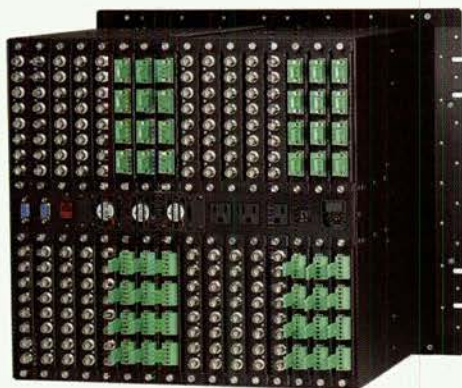
SYDNEY

2 Huntley Street, Alexandria NSW 2015
Tel: 02 9310 5222 Fax: 02 9310 5511
Email: info@chameleon-touring.com.au

BRISBANE

45 O'Connell Terrace, Bowen Hills QLD 4006
Tel: 07 3854 1511 Fax: 07 3854 1563
Email: brianoc@bigpond.com

www.chameleon-touring.com.au



Altinex have released the V-Matrix, capable of configurations from 8 x 8 to 128 x 128, handling signals ranging from audio to composite video to high-bandwidth RGBHV.

While almost all matrix switchers claim to offer some level of modularity, the V-Matrix is based on a new design concept that provides complete modularity through the use of independent elements for its housing enclosure, matrix router, input cards and output cards.

The core of the V-Matrix is a removable/replaceable patent-pending component called the Matrix Engine, which handles all of the electrical routing internally. Each enclosure can accommodate multiple signal types, and multiple enclosures can be "ganged" to handle more complex signal switching. The V-Matrix system enables you to design a huge number of configurations, with sizes ranging from 8 x 8 to 128 x 128 (in increments of 8) and signal formats that include any combination of RGBHV, F.GBS, RGsB, component video, S-video, composite video, stereo audio and

ALTINEX New Matrix Switcher at ENTECH

mono audio.

Cards installed into the V-matrix enclosure handle connectivity of inputs and outputs. The 8-input video cards provide built-in ground loop isolation, and both the input and output video cards provide a bandwidth of 350 MHz @ -3dB, allowing them to pass extremely high-resolution computer video signals without signal degradation.

The modularity of the V-Matrix concept makes it quick and easy to upgrade or maintain. All input and output cards are "hot-swappable" with finger adjustable lock-down screws and secure, positive engagement card-edge connections. Even the basic enclosure can be virtually stripped down to its bare metal essentials and re-built with user-friendly "pluggable" pieces – including the Matrix Engine and dual A/C power supply – without removing it from the rack.

Control of the system is accomplished primarily via RS-232, though the back panel also provides a 10 Base-T connection for future network control capabilities. Protocol for input/output selection is both powerful and simple, involving basic, easy-to-understand ASCII commands. For more information on the new V-Matrix from ALTINEX, visit www.altinex.com or contact the Australian distributor, Axis Audio Visual.

- Axis Audio Visual +61 3 9761 2688
ENTECH Stand C25

American Audio APX-152 – 2way speaker

American Audio have released the APX-152 - the rugged 20kg lightweight trapezoidal design is made from durable injection moulded plastic and is inset with a rear positioned handle for easy and comfortable transportation.

The speaker has a built in pole socket and flying points. The APX-152 has dual 1/4 inch and speakon inputs and a frequency range of 45Hz to 18kHz (-10db). The APX-152 is rated at 225W RMS nominal and is priced at \$1199.

- LSW +61 2 9568 2100
ENTECH Stand H16



ZERO[®] 88

Fat Frog

- 24/48 Control channels (48 in wide mode)
- The ability to control 12 moving lights
- An effects generator
- A fixture library
- 9 pages of 12 submasters
- Softpatch to 512 DMX channels
- Onboard LCD menus
- Floppy disk drive
- Up to 99 Memories
- Super user functions
- Twin isolated DMX Outlets
- Monitor output & keyboard input



\$7250
inc. GST



Clearlight Shows Pty Ltd

P: 03 9553 1688 F: 03 9553 4401



www.clearlight.com.au



Bose have released the MA12 - a speaker system using 12 closely spaced Bose proprietary 2 1/4" full-range drivers to create a small "line array" loudspeaker. Intended for reproducing voice and music, the MA12 speaker is designed for placement at ear level and radiates a wedge of sound at a near-constant height, significantly reducing ceiling and floor reflections.

The speaker takes full advantage of a line array's ability to target sound where it is wanted most. It radiates a cylindrical waveform - a "wedge" of sound with wide horizontal dispersion but very little top-to-bottom dispersion.

Bose claim that along with exceptional clarity, the MA12 loudspeaker delivers a uniform sound level, so that listeners sitting close to the speaker are not "blown away," while listeners in the back can still hear the performance clearly.

According to the specifications, the "decay rate" of only 3dB per doubling of distance is half that of conventional speakers with a spherical radiation pattern. By its nature, the MA12 line array is also less sensitive to microphone feedback.

Priced at \$1,999ea

Bose debut new installation speakers

Bose introduce a high-performance modular bass loudspeaker. The Panaray MB4 speaker provides extended low end in small-to-large permanent and portable applications. Multiple units can be stacked to produce increased coverage.

Built-in handles allow it to be easily moved by a single person. In permanent installations, the integrated hang points allow it to be ceiling- or wall-mounted in singles, multiples and arrays.

When multiple units are used with the custom bass array brackets and the Panaray system digital controller, the user can target the bass energy. For example, directing the bass audio to the dance floor but not the bar. Priced at \$1,299ea



• Bose +61 2 8737 9999
ENTECH Stand G25

JBL CONTROL SB210 - HIGH OUTPUT DUAL 10 INCH SUBWOOFER

JBL Professional has added the SB210 Compact Subwoofer to its line of Control Contractor products. At just 355mm tall, the SB210 features two ten inch A/V shielded aluminum/ceramic composite cone woofers for a total power handling capability of 400 Watts continuous (1600 Watts peak).

Nominal impedance is 8 Ohms. Intended for use indoors or out, the SB210 features a high impact polystyrene cabinet and multi-layer thermoset composite covered grill and boasts an IP-X5 weather resistance rating. It is available in either black or white and is paintable.

JBL Professional has made installation as easy as possible by designing the SB210 to be mounted several ways. Each SB210 is shipped with four feet, for setting on a shelf or floor and four foot receptacles for stacking SB210s. There are also 13 suspension points integrated into the speaker's cabinet for suspending the subwoofer. The optional U Bracket (MTC-210UB) attaches to both ends of the speaker allowing easy

installations on walls and ceilings.

The frequency range of the SB210 is 42 Hz - 200 Hz. When used with the optional JBL MTC-210-SAT network, a single amplifier may be used to drive an entire crossed-over subwoofer/stereo satellite system. An optional 250 Watt tappable transformer is also available for use on 70V or 100V line systems. The SB210 measures a very compact 335 x 590 x 570 mm and weighs 19.4 kg.

JBL is distributed by Jands Electronics.

• Jands +61 2 9582 0909
ENTECH Stand T30



dB Sound

Happy New Year!
from everyone at dB Sound.

Thanks to all those who supported us in 2001.
We look forward to seeing you all again
in 2002.

NEW!

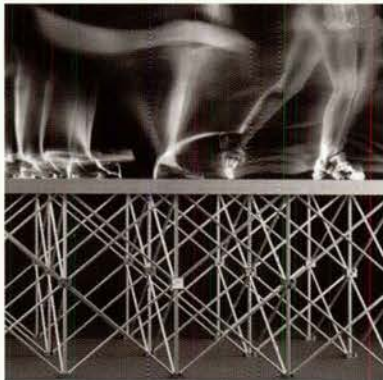
The dB Sound Hire Catalogue
will be available soon.

Phone, Fax, or email to get your *FREE* copy.
Don't forget to include a delivery address.

www.dbsound.com.au
7 Bridge St Rydalmere

hire@dbsound.com.au
(02) 9638 0777 (02) 9638 0749

Staging CAN'T get any easier than this...



2m² of staging set up in 30 seconds by one person.

Sound good? Then consider also these benefits:

Lightweight - 60cm leg section weighs 5kg

Strong - will support 1000kg per m²

Fast & Easy - legs can be set up with one hand!

Versatile - multiple heights let you build steps, multi-level staging, in fact you are only limited by your imagination!

SC Systems - distributed in Australia by:

trc

The Resource Corporation Pty Ltd
tel: (03) 9877 8233
fax: (03) 9877 8244
www.trc.com.au

300mm Alloy Box Truss

300mm Alloy Tri Truss

400mm Alloy Box Truss

500mm Alloy Box Truss

CLS SYDNEY
16 Susar Street
Armidale NSW 2038
Ph. 02 9519 4944
Fax. 02 9519 3422

CLS MELBOURNE
53 - 65 Kingsway
Southbank Vic 3006
Ph. 03 5682 6111
Fax. 03 5682 6777

email: info@cls.com.au
web: www.cls.com.au
ABN 14 305 422 319

CLS



speaker mounting solutions

K&M's range of speaker mounting options offer you the best solutions - winch-up & push-up stands to hoist & tilt-adaptors, satellite systems to wall mounts, all with the innovative design and distinctive German craftsmanship the world has come to rely upon.

Call us now for details on the complete range of K&M solutions.



trc

The Resource Corporation Pty Ltd
tel: (03) 9877 8233
fax: (03) 9877 8244
www.trc.com.au

Unique Digital Billboard



- Advertising
- Product Launches
- Concerts
- Scoreboard
- Parties
- Events

*Capable of Displaying Digital Images,
Video, AVI DVD*

Call Oztronics on 1300 766 669

eurocable speaker cables

You don't need to compromise your pro audio systems with inferior speaker cable. Eurocable speaker cables, specifically designed to carry audio signal, offer twinaxial, coaxial & figure-8 styles in 2 conductor to 8 conductor configurations and 1.5mm² to 4mm² gauges. And then there's the specialty hybrid cables...

Call & ask us which one's right for you.



trc

The Resource Corporation Pty Ltd
tel: (03) 9877 8233
fax: (03) 9877 8244
www.trc.com.au

Introducing the new Upside' Dome

The manufacturers of the Condome have now developed a new unit for suspending units whilst still affording total weather protection. The Upside' Dome carries all the features of the Condome and can be used in any angle or position from upside down to side mounting or even on its feet. Protection comes in the form of a fixture supply which ensures power is cut off in the event the plastic housing deflates, as well as the expected protection from the harshest of elements. The upside' dome base is flat and black, which makes it easy to fit everywhere.

- Coemar DeSisti Australia
+61 3 9467 8666
ENTECH Stand 016



RANE RELEASES NEW CROSSOVERS

Rane's SAC 22 and SAC 23 employ state-variable 4th-order Linkwitz-Riley filter alignments to minimize phase difficulties in the critical crossover region. Simply put, a Linkwitz-Riley crossover exhibits identical phase characteristics on its Low pass and High pass Outputs.

This characteristic guarantees in-phase outputs at all frequencies. In-phase outputs are mandatory for proper acoustic summing of common signals from adjacent drivers in the crossover region. An added benefit of this topology is steep 24 dB per octave rolloff slopes. A slope of this magnitude guarantees drivers designed to produce a specific range of frequencies, and no more, will not be driven past their limits, thereby minimizing distor-

Technology Update

tion and driver fatigue.

The SAC 22 and SAC 23 utilise a 31-position precision DC control voltage potentiometer to select crossover frequency points. This circuit design assures consistent accuracy from channel-to-channel and unit-to-unit. This is a distinct advantage over continuously variable designs using ganged potentiometers which can yield large variations in channel-to-channel matching.

The Mono Subwoofer output provides a separate mono sum of the Left and Right

Low Outputs. A 100 Hz low pass filter may be activated for this Output. The Subwoofer Output may be used along with the Left and Right Low Outputs.

The Input Level allows decreasing the overall sensitivity of the entire sound system, including the mono subwoofer if

one is used. The Low Level, High Level and Mono Subwoofer Output Level controls allow compensation for sensitivity variations in amplifiers and drivers.

Rane is distributed by Jands.

+61 2 9582 0909

ENTECH Stand T30



BYTESIZE APC DIMMERS

(ADVANCED PHASE CONTROL)



Unsurpassed energy efficiency gives longer life, higher reliability, lower running costs and lower acoustic noise

DISTRIBUTED IN AUSTRALIA BY:

EMAIL: entertainment@bytecraftentertainment.com WEBSITE: <http://www.bytecraftentertainment.com>
VIC - 2 Monterey Road Dandenong South 3175 Tel: 03 8710 2555 Fax: 03 8710 2599
NSW - 4/1-15 Rosebery Avenue Rosebery 2018 Tel: 02 8344 3800 Fax: 02 8344 3801


**BYTECRAFT
ENTERTAINMENT**

EVO



2048 CHANNELS WITH ETHERNET
MOTORISED FADERS, TOUCH SCREEN
POWERFUL EFFECTS CREATOR
HUNDREDS OF PAGES, CUES,
SEQUENCES, PALETTES ...

It is the EVOLution in lighting control. Built around ethernet and the latest technologies, EVO is modular and flexible so the future is guaranteed. Its powerful and userfriendly software will make your job very easy whatever the lights.

THE EVOLUTION IN LIGHTING CONTROL !

ENTTEC PTY LTD WWW.ENTTEC.COM TEL: 03 9819 2433 FAX: 03 9819 2733

DIGITAL RECORDERS

There are three categories in this Market Report - TWO TRACK DEVICES, MULTITRACK DEVICES, & SOFTWARE. We have allowed up to four products from each brand in each category. However, we have deliberately excluded consumer CD and DVD-RWs, data and commercial archival and/or storage devices, digital audio logging/recording and educational based recording devices, DSPs, sequencing software programs, and sound-cards. Remember, the manufacturers have supplied the text here, so you are likely to find a few interesting claims...



360 Systems DigiCart/II Plus



Denon DN-M1050R

Two Track - Recorders

360 Systems DigiCart/II Plus

DigiCart/II Plus is a full-featured hard disk recorder designed primarily for use in television master control, radio, and teleproduction applications. Random access and playback, Mass storage of production elements and sound effects, Editing with display, Sweetening for video and audio production, Automated playback of voice-overs for master control and Creation and execution of long and complex playlists. DigiCart/II Plus offers 16-bit linear recording in stereo or mono with sampling rates of 32k, 44.1k or 48k. Dolby AC-2 data compression is also available and produces 20kHz bandwidth recordings in stereo with a 5.33 to 1 increase in total storage time.

• From \$15,229

360 Systems Instant Replay 2.0

Instant Replay is a self-contained production studio and spot player in a box perfect for Radio, Television, Audio/Visual, or Live Events. Features: Instant access to 1,000 cuts; Precise editing of heads, tails, fades and levels so it's easy to isolate sound effects, or make continuous loops. Large illuminated buttons for easy hands-on operation, Displays cut names, ID num-

bers, and length and storage of multiple playlists of any size. Total Recording Time 24 hours - Dolby AC-2; 4 hours - 16 bit linear. Recording Medium 3.5" internal hard disk. Input Sample Frequencies 24k to 56k samples/second, converted to 48k or 44.1k via sample rate converter.

• From \$11,010

360 Systems Short/cut 2000

The standard for 2-track editing in news, production, and on-air applications since 1996, now with more speed, new editing features, and the same ease of use in a compact, portable package. Short/cut offers true 16-bit linear recording at sample rates of 44.1kHz or 48 kHz. It provides a bandwidth of 20Hz-20kHz, SNR and Dynamic Range in excess of 90 dB, and distortion below .005%. Features: intuitive cut-and-paste editing (with a waveform display), hard disk storage, optional removable media, and file interchange with PCs, Macs, and popular workstations. Powerful enough for serious production work, yet easy to learn.

• \$11,840

Alesis Masterlink ML9600

Mastering HD Recorder/ Editor/CD Burner. A complete Mastering House in a Box. A 2-track hard disc recorder to capture mixes in 24-bit, 96kHz; edit and apply finishing tools - with high-resolution parametric EQ Compression, limiting and normalising all in one system. Burn the finished recording in standard Redbook, or high resolution CD24, the new standard for archiving & transferring high-res. audio. AIFF compatible. Organise song playlists with total control of fade-ins, fade-outs, track gain, start points, track cropping and more. Uses inexpensive, readily available CD-Rs.

• \$4,299

Denon DN-F20R

Denon's DN-F20R portable IC recorder has been designed as a portable recorder for electronic newsgathering and broadcast applications. The DN-F20R features IC memory card recording, dual card slots, MPEG and linear PCM file format and adjustable bit rate recording. In addition, the DN-F20R accepts memory cards up to 96 MB and is powered by an AC adapter or 6 AA batteries.

• \$2,999

Denon DN-M1050R

Denon's DN-M1050R MiniDisc recorder has been designed as a professional MiniDisc recorder for recording studios. The DN-M1050R features auto level record start, auto track increment, stereo or mono recording and UTOC writing. In addition, the DN-M1050R features PS/2 keyboard compatibility and editing functions that include erase, divide, combine, move, name and undo. An optional sample rate converter card is also available to provide digital output at 32 kHz or 48 kHz.

• \$3,399

Denon DN-M991R

Denon's DN-M991R MiniDisc recorder has been designed as a professional MiniDisc recorder/player for broadcast applications. The DN-M991R features a hot start function, PS/2 keyboard connection, playback pitch control and eject lock. In addition, the DN-M991R features SCMS on/off selection and end monitor.

• \$4,999

Fostex CR300

The Fostex CR300 is a highly engineered rack-mountable machine, which offers state-of-the-art digital and analogue audio recording to both professional and consumer CD-R and

Brands and Distributors represented in this report...

360 Systems	EAV Technology	+61 3 9417 1835	www.eavtech.com.au
Akai	Australis	+61 2 9698 4444	www.australismusic.com.au
Alesis	Electric Factory	+61 3 9480 5988	www.elfa.com.au
Bias	Major Music	+61 2 9545 3540	www.majormusic.com.au
Boss	Roland Australia	+61 2 9982 8266	www.roland.co.jp
Cakewalk	Intelliware Australia	+61 8 8277 1722	www.intelliware.com.au
Denon	Audio Products Australia	+61 2 9669 3477	www.audioproducts.com.au
Digidesign	Digi Australia	+61 3 5428 7780	www.digidesign.com
Emagic	Electric Factory	+61 3 9480 5988	www.elfa.com.au
Euphonix	Technical Audio Group	+61 2 9810 5300	www.tag.com.au
Fairlight	Fairlight ESP	+61 2 9877 9999	www.fairlightesp.com.au
Fostex	Syntec International	+61 2 9417 4700	www.syntec.com.au
Genex	Audio Products Australia	+61 2 9669 3477	www.audioproducts.com.au
HHB	Audio Products Australia	+61 2 9669 3477	www.audioproducts.com.au
Korg	Music Link	+61 3 9765 6565	www.musiclink.com.au
Mackie Designs	Australian Audio Supplies	1800 502 015	www.ausaudio.com.au
Mackie/Soundscape	Kalimba Audio	+61 8 9473 1444	www.soundscape-digital.com
Marantz Professional	Technical Audio Group	+61 2 9810 5300	www.tag.com.au
Mark of the Unicorn	Intelliware Australia	+61 8 8277 1722	www.intelliware.com.au
Nagra	Broadcast Workshop	+61 3 9329 7655	www.broadcastworkshop.com
Otari Radar	Amber Technology	+61 2 9975 1211	www.ambertech.com.au
Pyramix	Synrotech Systems Design	+61 2 9879 0800	www.ssd.com.au
iZ Technology/Radar24	Factory Sound	+61 3 9690 8344	www.factorysound.com
ProTools	Digi Australia	+61 3 5428 7780	www.digidesign.com
Roland	Roland Australia	+61 2 9982 8266	www.roland.co.jp
SADiE	Neotec Audio	+61 2 9873 3994	www.neotec.com.au
Sek'd	Sound-Music	+61 3 9528 5744	www.sound-music.com
Sonic Foundry	Intelliware Australia	+61 8 8277 1722	www.intelliware.com.au
Sonic Solutions	ISMT	+61 3 9682 7388	www.ismt.com.au
Sony	Sony Australia	+61 2 9887 6666	www.sony.com.au
Steinberg	Electric Factory	+61 3 9480 5988	www.elfa.com.au
Syntrillium	Major Music	+61 2 9545 3540	www.majormusic.com.au
Tascam	Tascam SRD	+61 3 9862 0411	www.tascam.com
Yamaha	Yamaha Music Australia	+61 3 9696 5111	www.yamaha.co.jp
Zoom	Dynamic Music	+61 2 9939 1299	www.zoom.co.jp

CD-RW media via easy to use front panel controls. Professional features include 4 CD-RW erase modes, digital fade-in and fade-out for smoother recordings, three modes of copy bit selection and support for FDMS (Fostex Disk Management System) data backup from Fostex Digital Multitrackers. A full complement of digital I/Os including AES/EBU input and S/PDIF is present, along with a built-in sample rate converter. This is essential for making original CD masters from DAT or MD media.

• \$3,429

Fostex D-15

With Applications such as video postproduction, multimedia authoring, digital audio recording and broadcast technology merging closer each day, it has become even more important to choose studio solutions that can deliver in all working environments. And choosing a DAT machine is no exception. The D-15 integrates seamlessly into the operation of a wide array of modern video, film and broadcast post systems. Based on technology first seen in the market leading D-10, the D-15 is equipped with a full compliment of audio interfaces such as balanced +4dBu XLR I/Os and -10dBV RCA connectors, AES/EBU and optical S/PDIF and 37-pin parallel interface for connection to cabled remote controls.

• \$6,329

Fostex DV40 DVD-RAM Master Recorder

NEW! Designed to record and playback audio data directly onto a DVD-RAM disc. Using a 'Verify/Write' mode that examines all data recorded, all of the time, while in record mode. The unit offers a high reliability of recording and easy transfer and integration capability using UDF (Universal Disc Format) so Macintosh and PC workstations can read DV40 media (running a variety of OS). Additionally the DV40 can become part of your media network via its standard 100base-T Ethernet port. The DV-40 will to give you many more possibilities for mastering, particularly surround mastering.

• \$13,499

Fostex PD4

The PD4 is a professional portable DAT recorder that features the two main requirements for pro on-location work - full function capability and the highest quality sound. Add great flexibility, a superb operating environment and lightweight and you have the best rugged DAT recorder there is. If you want a machine that is built to last, operationally friendly with the facility to mix four mic inputs, the ability to record time code and jam to other sources then buy this machine and you will always have a trouble free recording time. On the front panel are three gain controls and one master gain control, the three-channel mixer works extremely well, it is nice to operate and the limiter is excellent.

• \$12,699

HBB CDR830

HBB's CDR830 BurnIT CD recorder is a professional recorder designed for general and commercial applications. The CDR830 features 24-bit A-D/D-A converters, CD-RW recording and editing, CD text display, CD text input and editing. In addition, the CDR830 features SCMS-free digital recording, digital input, input gain control, synchronised recording and

double speed CD finalisation.

• \$1,499

HBB CDR850

HBB's CDR850 CD recorder is a professional recorder designed for studio and broadcast applications. The CDR850 features a built-in sample rate converter, balanced input/output connections, auto pause, fade in/out and output level control. In addition, the CDR850 features an SCMS-free input and copy prohibit output.

• \$2,399

HBB MDP500

HBB's Portadisc portable MiniDisc recorder has been designed as a portable recorder for electronic news gathering and broadcast applications. The MDP500 features ATRAC 4.5 recording algorithm, 6 second pre-record buffer, 40 second shock-proof memory, internal sample rate converter and USB interface. In addition, the MDP500 can be powered by NiMH rechargeable batteries (up to 3.5 hours battery life), AA alkaline batteries (up to 3 hours battery life), 12 to 15 vol: DC power, or AC mains power.

• \$3,499

Marantz CDR500

This combination CD player & CD/CD-RW recorder is similar to the CDR631 with the addition of a separate CD Player and Automaster 'Disk At Once' (DAO) copying for Red Book Glass Mastering or Duplication. Combined AD/DA Codec Converters, Omits: 10 Direct Track Access Key Pad, Jog-Shuttle Wheel and AES/EBU (XLR) available on CDR631.

• \$2,295

Marantz CDR631

The CDR631 records from virtually any audio source: CDs, LPs, Cassettes, DAT or Sound Card Output from a Computer, CD-TEXT Format, 1MB Memory Buffer for Frame Accurate writing of track ID's, Menu Selectable SCMS Copy Protection, Auto Finalising, 11-56 and 96kHz SRC with Bypass, 20/24-bit AD/DA Converters, 10 Direct Track Access Key Pad, Back-Lit Transport Keys, Jog-Shuttle Wheel, IR Remote, XLR and RCA Analogue and AES/EBU (XLR), Coaxial and Optical Digital Ins, RCA Analogue and Coaxial Digital Outs with Coaxial Loop-out.

• \$1,995

Marantz PMD650

This Portable Stereo MiniDisc Field Recorder includes a Large LCD Screen, Built-in Mic & Speaker, Recording Time of 148min Mono/74 min Stereo. Features a built-in clock, Data Back-up with TOC data, Time & Date, 20sec Shock Proof Buffer Memory, Auto End Search and Dual Level mono recording (as set & -15dB) XLR Mic/Line In, Digital In (RCA) SPDIF, Digital Out (XLR), +48v Phantom, Ambient Noise Control, Backlit LCD, External Speaker Out.

• \$3,295

Marantz PMD680/690

Is a portable field recorder that uses interchangeable PCMCIA (Type II or III) ATA memory cards. Data storage in MPEG-1 layer 2 or in Linear PCM uncompressed .wav format meaning files can be easily transferred to computer for archiving, editing or internet uploading. Six selectable bit rates for opti-



Alesis Masterlink ML9600



Denon DN-M991R



Fostex D-15



HBB MDP500



Marantz PMD680/690



McLean Audio Services

Is now online - visit our new website at www.mcleanaudio.com.au for all the latest news.

Rental, Design and Staging for Corporate, Theatre, Industrial, Concerts, Television, Broadcast and Special Events of all sizes.

Building 4, 64 Balmain Street Richmond Victoria 3121. Telephone (03) 9429-5381. Facsimile (C3) 9428-0156

Digital Recorders



Nagra ARES-P



Sony CDRW66



Sony PCM7040



Tascam DA-45HR



Tascam DS-D98



Korg PXF.4

mum storage efficiency vs sound quality. XLR & 1/4" Mic Inputs, Telephone Jack I/O for telephone conversation recording or passing live recordings to telephone, RCA Line In/Out, Coaxial RCA Digital SPDIF Out. Portable MiniDisc Field Recorder, Built-in Mic & Speaker, XLR Stereo balanced mic ins, Digital in & out, +48v Phantom, Speaker & Headphone out, auto or manual recording level. Mono or Stereo.

• \$2,995

Nagra ARES-P

The Nagra ARES-P/RCX220 is a handheld audio recorder/player with all the features reporters have requested. It is compatible with the NAGRA ARES-C and NAGRA C-PP and, as such, is compatible with most of the editing systems on the market. The flash-card can easily be removed from the machine for editing and/or ISDN transmission using a NAGRA ARES-C or C-PP. With the ARES-95 or ARES-NT software, the files from the flash-card can be downloaded at high speed (including file format conversion) to a laptop or PC. The ARES-P will operate for 4hrs on a set of five standard AA (LR6) cells.

• \$3,000 approx.

Nagra RCX220

The RCX220 has the same possibilities as the ARES-P with an additional USB connection, PCX card emulation and 2 additional software packages. The RCX Load software allows file sorting by Name, Size, Type, Mode, Creation date or Playback algorithm. Playback of any selected file can be implemented with a simple click of the mouse. The Xtrack Light Edition Editor is limited to 2 virtual audio tracks and offers comprehensive, non-destructive editing and processing functions including Cut, Copy, Insert, Replace, Drag & Drop, Fade-in, Fade-out and Crossfade.

• \$4,200 approx

Sony CDRW33/66

Both the Sony CDR-W33 and CDRW66 CD Player/Recorders are compact disc recorders developed with the achievement of outstanding quality as a central design objective. Through the use of Super Bit Mapping recording technology and 24-bit A to D and D to A conversion, the CDR-W33 meets this goal achieving sound quality approaching that of 20-bit recording quality. The CDR-W66 has been designed specifically for professional production applications. In addition to its advanced DSP pre-mastering capabilities, the CDR-W66 features a unique 32kHz-96kHz range sample rate converter. This makes the CDR-W66 suitable for recording from higher sample rate sources, now common with the advent of higher-resolution music recording formats.

• CDRW33 - \$1,419

• CDRW66 - \$2,240

Sony PCM7040

The Sony PCM-7040 Synchronise DAT Recorder is the latest model in the development of this 7000 series. Building on the vast experience gained from the many PCM-7000 Series recorders in daily use around the world, it is smaller, lighter and consumes less power than previous models. The PCM-7040 features: Memory Start Function; Time Code Capability; External Synchronization; Chase Synchronization; General Purpose; Interfacing facility; Comprehensive Serial Remote Control; Subcode Recording; Search/Locate Function; RAW (Read-After-Write) and RMW (Read-Modify-Write); Variable-Speed Playback; Input Signal Level Control; Variable Speed Recording; Informative Display; Compact Reliability; 4 Motor Mechanism; Assured Audio Quality; Ideal Audio Source for Video Editing Systems.

• \$15,373

Sony PCMR300

This affordable, semi-professional DAT recorder is designed primarily for home studio use where unbalanced analogue and digital I/O are an acceptable interface. Start ID, End ID, Skip ID control on front panel; Flexible set-up menu; Remote controllable; Super Bit Mapping In the AD circuitry; Error rate display can be selected on the display; Coaxial and optical digital interface; A/D and D/A monitoring modes; Recording and playback in Long play mode; Switchable ID06 mode (SCMS copy code).

• \$1,775

Sony PCMR500/700

The PCMR500/700 Professional-Use DAT decks incorporate Sony's high-performance 4 D.D. Mechanism setting the standard for professional-use DAT. The Shuttle and Jog Dial offer ease of operation while extensive interface options and multiple menu modes meet a wide range of application needs. The PCM-R500 offers balanced analogue and digital I/Os; High-reliability 4 D.D. transport; Flexible set-up menu.; Remote control; Wide range of audio interface options; Super Bit Mapping In the AD circuitry; R-Core Transformer for reduced leakage flux and Independent Channel 1/Channel 2 recording level volume controls to eliminate cross talk. The PCMR700 also features a 4-head construction for RAW (Read-After-Write) confidence recording.

• PCMR500/700 - \$3,471/\$5,455

Tascam DA-45HR

24-bit 48kHz 2-track DAT recorder with fully balanced analogue I/O's plus AES/EBU and S/PDIF. Word clock sync in/thru, 2-point memory search, shuttle wheel, 16-bit compatibility. Optional remote.

• DA-45HR - \$4,925

• DA-40 16-bit version without Word sync - \$3,158

Tascam DA-60mkII

Tascam's only 4 head, 9-pin (RS-422 Sony P-2) synchronisable DAT recorder. Fully balanced XLR analogue connection as well as AES/EBU digital. Includes onboard chase synchronizer, instant start-up and rehearsal capabilities.

• \$11,000

Tascam DS-D98

Super Audio CD format 2-track DTRS Recorder (also configurable for PCM multitrack). Sampling freq- 44.1/48 (8-track) 88.2/96 (4-track) 176.4/192kHz (2-track) or Direct Stream Digital (2.8224MHz 2-track) Sony SDIF-3 interface as well as TDIF-1, AES/EBU digital I/O standard. The DS-D98 is a State Of The Art acquisition & mastering machine.

• \$19,000

Multi-track (3-7 tracks)

360 Systems TCR-4

The new TCR4 4 track master recorder is an ideal replacement for time-code DAT machines, and "audio-only" VTRs. It includes the 3rd and 4th tracks so often needed, and provides greatly improved audio quality, cost-effective removable DVD-RAM media, and the instant response of a hard disk recorder. Most important, TCR4 delivers a degree of reliability unattainable with tape. Ideal for broadcast and post production audio applications.

• From \$16,000

Korg PXR4

Korgs PXR4 digital multi-track recorder is compact & portable that allows four tracks of high-quality, MPEG format recording onto SmartMedia or eight virtual tracks or "takes" per channel. There are recording modes (high, standard, low), 99 songs per Card, 270 minutes recording time, track editing functions, 77 studio-quality modelling effects, 100 factory programs, 100 user programs, 55 PCM rhythm patterns, a large easy-to-read LCD display; built-in mic, metronome, USB serial port for transfer to PC. Ships with 16MB SmartMedia card, supports 8 MB through 128 MB SmartMedia.

• \$1299

Nagra DII

The Nagra DII is a four channel open reel 24 bit digital recorder capable of sampling up to 96 kHz (stereo) with real time playback. Powered by an internal battery and equipped with the SMPTE/EBU time code option and chase synchronizer it is ideal for both music and cinema production. The Nagra-D and DII are used to capture the highest possible "on-location" audio in fields as diverse as the music industry (as a mastering format for CD's) and, due to their 96 kHz possibilities and dynamic range, by film and ethnomusicology areas. See also the NEW Nagra V Hard disk based portable recorder.

• Nagra DII - \$ 30,000 (approx.)

Yamaha MD45

MiniDisc recorder using MD data format, 4 channel mixer, 3 band EQ, 2 Aux with twin stereo Aux returns, 2 Mic XLR inputs and inserts, separate stereo cue mixer with independ-

ent pan & level. MIDI I/O with MIDI machine control (MMC) & MTC implementation, Jog & shuttle wheel, auto punch I/O, auto-locator, nonlinear recording with cue list song assembly, and fluorescent display for level meters track time / name. Ideal for Project & home studio, duo backing.

Zoom MRS-1044

All-in-one Multi Track Recorder with built-in Multi-Effects & Rhythm Machine. MRS-1044 Version2 (20GB) & MRS-1044 CD (40GB) provide 60 & 120 hours of recording time respectively. Also includes: Phantom-powered XLR inputs; 24-bit A/D-D/A converters; 24-bit data processing; 44.1kHz non-compressed 16-bit linear recording data format, and S/PDIF digital output. An optional USB interface allows the transfer of recorded data to PC for further editing work or for backup, as well as burning onto CD-R/RW media. Real-time processing on MTR, and Non-real-time processing on PC is the current trend for many users.

• From \$1995

Zoom PS-02

Uses a memory card and offers 3 audio tracks, a stereo drum track and a bass track for a combined 6 tracks of creative power. Up to ten virtual takes per audio track. Maximum recording time (64MB Smart Media card) 67 m across all tracks, mono/long play mode. Other features: Auto punch-in/punch-out for track editing; Track bounce; Stereo recording of CD or MD source; 4 hr of use on 4x AAA batts, in-built mic; 60 FX patches. An integrated auto-chromatic tuner makes the PS-02 as a complete all in one processor. Supplied with 8MB card (with demo song), belt and AC adapter for extended sessions.

• \$865

Multi-track (8-16 tracks)

360 Systems TCR-8

360 Systems designed the TCR8 8 track master recorder with one goal in mind: to deliver a Master Recorder that faithfully captures the results of your work. TCR/8 recorders can be operated as a multi-machine group, with up to 8 machines providing 64 tracks of audio. TCR recorders deliver 144 dB of dynamic range, from digital input to digital output; SD-2, AIFF; WAV and BWF File Interchange; Off-Line Editing Tools Included; SMPTE/EBU Time Code (can read LTC or VITC, and act as a master or slave). Gold-plated XLR-3 connectors. Ideal for broadcast and post production audio applications.

• From \$18,000

Akai DD8 Plus

The DD8 is a magneto/optical-based, random-access digital film dubber designed as a plug-and-play replacement for the DA-88. It features virtually instant locating, convenient removable media, flexible I/O and remote control options, and data compatibility with the Akai DD1500 Recorder/Editor as well as the main disk/file formats used by DAWs and disk recorders. And it syncs to everything. Forward and reverse. At any speed. Uncompressed 16, 20 and 24 bit data formats; 96kHz recording/playback capability; extensive synchronization options and MIDI Machine Control + more. New Features: Direct playback of OMF files from DAW systems such as Digidesign ProTools, Avid AudioVision, and Avid MediaComposer, to name a few.

• \$15,000 Approx.

Akai DPS16

The DPS16 is a 16-track, 24-Bit, 96kHz personal/studio digital multitrack. Key features: Q-Link Navigation provides realtime system access and assignable realtime control knobs (that's right, realtime control knobs!); True 24-bit recording (no destructive data compression); Sampling rates to 96kHz; 24-bit/96kHz A/D and D/A converters; 56-bit internal processing; Large 6 inch diagonal flip-up graphic display; Graphic waveform editing; Phantom power; External SCSI port; High-impedance input select for direct recording of guitars and basses; Optional EB4M 4 bus EFX card with 56-bit processing (standard in the US). The DPS16 is compatible with DPS12 and DPS12i projects and ships with a 20GB IDE drive.

• \$3995

Akai DR16Pro

A digital hard disk recorder featuring the 24-bit technology and 16-track performance from a single hard disk. Features

non-destructive editing functions, 16 channel programmable digital mixer and foreign file format compatibility for all studios requirements. The DR16Pro supports uncompressed 24-bit linear data recording. In 20-bit packed mode provides linear, hi-bit recording (no compression). 16-bit still supported with selectable 32kHz, 44.1kHz, 48kHz and 96kHz sampling frequencies. 96kHz sample rate available using on-board 2-channel AES/EBU digital I/Os (and optional digital I/O's) allowing up to 5 track recording and 8 track playback simultaneously. At all other rates the DR16pro supports up to 10 tracks in/16 tracks out.

• \$7995

Boss BR1180CD

The BOSS BR1180CD is a self-contained 10-track digital recording studio with stereo Master Track, 80 Virtual Tracks, a 20G hard drive, and a built in CDR/RW drive. There are also onboard COSM effects including 2 Loop processors, 1 insert processor and a Mastering Tool Kit and a Separate Rhythm Track with realistic drum sounds and patterns. Add to that easy icon-based interface that simplifies recording, bouncing and mixing, 2 XLR Mic inputs w/phantom power, plus Hi-Z guitar input and line inputs for easy connection and the ability to import/export .WAV files directly for loading drum loops and the possibilities are endless!

• BR1180 - \$1995

• BR532 4trk - \$1295

Fostex VF08

The VF08 is an 8 track feature packed digital recorder complete with a 10GB hard drive that provides over four hours of 8-track recording. NEW FEATURE: mastering libraries are now equipped with various mastering effects including 3-band EQ, effects and compressor. Audio scrubbing with waveform display is also a useful tool for intuitive editing. Other powerful features: copy/paste, move/paste, undo/redo, auto loop function, internal-tempo-mapping for song structures; SCSI option for fast backup, and .WAV file import/export, S/PDIF I/O and Midi clock capabilities, making the VF08 compatible with drum machines, sequencers and samplers.

• \$1799

Fostex VF160

The VF160 is a 16tr digital multi tracker inheriting all the user friendly advantages of the VF-16. Now with a 20GB hard drive & an optional built-in CD burner the recording process has become even more efficient to backup and create audio CDs. The ADAT mixer mode makes the VF160 even more impressive with its ability to integrate with PC/MAC-based audio/midi software. In addition to individually channelled stereo tracks, 3band EQ, compressor and 2 AUX sends, the VF160 now includes zoom I/O of waveforms so editing points can be precisely selected. With 16tr recording and 24-bit stereo effects the VF160 is the most affordable system in its class.

• \$3665 or \$2750 (w/out CD-burner)

Genex GX8500

Genex's GX8500 eight-channel multi-format digital audio recorder has been designed for multi-channel mastering & high-definition location recording. The GX8500 features high definition PCM recording up to 24-bit/192 kHz, eight-channel Direct Stream Digital recording for SACD, built-in eight-channel digital mixer and seamless switching between internal and external drives. In addition, the GX8500 can be supplied with magneto-optical or fixed hard disks and is available with optional 24-bit/96 kHz A-D and D-A converter modules.

• From \$20,999

Korg D12

Korg D12 Digital Recording Studio features a 12-track digital recorder, 16-channel 4-bus mixer, built-in effects, PCM rhythms with 6 GB drive. Uncompressed recording at 16 or 24-bit, 44.1 kHz resolution. Record four tracks simultaneously, with 12 track playback in 16-bit mode and six track playback in 24-bit mode. The D12 can record up to 100 songs, plus each of its 12 tracks has eight virtual tracks, for a total of 9,600 tracks. 99 levels of Undo. 16-input, 4-bus digital mixer, 3-band EQ. Balanced inputs with XLR-1/4". 20-bit, 64x oversampling A/D, 8 insert effects, two master effects and one final effect. SCSI for internal/external CD-R.

• \$2999



Yamaha MD4S



Zoom MRS-1044



Akai DD8 Plus



Boss BR1180CD



Fostex VF160



Genex GX8500



Korg D12

Digital Recorders



Korg D1600



Roland VS-1824CD



Tascam DA-98



Yamaha AW4416HD



Alesis ADAT-HD24



Euphonix R-1

Korg D1600

Korg's D1600 16tr, 24 bit/44.1 kHz recorder. CD-R/RW & 20Gb hard drive as standard. (31hrs of 24 bit/44.1 kHz, 62hrs of 16 bit/44.1 kHz), D1600 is a 24ch, 8 bus system, eight virtual tracks per track, 4 XLR inputs with phantom, quality mic preamps. Eight insert effects, 2 master effects, and a final effect, 192 effects programs. Digital I/O options include 24-bit S/PDIF optical I/O and a 50 pin SCSI-2. Touch Screen. Excellent editing and track bouncing capabilities. 100 nameable Mark Points. TouchView waveform display to specify IN, OUT and TO locations, or to select studio-accurate audio scrubbing with Time Expansion/Compression functions.

• \$5999

Otari PD-80

8-track random access disk recorder using high-performance 3.5" MO disks or optional internal/external SCSI disk drives. The PD-80 is an ideal post-production tool featuring extensive editing capabilities including reverse play, scrolling wave forms, screen zoom, time compression/expansion & pitch shift etc. The system is compact, easy to use and is supplied complete with a full-function remote system controller.

• From \$17,000

Roland CDX1

The CDX-1 DiscLab is a totally new type of flexible audio workstation: part digital multitrack recorder, part phrase sampler, part CD burner. Record multitrack performances (2 tracks simultaneously/ 8 tracks in total) on onboard CD-RW. Sample and sequence loops using sampling tools such as waveform editing, high quality time-stretching, BPM syncing and more. Using the 2 stereo effects processors add effects including COSM guitar multi-effects, Groove effects and studio effect. Then take advantage of the Mastering Tool Kit, and burn it all to recordable CDs. There's never been a quicker or more convenient way to get your music to CD.

• \$3695

Roland VS-1824CD

The VS-1824CD Digital Recording Workstation comes loaded with 18 tracks of 24-bit digital recording, 288 Virtual Tracks, a 28 channel fully automatic digital mixer, internal CD-RW Drive and a solid 10-gig hard drive. A VSBF-2 Expansion Board, gives you a plethora of awesome effects including the famous COSM Guitar Amp and Mic Modeling. An optional second board doubles your processing power! Large icon based display and intuitive soft key navigation makes navigation easy and 999 levels of undo will get you out of trouble! The Mastering Tool Kit has everything you need to mix down your track and then hit the dedicated CD-RW Mastering button to burn to a playable CD!

• \$5695

Tascam 788

24-bit 48kHz 8 track DAW Portastudio with integrated mixer featuring 3-band EQ, versatile in/out's with flexible routing. Inbuilt hi quality multi effects processors, 250 virtual tracks, 99 levels of undo, S/PDIF out and a SCSI 2 port for archiving.

• \$2,699

Tascam DA-98/78HR

8 track DTRS format recorders with 24-bit recording (or 16-bit), on board LTC synchronization, selectable sampling rates, MIDI in/out/thru, TDIF I/O's, internal patch bay. 98HR has 24-bit 96kHz or 192kHz capability, confidence monitoring & video sync. (Analogue cards optional on 98HR).

• From \$6,000 to \$12,000

Yamaha AW2816HD

16 or 24-bit recording (uncompressed) 16 tracks plus a stereo track and virtual tracks for as many as 130 tracks, total. Precision editing and pinpoint location capability. 28 input channels (with optional I/O board), 18 mix busses 8 balanced inputs including two XLRs with switchable phantom power. Motor faders and full mix automation. Powerful channels functions inherited from the industry-leading O2R Digital Mixer. Master your own audio CDs without leaving the digital domain. Convenient, reliable data storage and retrieval. Directly load audio and other data from CD-ROMs. Vers 1.11 expandable with Waves Y56K card.

• \$4,495 with 20GB hard drive (excluding CRW)

Yamaha AW4416HD

44 input channels, 20 mix buses. Motor faders & full mix automation. Advanced channel functions (inherited from the industry-leading O2R Digital Mixer). Two powerful effect processors. 16 or 24-bit recording (uncompressed). Up to 130 tracks (16 tracks x 8 virtual tracks + STEREO TRACK). Precision editing and location. 8 sampling pads for real-time playback of samples from hard disk, external audio sources, WAV files on CDs or external SCSI devices. 16 samples with 8-note polyphony (90sec sample time) Master your own audio CDs without ever leaving the digital domain. Convenient, reliable data storage and retrieval. Directly load audio and other data from CD-ROMs. Ver 2.0 expandable with Waves Y56K card.

Yamaha MD85

MiniDisc recorder using MD format, 8 track independent / simultaneous recording on reliable, removable MiniDisc. The full feature mixer includes: 3 band EQ with mid sweep, 2 Aux with twin stereo Aux returns, 2 Mic XLR inputs with phantom power and inserts, separate stereo cue mixer with independent pan & level. Midi IN / THRU / OUT with MIDI machine control (MMC) & MTC implementation, Jog & shuttle wheel, auto punch I/O, auto-locator, non-linear recording with cue list song assembly, and fluorescent display for level meters track time / name. Ideal for Project & home studio, duo backing.

• \$2,645

Multi-track (greater than 16 tracks)

Alesis ADAT-HD24

This 24 Bit 24 Track Modular Hard Disk Recorder is the new standard in modular hard disk recorders. Incorporating 44.1 kHz, 48kHz internal sample rate with 88.2kHz & 96kHz option. Dual hot-swappable media bays. 24 analogue ins & outs & 24 ch ADAT optical light pipe. MIDI In/Out, 10 base-T Ethernet, ADAT Sync In/Out & Word Clock. Remote Control included.

• \$6,999

Euphonix R-1

The revolutionary R-1 Multi-Track offers the traditional feel of a reel-to-reel machine with all the significant advantages today's technology has to offer. Superior sound quality, improved efficiency, upgradeability, improved reliability and the familiar Reel Feel of tape machines. The R-1 has been designed as a direct replacement for any type of multi-track machine or mag dubber and supports all standard formats up to 24bit 96kHz which can be selected when recording the highest fidelity. The converters are designed to be transparent and the system features 40 bit internal floating point processors.

• \$79,995 +

Fairlight ESP Dream Satellite

Digital audio workstation; 16, 32 or 48 track configuration; up to 96kHz sample frequency; 24-bit gapless, seamless punch in/out across all tracks to a single hard disk; ergonomic user interface with Binnacle editing model; extensive non-destructive editing; up to 48 channels of analogue and/or digital I/O; 9-pin machine control; optional networking and file exchange.

• From \$37,526

Fairlight ESP Dream Station

Digital audio workstation with integrated 56 channel automated mixing; 24 or 48 track recorder tracks; 4 auxiliaries - mono or stereo; 4 sub busses - each up to 7.1; Bus-to-bus mixing; Main bus up to 7.1; Dynamics and EQ on all busses; Real-time 6-band EQ on all channels; Real-time two stage Dynamics on all channels; Insertion on channels and busses; Total Dynamic Automation; Motorised touch sensitive rotary controls and faders; Enhanced surround panning system; Optional Sidecar fader extension bays; Optional third-party plug-ins, networking and file exchange.

• From \$64,005

Fairlight ESP Merlin

Digital audio multitrack recorder; 24, 32 or 48tr config; up to 96kHz sample freq; 24-bit gapless, seamless punch in/out across all tracks to a single hard disk; familiar tape machine style user interface; all digital or analogue-plus-digital I/O; powerful editing with 64 levels of undo; optional network-

ing, 9-pin machine control & file exchange capability.

- From \$44,800

Fostex D2424 24-track

In truth the D2424 is a fine, clear-cut 24-track that integrates fully into a studio set-up easily because of its stability and trouble-free operation. Packed with features, more so than its competitors, with a front panel remote control with built-in screen and editing capability, lots of audio I/O as standard, 24bit/88.2kHz and 24bit/96kHz recording available, several backup methods plus DVD-RAM option. Exports and import audio in WAV format. In short the D2424 is a first-class piece of digital equipment with convenience and flexibility plus it costs a fair bit less than its competitors.

- \$5999

iZ Technology RADAR24

The RADAR24 base system is supplied as standard a 18 GB Barracuda removable SCSI drive that records 86 minutes/24 tracks at 24-bit, 48 kHz. The Adrenalin recording engine records at sample rates of up to 192kHz and 2 x DVD RAM drives for backup and restore. Also features 2 channels of AES/EBU and S/PDIF I/O; Reads SMPTE, MTC, Word clock, AES, S/PDIF and Video Sync. Radar24 runs on the real-time, BeOS operating system for solid performance; outputs analogue and digital signals simultaneously. RADAR24 is Soundmaster compatible, has bullet proof reliability, extremely easy to use with renowned Support. Many more options and features.

- From \$14995 (with DVD backup as standard)

Mackie HDR24/96

Save your computer for email! This 24-Bit/24-Track Hard Disk Recorder/Editor Features 24 Tracks and 192 Virtual tracks for up to 100 minutes of continuous recording @48kHz. Non destructive, non-linear recording and full featured editing software with 999 levels of un-do, just plug in an SVGA monitor, keyboard and mouse and start scrolling! Works with any analogue or digital mixer. Also features full meter-bridge, internal 20GB recording drive plus a pull-out bay for removable M90 20GB hard drives & Mackie Media ORB drives. Uses the same I/O as the Mackie D8B including Analogue, ADAT, AES/EBU 24-Bit ADAT/TDIF. Syncs to SMPTE, MIDI, Word Clock and NTSC/PAL video blackburst. Built-in 100BaseT Ethernet.

- \$10,995

Mackie MDR24/96

24-Bit/24-Track Hard Disk Recorder/Editor. Plug and play recording. Features 24 Tracks and 192 Virtual tracks for up to 100 minutes of continuous recording @48kHz. 24 channels of 24-bit, 48kHz analogue I/O included!! Non destructive cut/paste and copy editing with 999 un-dos! Works with any analogue or digital mixer. Also features full meter-bridge, internal 20GB recording drive plus a pull-out bay for removable M90 20GB hard drives & Mackie Media ORB drives. Uses the same I/O as the Mackie D8B including Analogue, ADAT, AES/EBU 24-Bit ADAT/TDIF. Syncs to SMPTE, MIDI, Word Clock and NTSC/PAL video blackburst. Built-in 100BaseT Ethernet.

- \$6,495

Mackie/Soundscape R.Ed/16

Mackie/Soundscape is proud to introduce the R.Ed/16 DAW. If you haven't discovered Soundscape yet, you're in for a surprise. R.Ed/16 is for users who need a professional level of recording and editing with balanced I/O, but don't need the track count of a R.Ed/32 system. Typical uses would be radio editing, CD mastering, sound effects, DVD, voiceovers. R.Ed/16 features: two 24-bit 96kHz balanced analogue inputs; four 24-bit 96kHz balanced analogue outputs; two AES/EBU inputs; four AES/EBU outputs; 8 channels TDIF; customised mixing; automation; video file support; third party plug-ins; up to 274GB audio storage per unit; multiple units can be linked to give additional tracks and I/O; it doesn't crash.

- R.Ed/16 - \$8,295

Mackie/Soundscape R.Ed/24

The Mackie/Soundscape R.Ed/24 is the perfect system for music recording and editing for professional recording studios or project studios. R.Ed/24 features: 24 channels TDIF; customised mixing; automation; video file support; third party plug-ins; up to 274GB audio storage per unit; multiple units can be linked to give additional tracks and I/O; TDIF can be converted to Line, MIC, XLR, MADI, ADAT, Headphone,

SPDIF or AES/EBU via Mackie/Soundscape iBox Audio Interfaces; it doesn't crash.

- R.Ed/24 - \$8,295

Mackie/Soundscape R.Ed/32

The Mackie/Soundscape R.Ed/32 DAW is possibly the world's most capable professional audio post system. If you haven't discovered Soundscape yet, you're in for a surprise. R.Ed/32 is ideal for top end professional post-production and recording studios, where a high track count is a major requirement and professional specification inputs and outputs are a pre-requisite. R.Ed/32 features: two 24-bit 96kHz balanced analogue inputs; four 24-bit 96kHz balanced analogue outputs; two AES/EBU inputs; four AES/EBU outputs; 24 channels TDIF; customised mixing; automation; video file support; third party plug-ins; up to 548GB audio storage per unit; multiple units can be linked to give additional tracks and I/O; it doesn't crash.

- R.Ed/32 - \$12,995

Otari Radar II

RADAR was purpose designed to replace traditional 2" 24tr machines so operation is familiar to anyone who has used an analogue tape recorder. This means that RADAR's learning curve can be measured in minutes, not days or weeks: connect to the 24-track I/O's, arm the required tracks and press "Record". That's it. The system comprises a 4U mainframe, comprehensive remote controller & removable 48tr ready meter-bridge. Complete system information is available via external VGA monitor with various archiving/back-up format options. With over 1,000 systems in use worldwide, RADAR has set a benchmark combining true random access technology, simplicity of operation & superb audio quality.

- From \$21,000

Roland VS-2480

VS-2480 24-track Digital Studio Workstation is the first self-contained recording workstation to offer 24-track (384 Virtual Track)/24-bit digital recording with 64-channel fully automated digital mixing, 2 onboard stereo effects processors (expandable to 8) including COSM Mic and Amp modeling, and optional CD burning. This revolutionary workstation also boasts a 40G/7200rpm AV Drive, 17 motorized faders, 8 XLR/16 balanced TRS inputs (expandable using the dual R-BUS ports), a VGA monitor output, plus "Drag and Drop" mouse-based editing and ASCII keyboard inputs-taking the V-Studio concept to an entirely new level.

- \$8995

SADiE Artemis

Artemis is designed for DSP intensive audio applications requiring large numbers of plug-ins, EQ and dynamics running in real time. Supplied as fully configured, rack mounting turn-key systems from 8 to 24 inputs and outputs, Artemis can replay up to 96 tracks, with 24bit 96kHz and 192kHz audio editing as standard, making every ARTEMIS DVD-V and DVD-A ready. Other features: Internal audio processing that utilises 32-bit floating-point accuracy; Full timecode support, 4 channels of RS422 9-pin I/O, XLR digital I/O, XLR digital reference input, XLR timecode I/O, and optional balanced XLR analogue inputs and outputs at standard operating levels. Free software updates included.

- From \$32,000 to \$100,000+ subject to options.

Tascam MX-2424

The MX-2424 offers 24-tracks of 24-bit/48kHz or 12 tracks of 96kHz hard disk recording, 24 channel simultaneous recording using analogue or digital or both I/O's. On board editing, 9-pin interface standard. Ethernet control for up to 6 machines. Full waveform editing software supplied.

- \$9,000 + interface cards from \$1,575 to \$4,500

Tascam SX-1

The SX-1 Integrated Audio Production Station combines 40 channels of automated digital mixing with 24-bit hard disc recording, MIDI sequencing, extremely powerful editing, DSP plug-in technology & multi format mastering capabilities. The SX-1 is different from most workstations; it uses the BeIA Operating System and a powerful graphics engine, making the SX-1 an affordable all-in-one solution for professional Music and Video Post production use.

- \$22,000



Fairlight ESP Cream S-station



Fostex D2424 24-track



iZ Technology RADAR24



Mackie HDR24/96



Roland VS-2480



SADiE Artemis

Digital Recorders



Bias Deck v3.0



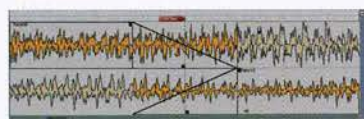
Cakewalk Sonar



Emagic Logic Audio Platinum V5



Mark of the Unicorn Digital Performer 3.0



Sek'D Sequoia

Software Solutions

Ableton Live

Live brings together audio from various sources & adjusts samples to the real time tempo without pitch change. An audio sequencer for Mac or PC live or studio applications. Recording new clips is as easy as playing existing ones, & every track, each of four send-channels, & the master output, can have a chain of effects; supports VST plug-ins; Every action carried out in a session can be recorded; editing audio is extremely fast. A Snap to Grid function does away with having to zoom in on waveforms to find musically significant intervals.

• \$699

Bias Peak VST 2.6

Enables lightning fast, non-destructive waveform editing. Features include: Unlimited Undo & Redo; Extensive Plug-In Support and Hardware Compatibility; DVD and High-End editing and processing, supporting files up to 24/32 bits and sample rates to 10 Mhz, including 96 kHz; Works native with Mac built-in audio or any compatible audio card; VST Plug-In support (ships with 25 free Plug-Ins); MP3 encoding and decoding; Imports QuickTime movies. Supported samplers from AKAI S series to Yamaha; Built-in Batch File Processor; Save files in any of Peak's supported file formats - even MP3. Peak can be used with PowerPC, G3, or G4's built in audio I/O.

• \$1099

Bias Deck v3.0

Deck provides quality multitrack recording and editing allowing you to record, edit, and play back up to 64 tracks of audio & 999 virtual tracks. Extreme Compatibility supports real-time VST Plug-Ins, & ships with more than 25 VST plug-ins; supports ASIO-compatible audio cards; can be used with Mac built-in audio connections, without extra hardware; Mixing and Automation offers hi-resolution moving faders and editable automation envelopes that "follow" audio regions as they are moved; Quicktime Movie Window and SMPTE/EBU Timecode Sync., also working perfectly with many digital video editing systems such as Final Cut Pro & Avid.

• \$899

Cakewalk Home Studio 2002

Do it all from your PC with Cakewalk Home Studio. There is no better Windows software available for taking the step into the world of digital recording. Home Studio provides you with everything you need to turn your PC into a powerful multitrack recording studio. With support for real-time DirectX effects, DXi software synths, MIDI FX plug-ins, & ACID™-format audio loop technology, Home Studio takes your music farther, faster, & for less money than any comparable software product. Windows 98/98SE/Me/2000/XP.

• \$249

Cakewalk Sonar

Sonar is suitable for recording, editing, mixing, music delivery, CD sound projects, film and video scores, the Internet, or any multimedia project. Sonar introduces DX Instruments (DXi), a new standard in software synthesizers (based on Microsoft DirectX technology) that makes it easier to work with soft synths, integrating them within the recording system, greatly expanding their capabilities. Sonar XL includes additional plug-ins, loop resources & DXi softsynths. Requires Windows 98, Windows 98SE, Windows Me, Windows 2000, Windows XP.

• Sonar - \$995

• Sonar XL - \$1495

Emagic Logic Audio Platinum V5

Professional Studio Music Production Software. The most powerful product of the Logic Audio series. The High-end Audio and MIDI sequencer for Macintosh & Windows. Includes up to 24bit/96kHz audio resolution, 256 audio tracks with multiple audio hardware support, fully parametric EQs, 16 inserts, 16 sends, 32 busses. Highly Advanced Automation. Over 50 native effects algorithms, VST & TDM support, Definitive sample editor with Time Machine, audio quantising. Comprehensive scoring facilities. Far too many features to list here. See www.emic.de for all the details.

• \$2,199

Emagic Micrologic AV V4

Entry Level Music Production Software. Audio and MIDI

sequencer with notation for Macintosh and Windows. Up to 16 audio tracks, easy real-time effects, an integrated stereo sample editor and virtual General MIDI mixing consoles, MicroLogic AV gets the user familiar with desktop studio technology without stress and hassle. A simple soundcard is sufficient to produce superb sounding songs. For creating soundtracks, any Quicktime or AVI movie can be played in perfect synchronisation. Innovative details such as the interactive real-time windows and the unsurpassed system resolution.

• \$299

Emagic Waveburner Pro

Audio Mastering & CD Authoring Software. Plug-ins can be applied to individual regions as well as to mix. Any number can be serially inserted, based on host processing resources. Proprietary plug-ins from Logic included. Bounce with or without plug-ins. Audio files work in original bit depth. 32 Bit processing throughout. At final Mastering stage the 32-Bit signal is converted to standard CD format. Comprehensive playlist PQ & Index editing. Supports 24 Bit/96kHz, VST, AIFF, WAV, MP3, SDII, ASIO, Direct I/O, SoundManager and AW8/2. Supports a big range of FireWire & SCSI CD writers.

• \$799

MOTU - Mark of the Unicorn Digital Performer 3.0

Digital Performer is an integrated digital audio and MIDI sequencing production system for simultaneous recording and playback of multiple digital audio tracks and MIDI data in a integrated, creative environment. In addition to editing, arranging, mixing, processing and mastering multitrack audio, Digital Performer's award-winning multitrack sequencer design, combined with non-destructive digital audio editing capabilities, provides flexibility and control of unlimited audio and MIDI tracks as your hardware will allow. Supports a wide range of audio hardware from Pro Tools, Direct I/O, ASIO, Sound Manager and also supports high resolution 24-bit/96kHz audio and surround sound, from LCRS up to 10.2. For Power Macintosh w/- MacOS 8.5.1 +.

• \$1695

ProTools ProTools HD

ProTools HD allows sample rates of up to 192k and up to 128 tracks at 24bits resolution. New generation of "state-of-the-art" high resolution converters matching the world's best, supporting up to 96 channels of I/O, both analogue and multi-format digital! New TDMII provides support for very large mixes. New MIDI and SYNC interfaces that seamlessly operates within the ProTools environment. Wide array of third-party support, and the ability to use "legacy" ProTools I/Os. ProTools HD is the new generation of the industry standard.

• Systems from \$22,000

Pyramix Virtual Studio

Merging Technologies is a name you may already be familiar with, due to their recently released Mykerinos PCI Audio board. Pyramix is their in-house developed Digital Audio Workstation software designed to utilise all the power of the Mykerinos card. A single card will provide 64 channels, with a variety of input formats available. Pyramix provides seamless video solutions, fast editing tools and an amazingly flexible mixer with all the facilities of a hi-end console. Their own hardware in/out boxes are available, using fully balanced XLR's and machine control operates via true standard 9-pin protocol. More information at www.merging.com

• Systems configurable from \$2,630

Sek'D Sequoia

High-end 32/192 Digital Audio Workstation software designed for sophisticated stereo and multitrack editing. Besides reliable HD recording tools, Sequoia offers superior cut and crossfade features for precise audio editing which makes it the first choice for report/interview edits, complex assembling of classical music productions or the editing of dialogue for film, video and radio plays. 4 Point Edit functions for stereo and multi-channel operation, Stereo, Dolby 5.1 and ProLogic-Surround Mastering. Completely integrated CD-Premastering (realtime!), Option for Tape Mastering and Dolby Digital Encoding (AC-3), SMPTE/MTC-Sync (Master/Slave), 32 Bit Float audio resolution, up to 192 kHz-sample rate, more than 64 stereo tracks.

• \$4995



Sonic Foundry Sound Forge 5.0



Sonic Solutions SonicStudio HD HD-196



Syntrillium Cool Edit Pro



TC Works Spark-XL V2.0

Sonic Foundry Acid Pro 3.0

Acid Pro 3.0 is an award-winning loop-based music creation tool that allows you to produce original, royalty-free music. Use Acid to create songs, remix tracks, develop music beds, score videos, and develop music for Web sites and Flash animations. This revolutionary tool is intuitive and easy to use. Work with hundreds of loops in multiple genres. Use unlimited tracks of audio. Import complete songs, even MP3s. And when you're done, publish your music to ACIDplanet.comSM. It even has built-in support for MIDI, video scoring, and can save to a number of audio and video file formats, including WAV, WMA, RM, AVI, and MP3. Requires Microsoft Windows 98, Me, 2000, or XP.

• \$595

Sonic Foundry Sound Forge 5.0

Sound Forge is Sonic Foundry's award-winning two-track digital audio editor. Sound Forge includes a powerful set of audio processes, tools, and effects for manipulating audio. This one-of-a-kind application is perfect for audio editing, audio recording, effects processing and media encoding. Combine Sound Forge with any Windows-compatible sound card to create, record, and edit audio files. The clean and familiar Windows interface makes editing a breeze. It also has built-in support for video and CD burning and can save to a number of audio and video file formats, including WAV, WMA, RM, AVI, and MP3. Microsoft Windows 98SE, Me, 2000, or XP

• \$595

Sonic Foundry Vegas Video 3.0

Vegas Video 3.0 Digital Video Editing System provides you with what you need to bring your ideas to the screen or to the Web. Vegas Video offers support for all OHCI-compatible IEEE 1394 DV devices, from consumer to professional. Whether the final project is DV, MPEG-2 for DVD, streaming media for the Web, uncompressed D1 for broadcast, NTSC or PAL, or a Red Book audio CD master, Vegas Video 3.0 provides all the integrated tools and high quality output options you demand for your production environment. Put yourself in the director's chair with Vegas Video 3.0. Requires Microsoft Windows 98SE, Me, 2000, or XP.

• \$595

Sonic Solutions SonicStudio HD HD-196

The world's leading system for High-Density Audio editing and mastering, SonicStudio HD provides surround audio editing and processing for CD pre-mastering, DVD-Video, and DVD-Audio sound preparation. The industry-standard editing model includes support for eight channels of 96 kHz audio and four channels of 192 kHz audio, all at 24-bit resolution, a 48-bit internal data path, segment-based processing of EQ and gain, HD multi-channel sample-rate conversion with AutoSonic, dither, Playhead scrub mode, edit soundfile during record, PQ code editing, ISRC codes, UPC editing, direct CD-R and DDP support, Loop and Fill functions, SRC on input and Varispeed. Requires SonicStudio HD compatible I/O converter HD-696 or the Sonic Audio I/O (DVD-888) and one PCI slot.

• SonicStudio HD-196 - \$19,411

• HD-696 High-Density Audio I/O - \$10,784

Sonic Solutions DVD-Audio Complete Workgroup

Sonic is the main company producing DVD Audio authoring systems. Solutions can be added as applications require or as complete a package, such as the HD-2121 Sonic DVD-Audio Complete Workgroup. It is designed as a complete system for hybrid DVD-Audio/DVD-Video and CD-Audio multi-channel High-Density Audio mastering and for adding interactivity for hybrid DVD-Audio/DVD-Video titles and output to DVD-R or DLT for replication. Includes SonicStudio HD (HD-196), High-Density Audio I/O (HD-696), OneClick DVD (HD-701), MLP Encoding (HD-710), Sonic DVD Transcoder (DVD-5500), DVD-Audio Creator Authoring (HD-721) and DVD Fusion SE (DVD-5063). Requires Macintosh with two PCI slots and PC running Windows.

• \$129,411

Sonic Solutions OneClick DVD HD-701

An add on option for HD-196, OneClick DVD enables the creation of simple DVD-Audio titles and High-Density Audio preparation for any DVD-Audio project. Enables the conver-

sion of SonicStudio HD EDLs to LPCM or MLF (with optional HD-710 plug-in) elementary streams for direct import into DVD-Audio Creator. Support for simple DVD-Audio titles includes Simple Audio Manager creation, Group Support, ISRC codes, SMART content mixdown, multiplexing and writing to DVD-R or DLT tape. Other options: MLP Encoding Plug-In for OneClick; High-Density Audio NoNOISE Suite HD-200; High-Density Audio Manual Declicking HD-101; High-Density Audio Production Declicking HD-103; High-Density Audio Denoising HD-104.

• DVD HD-701 - \$32,352

• MLP Encoding Plug-In - \$19,411

• NoNOISE Suite HD-200 - \$21,568

• Manual Declicking HD-101 - \$2,156

• Production Declicking HD-103 - \$12,941

• Denoising HD-104 - \$12,941

Steinberg Cubase VST, VST SCORE, VST32

High resolution MIDI recording with audio recording in either 16, 24 or 32 bit overload free format, 44.1-96kHz operation. 128 Audio channels simultaneously. Sample accurate Virtual Synthesizers and instruments. 4 Equalizers and full dynamics control per channel. 8 send effects and 4 insert effects per channel. Full Automation and remote controllers. Professional notation layout and printing. Apogee UV22 dithering. Supports ASIO low-latency audio cards. Comes complete with a large range of real-time VST effects and instruments.

• VST - \$799 VST SCORE - \$1199 • VST32 - \$1499

Steinberg Nuendo

Nuendo is a 200 track recording facility with 200 channel audio mixer including recording, editing and automated mixing for film, post, music, or surround sound design. Features include: Audio, group, video, midi, mix automation, marker, tempo and time signature tracks, 64 sub groups, 16bit - 32bit, 44.1kHz - 96kHz recording, 8 effects bus, 8 master effects, sample editor, integrated processes, non-destructive editing, audio process history, sample accurate sync, remote controllable, video playback, OMF in/out, mixdown to many formats, enhanced editing and tools like nudging, scrub, UNLIMITED undo/redo, VST, DirectX support, ASIO 2.0 support, offline mixdown, surround mixing, freely configurable speaker arrangement, fast locate and sync lock up.

• \$ 2999

Steinberg Wavelab

WaveLab is the fastest audio editing and mastering software available. It includes a user-friendly stereo editor that is currently available with a range of processing capabilities such as: effects, Red-Book compatible CD burning software, audio analysis, an audio file database, batch processing and sampler support, and finally, Audio-Montage Window - a revolutionary, non-destructive editing concept whose flexibility and power set it firmly apart from other audio software solutions.

• \$999

Syntrillium Cool Edit Pro

Cool Edit Pro is a digital audio recorder, editor, and mixer for Windows. Cool Edit Pro is a breeze to learn and use, packs enough top-quality digital effects modules to fill a room full of rack mounts, and can mix up to 64 tracks together, using just about any sound card. It's like having thousands of dollars worth of professional audio equipment all in one easy-to-use software package. Musicians, recording engineers, and broadcast professionals around the world choose Cool Edit Pro for its power and ease of use.

• \$869

TC Works Spark-XL V2.0

TC WORKS Audio Editing & Mastering Software for MAC. Powerful Multi-FX DSP, editing and mastering. Combines all aspects of audio editing from file database to audio editor and play list to browser view. FX processing with unparalleled routing and processing. Edit files, build playlists, re-arrange tracks with real-time processing and FX. Use the FX-Matrix independently in your sequencer. Instant cut, copy & paste, single channel editing, unlimited Undo/Redo, Direct editing of split stereo files. TDM support, De-Noiser, De-Clicker and much more. SparkXL has the tools you need!

• \$1,199

LIGHTING DIMMERS

We asked all of the distributors of dimmers to send us some information on any four of the dimmers or dimmers ranges. Below you will find the result. Each supplied us with a description of the dimmer you see hear, so remember that a grain of salt may be needed with some claims that are made...



Bytesize APC



Compulite CompuDIM 2000



Compulite MobileDIM 2000



Dynalite Dimtek DBC410

Bytesize 483

Features Broadcast quality 12 x 2.5kW or 6 x 5kW dimmer; Available as freestanding (Bigtop) or rack mount (483); 2 outlets per dimmer available on Bigtop; Status monitoring and remote reporting; Input DMX 512, AVABDMX, Felix, Command Link, Analogue +/- 10V; Fault reporting; Internal preset programming; Soft patch; curve control; Robust 60 Amp SCR Technology; 100 x 12 channel internal preset memories; Internal back-up; RCD safety protection.

• \$4,900

Bytesize APC

Features Easy to use; 12 x 2.5kW or 6 x 5kW; Direct access to frequently used functions; LED level and status indication; Dynamic, real-time Frequency Tracking from 40Hz to 80Hz; Output voltage line regulation; Neon "phase available" indication; Protocols: DMX512, LONworks™ (for supervision); Status monitoring and remote reporting; Totally digital hard firing; 13 bit fade resolution; CE and C-Tick compliant; Patent pending APC technology resulting in energy saving and lower noise; Cool, quiet, light-weight 19 kg; RCD safety protection; Controllable via local network hookup. Optional Dimmer Control Unit (Remote) and shuttle dial provides access to advanced features even from a remote location.

• \$3,300

Bytesize VST

Features - Highly efficiency 12 x 2.5kW; Sinusoidal output independent of load, including reactive loads; eliminates lamp filament singing and reduces dramatically harmonics; heavy neutral currents, RF harmonics and associated interference; Operates with distorted generator sources; Compatible with most lamp types, including discharge lamps; Remote status and remote control; Electronic overload and short circuit protection; Stand alone internal sequencing, with presets including fade-up and fade-down time; Rated at continuous use at 40°C ambient; CE and C-Tick compliant; RCD safety protection; Controllable via local network hookup. Optional Dimmer Control Unit (Remote) provides access to advanced features even from a remote location.

• SPOA

Compulite CompuDIM 2000

Fully modular, fully digital DMX/ethernet dimming system. Rack cabinets are available in 12, 18 & 24 draw sizes. Each draw can be loaded with different modules, including 4x10A, 2x20A, 1x40A dimming or 4x20A contactor, for a maximum of 96 channels per rack. Full remote status monitoring includes temperature, current draw, open circuit load, c/breaker status, DC on output and module type. Connects to Compulite consoles or the Compulite Dimmer Monitor Software for Windows. The cabinet includes full 300A busbar power distribution and each plug in module drawer includes all the required circuit breakers. RCD's on individual outputs are available as an option. Dual redundant CPU modules are available. Dual DMX inputs with merging, ethernet and analogue.

• from \$15,000

Compulite MobileDIM 2000

Portable rack mount version of the CompuDIM 2000 DMX/ethernet dimming system. All the same features plus hotpatch and power input connectors, housed in a standard wheeled roadcase. In the unlikely event of a failure simply pull out the failed module and slide in a new unit. The system will instantly recognise the new module and return to normal operation. The fully modular construction is ideal for rental houses. Simply plug in the modules required for a particular show/tour and send the system out the door. Include a spare plug in module and the user can service any damaged channels without any tools (or after hours call to your staff).

• from \$18,500

Dynalite Dimtek DBC410

The DBC410 (formerly DTK925) is a 4 channel wall mount architectural ballast controller suitable for use with electronic dimmable fluorescent ballasts, either 0-10V or DSI. It also includes 4 breaker protected heavy duty 10A relay outputs to switch fluorescent lighting or other loads in a DyNet energy management system. The DBC410 can be programmed to adjust the lighting levels to within an environment to satisfy regulatory or operational requirements. Lighting levels can be kept constant throughout the day, thereby improving productivity and comfort. Using the DyNet universal sensor, light output can be automatically adjusted to compensate for changing ambient light levels.

• \$1,020

Dynalite Dimtek DMC805

The DMC805 (formerly DTK805) is a wall mount architectural controller that offers control of both incandescent lamps and electronic dimmable ballasts. A 20A breaker protects 4 leading edge phase control channels rated at 5A each for control of incandescent loads. Another 20A breaker protects 4 channels, which connect to electronic dimmable ballasts, where any

Brands and Distributors represented in this report...

LSC	LSC Lighting Systems	+61 3 9561 5255	www.lscighting.com.au
Compulite	Coemar De Sisti Australia	+61 3 9467 8666	www.cdaust.com.au
TechArt	Coemar De Sisti Australia	+61 3 9467 8666	www.cdaust.com.au
Solution	Bytecraft Entertainment	+61 3 8710 2555	www.bytecraftentertainment.com
Bytesize	Bytecraft Entertainment	+61 3 8710 2555	www.bytecraftentertainment.com
Jands	Jands Electronics	+61 2 9582 0909	www.jands.com.au
ETC	Jands Electronics	+61 2 9582 0909	www.jands.com.au
Dynalite	Dynalite	+61 2 8338 9899	www.dynalite-online.com

one channel can be loaded to a maximum of 10A. Both 0-10V and DSI ballasts can be controlled. The DMC805 is the ideal choice for boardrooms. It can be controlled directly using any of the Dynalite accessories, or fully integrated into an audio visual control system supplied by a third party. The DMC805 has been designed as the solution for small areas of mixed lighting loads. • \$1,271

Dynalite Dimtek DTK410

The DTK410 is a 4 channel leading edge phase control wall mount architectural dimmer with a maximum load per channel of 10A. Each output is separately protected by a 10A circuit breaker. It is suitable for use with incandescent, low voltage, neon and selected fluorescent light sources. The DTK410 is suitable for controlling mixed lighting loads, providing the convenience of lighting preset scene control whilst offering dramatically increased lamp life. In applications where there can be numerous users, such as lecture theatres, the DTK410 can be configured with control panels and the DyNet universal sensor to provide preset scenes for entry, set-up, cleaning and presentations. An override capability for presenters can be provided using Dynalite's IR handset. The unit is also available with an optional DMX512 port. • \$1,482

Dynalite Dimtek DTK910

The DTK910 is a 12 channel leading edge phase control wall mount architectural dimmer with a maximum load per channel of 10A. Each output is separately protected by a 10A circuit breaker. It is suitable for use with incandescent, low voltage, neon and selected fluorescent light sources. In applications that have diverse lighting loads and demand 24 hour operation, such as a resort foyer, the DTK910 is ideal. It's rugged reliability and superior lamp protection technologies ensure that lighting down time is kept to an absolute minimum. The dual standard DyNet / DMX512 control makes the DTK910 suitable for theatres and auditoriums. This allows the same controller and lights to be used for both architectural and production lighting. The DTK910 is fully DyNet compatible. • \$4,136

ETC Sensor Dimmer Rack System

Single or dual 15 or 25amp dimmer modules that configure

into user specified racks with separate CEM control module. CEM has test, preheat, 110/240 voltage, curve adjustment, DMX assignment options, input and output displays. Sensor Online dimmer reporting option. Available with RCD per channel. Ideal for architectural or theatre installations or in touring package. • \$ POA

Jands FP 12 Dimmer Rack

12ch x 10amp 2.4kw circuits. Available in rack mount and wall mount versions. Each channel with circuit breaker protection and LED level display. Rear mount output sockets on rack mount version, RCD also available. Test, chase and preheat facility. DMX bank control. Ideal for medium sized venues and community centres. CE and C-tick approved.

- from \$ 2,995 (rack mounted)
- from \$3,045 (wall mounted)

Jands GP 12 Dimmer Rack

12ch x 10amp 2.4kw circuits. Rack mountable. Each circuit with fuse protection and LED level display. Front mounted output sockets. Test and chase facility. DMX bank control. 3phase input. No frills unit ideal for schools and churches. CE and C-tick approved.

- \$2,695

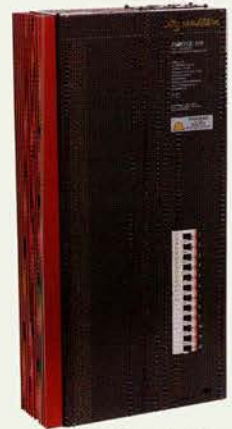
Jands HP 12 Dimmer Rack

12ch x 10amp 2.4kw also available with 6ch of 20amp 5kw circuits. Rack and wall mount versions available with Triac or SCR control. Rear mount outputs and front mount circuit breakers each. LED level and status display per channel. DMX channel assignable. Test, preheat, 110/240 voltage, scene and chase facilities. Software upgradeable. Ideal for touring, high usage venues. CE and C-tick approved.

- from \$4,295 (rack mount)
- from \$4,345 (wall mount)

Jands Hub 24

Incorporates 15 dimmer outputs, 9 switched outputs, a 1in and 3out DMX splitter. Its an ideal choice for any one using a mixture of conventional and automated lighting fixtures and offers a host of powerful control options. Separate ELCB protection for dimmer and power distribution.



Dynalite Dimtek DTK910



Jands FP 12 Dimmer Rack

GRAHAM WALNE

- lighting designer of 500 productions worldwide
- author / editor of 8 technical books and over 100 articles
- specialist in vocational training
- theatre consultant to over 80 projects worldwide

world class

www.graham-walne.com

Lighting Dimmers



Jands HP 12 Dimmer Rack



LSC e24 Dimming System



LSC ePRO - iPRO Dimmer



TechArt TV5000

tribution sections, current metering on all 3phases,selectable output voltage (240/120v),selectable fade curves, snapshot storage, 50or60hz operation. The Hub24 uses a chokeless IGBT plus thyristor output tpology for reduced weight and noise. • \$POA

LSC e24 Dimming System

24 channel compact Dimming System, fully flight cased and ready to go! The e24 comprises 24 channels of LSC's ePRO 13 Amp dimmers hooked up through a very versatile patch system. Dimmers have the same functions as per the ePRO dimmer, but configured for 24 channel operation. The Dimmer Patch is a Series/Parallel arrangement providing two 115 Volt and two 230 Volt outputs per dimmer channel. Also included are 3 circuits of "live" patch outputs comprising two patch sockets and one 3 pin GPO per circuit. The Light Patch is a separate mounted module and contains the patch plugs hard wired to a choice of multipole connectors. Four, five or six circuit wiring can be configured utilising 10 pole Wieland, 16 pole Wieland or 19 pin Socapex connectors. • from \$13,750

LSC ePAK - iPAK Dimmer

12 channel x 10 Amp fan-cooled dimmer with MCB per channel; easy to use front panel controls for DMX address setting, scene storage, channel selection and drive output; complete with 32 Amp three phase plug and tail (ePAK only). The central heatsink has been custom designed to mount all the main components and provide an efficient airflow, resulting in a 100% duty cycle operation. "Current Control Technology" smoothes out large in-rush currents, avoiding nuisance tripping of Circuit Breakers. ePAK available in 19" rackmount format with rear panel output connectors and iPAK as an installation version with front panel mounted connectors. • \$2,585

LSC ePRO - iPRO Dimmer

The ePRO and iPRO embrace the physical characteristics of the ePAK and iPAK, but with higher specified enhancements. The "PRO's" offer 12 channel x 13 Amp or 6 channel x 25 Amp variants with multiple choices of output connectors (including screw terminals) and Triac or SCR control. Six different curve settings are available for each individual dimmer channel and is easily set up from the front panel controls. A variable speed fan control circuitry allows the fan to run dependant on how hard the dimmer is working. The 120 Volt and Non-Dim selections make this dimmer very versatile and desirable for the professional user. • from \$3,795

LSC TDS Dimming System

Flagship of the LSC Dimming range is the TDS 48 channel Dimming System. Utilising the ePRO 12 channel x 13 Amp dimmers, the TDS is modular in construction and allows the customer to design their own system from standard building modules. Choices of Mains Distribution units, Power Monitoring systems, Dimmer Patch configurations and Light Patch output connectors, allow the TDS to be tailored to match most system requirements. Housed in a sturdy steel frame that is fully flightcased, the overall effectiveness of the TDS design provides for a quick and accurate pre-show setup, thus optimising time and crew required. • from \$39,985

Solution Solution28

Specific dimming requirements (10, 20 and/or 40

Amp) can be incorporated into each Solution28 cabinet. Stand alone internal sequencing with 100 presets each including fade times, internal soft patch, fault detection, status monitoring, RCD protection and more. For permanent dimmer installation in theatre, hotel, conference and exhibition centre. • \$9,680

Solution Solution5

Compact, robust, wall mounted dimmer pack can control variety of loads incl. incandescent, fluorescent, ELV, metal halide and cold cathode. Analogue or digital control. Master/slave operations and multiple Solution5 configurations are supported. Stand alone internal sequencing, with presets including fade up and down time, multiple local and remote modes. Available as 1 x 20amp, 2 x 10amp or 5 x 4amp. • \$1,650

TechArt Custom Made

TechArt manufacture dimmers in small production runs, so are capable of producing custom units to meet specific requirements. Recent examples include a 6 channel 19" 2RU dimmer with single phase 20A input, and a small 3x10A DMX dimmer with individual 10A inputs for truss mounting. Other options include internal DMX merging, contactors for switching, single or three phase supply and dropped neutral protection (ideal for rental). Cases can be rack mount, free standing or truss hanging variations. Prices are on design application. • P.O.A

TechArt Mod-U-Dim

A full Plug and Play DMX dimmer system. The 19" rack cabinet can house up to 96 x 10A or 48 x 20A modules, or combinations. Control modules with LCD screens provide configuration of user options. Full internal power and load distribution wiring. In the unlikely event of a dimmer failure, the offending module is removed from the rack (no tools required) and a replacement module inserted. Configuration is automatic and the system returns automatically to normal operation. • from \$10,000

TechArt PowerDim

3RU, 19" rack mount DMX dimmer system. Available in 6x5kW or 12x2.4kW versions. Includes thermal/magnetic circuit breakers on each channel, neon load/open circuit indicators, thumbwheel DMX address. Rear panel options include 240v outlets, wieland, socopex, etc. Very easy to service with only 6 screws required to gain access to all the internal components. No soldering required to replace triacs. Optional SSR (solid state relay) output devices are almost indestructable, even into a short circuit. • from \$2,800.00

TechArt TV5000

Wall mount version of the PowerDim rack. Available in 12x5kW, 12x2.4kW or 24x2.4kW models. Optional LCD menu for advanced configuration. 3phase RCD on input, individual thermal/magnetic MCB's on each output. Hard wire inputs/outputs on large terminals. The dimmer cabinet features a hinged front door for easy internal access for wiring. SSR (solid state relay) output devices are almost indestructable, even into a short circuit. Optional front mount 240v sockets for integral hard patch. As recently supplied to Australian Film & Television School (NSW), Channel 7 Melbourne Broadcast Centre and FoxTel.

• from \$3,800

Venue Building

Jands wins \$4.8m contract for Walsh Bay Theatre

In a deal that includes a power flying system, and in partnership with Stage Technologies, we take a look at what the winning tender has in store...

by Madeleine Murray

At the moment, it's a vast hole in the ground. Dozens of workmen are putting in formwork on a concrete platform beside the excavation. Hard to believe that within a year, this will be the Walsh Bay Theatre (WBT). Some people, of course, believe this will be a theatre, such as consultant Denis Irving, and Jands Electronics, which won the \$4.8m contract to supply equipment that includes stage machinery, power flying equipment and lifts.

This is a significant salvo for Jands incorporating three partnerships, two from overseas. The most stunning part of the project is the alliance with Stage Technologies, to supply and install the power flying system. Jands will manufacture the hoists here in its new purpose-built workshop, while British company Stage Technologies (ST) will supply the control with its Nomad desk. The winch design will be developed in consultation with ST based on their Big Tow 350 hoist which won a PLASA award three years ago. The state of the art orchestra lift machinery will be supplied by French company Serapid. I spoke to Jands CEO Paul Mulholland about this latest venture.

"This is the biggest single contract we've been awarded," Mulholland told me at his Jands office. "Chris Johnson who runs the theatre division, and John Buckley who looks after the technical aspect of things, have known about Stage Technologies for some time. Stage Technologies had exhibited at Entech three times, and was interested in trying to do business in Australia.

"Chris and John had identified that Jands needed a partner that had control smarts. Jands has got all the hardware and heavy machinery smarts, and some control smarts, but Stage Technologies is a world leader in theatrical control technology, and so they started talking. Then they got me involved. I had a couple of meetings in London where we decided to form a strategic alliance and bid the Walsh Bay project together. Jands fronted the bid, because we're the Australian company and we supply all the machinery, and Stage Technologies is sitting right behind us with the control smarts." The whole process involved talking for two years, agreement for a year, and then the contract.

Jands will manufacture all the machinery locally. In a daring gamble, Jands spent half a million dollars on new machinery in the metal shop before they won the bid. "So you were happy when you got the contract?" I asked. "Very," said Mulholland, succinctly. "We had a plan at the beginning of the year. We knew that Walsh Bay was on the drawing



board. Twelve months before it went to tender, we formed an alliance with Stage Technologies, we investigated the sort of machines we needed – that was a three month project to work out what was available – we then placed orders, it all had to be imported. It was all in place by September and working. So when they got to evaluate the tenders, and they came out and looked we were all running and working, and we were successful. It's a gamble, but it paid off. "It will probably be one of the most sophisticated theatres in Australia."

Stage technologies

"We're very excited about it, I have to say," John Hastie, cofounder of ST told me on the phone from his London office on a foggy morning.

"We've been looking to find an Australian partner for a while," he continued. "We've had a stand at the past three Entechs, where we got to know a few people and some of the consultants. That's how we built up a picture of what was happening in your neck of the woods. Then we started talking to Jands around last PLASA time."

John Hastie is such a busy man that he flew from London to Australia for a day meeting about the WBT, and flew back that night. "At Walsh Bay, they want to use the system to put a show into the theatre but they also want to be able to do nice effects when they are running the show. You can't do both on a lot of other systems. That's what makes it even more appealing for us to win this project".

Nomad is ST's top end high spec control system, now used in 15 installations around the world, including the Royal Opera House, Sadlers

Top Right: Model of the finished Walsh Bay project
Below: Denis Irving



(continued over)

Wells, the Lyric Opera in Chicago, and the Brussels Opera House. The Nomad is entirely produced in house. ST developed the hardware, platform and electronics for it. They write all their software in house, and then build it. Of their 36 employees, two thirds are involved in engineering.

Marketing director Hastie, 38, and CEO Mark Ager, 40 started ST in '94. Both worked in the theatre automation industry before that. "We started the company with the goal of making automation systems modular, rather than designing a bespoke piece of equipment for every single project which is what happened previously. We wanted to produce product and then integrate those in applications, like the flying system at Walsh Bay or the Royal Opera House. Virtually everything in the Opera House control system is in a standard product, but we have to do some other software and engineering to make it a complete system."

The power flying system

The power flying system will have 61 power flying hoists arranged for a full complement of scenery battens at 200mm centres. These are direct winched with enclosed winch rooms on either side at grid level. Each will accommodate alternate winch sets and associated VS drives. Jands will supply 61 lines of power flying for cross stage battens (four for panorama bars), and another 10 spot hoists – a single points of suspension that can work anywhere over the stage area. All the large hoists will be able to move a quarter tonne at two metres per second, or half a tonne at half a metre per second.

"We're really excited about supplying this power flying system. It will give us the opportunity to work with a style and a level of technology that is world class," John Buckley said.

A new system called MaxisID, which uses an embedded software platform

contained inside a Siemens variable speed drive, will remove the necessity for a custom hoist interface. The winches will use AC servo motors rather than conventional four pole motors, because they are much quieter. "The mechanism is very quiet and accurate in terms of repeatability," Buckley said. "Everything with power flying and the motion of scenery is dependent on repeatability and it must be absolutely bomb proof. If you lose a light, so what, if you lose a speaker, so what, but if you lose a power flying hoist the consequences can be far more serious".

The story behind the theatre

The WBT should do very well, as it will be surrounded by over 250 luxury apartments in the sweeping Walsh Bay development project. The apartments are in the Rocks with views over Sydney Harbour. It's a first class address, and the consortium Walsh Bay Partnership are building a theatre as part of the development agreement. The two tiered, 850-seat space will work for the Sydney Theatre company, the Sydney Dance company, Bangarra and touring shows.

"For a number of reasons, very early on in the piece, I was pushing for the theatre to have a fully power operated scenery flying system, and not a counterweight system" Denis Irving told me from his Melbourne office, which he runs without Email or a mobile phone. "In the end, I managed to get enough people onside, and a decision was made to do that. There are long term savings.

"The winching equipment is relatively straightforward, but the control equipment for it isn't. To have an electronic system which is as sensitive as a flyman pulling a rope is very difficult to do. There aren't many people in the world doing that really successfully. One of the better companies doing that internationally is the English company, Stage Technologies."

Three companies, Bytecraft, APC and Stage Technologies (ST) were the preferred tenderers. Jands, who was interested in making the machinery, and ST, who would make the control, formed a consortium, and won the tender. "After quite a lengthy and I hasten to assure you, a very punctilious process, the Stage Technologies and Jands bid was awarded the contract," Irving said.

He went on to explain some of the constraints of the project. "We always seem to get stuck with difficult sites. We have to fit the theatre into the space created by demolition of one of the bond stores. On one side we've got the street, foyer end is a new apartment block, on the OP side we have existing bond store three, and backstage is existing bond store two, so we're constrained on all four sides. This was one of the reasons that we went to power flying, because on the prompt side, there is minimal wing space. We couldn't put counterweights on the other side because that's the only place for the side stage where we go back into the old bond store. It's quite a tricky shoe horning exercise. The nominal proscenium width is 12 metres, which will open up to 14, and the stage depth is 11 metres. With a lot of fighting we created a crossover at stage level by putting a passageway in the bond store next store, which caused a considerable discussion because they didn't want to give away a bit of commercial space. There was that sort of thing – all the time we were trying to fit in amongst commercial sensitive development. I must say that once major design decisions were made, Walsh Bay partnership continues to be very supportive."

The power flying system was treated as a separate tender because of the government funding. Jands also won another tender for all the

(continued pg 68)



Chris Johnson runs the Jands theatre division

Arena Concerts

LIVE



Reinforcing that line-array systems really are the flavour of the month, Jands supplied the new JBL Vertec line array system for the tour. According to FOH engineer David Lohr the JBL line array was their preferred system for the Australian tour although they have used a range of comparable systems around the world.

David started touring with LIVE in May 2000 after 22 years of working with some of the biggest names in the music world.

"I started in 1978 with club bands and then in 1981 I started touring with a band who had a hit single in the US so I started doing it professionally then. I quit in 1985 and built a studio and did a studio stint for three years, then I got a phone call from Pink Floyd to be their Quad Operator which involved tape machines and all the things I was doing in the studio as well, so I decided to go back on the road - that was rather a hard one to turn down! So I did that for two tours and I've been on the road ever since."

Since then David has worked with Neil Young, Carly Simon, Daryl Hall and John Oates, and continues to work with Crosby, Stills, Nash and Young, in addition to non-rock and pop work including mixing live audio for the Superbowl. It was in his work with the American football season that David came across the JBL Vertec for the first time.

"I did a short stint this year with the JBL Vertec system on a very short Evco football season in the States and used this system for stadiums and liked it. It was a totally different application but I really

liked it because it was beefy enough to give good impact, a lot of the video playback sounded really good through this system as well as music and handheld vocal mikes. I just really like the system and decided it was the best thing going and now that it's become readily available in most countries it's a good option for touring.

"I like V-DOSC as well, I'd used it quite a bit before this came out. But for rock this has a bit more impact. The V-DOSC is very clear sounding and its coverage is very similar. This system is actually very similar to V-DOSC but they do a couple of things differently with this system and it gives you a bit more headroom and a bit more clarity. It doesn't get as nasty sounding when you really jump on the system, and with this band I'm mixing back at the console at about 113 C-weighted and about 105 A-weighted. So it gets loud, but it stays punchy."

While "punchy" is important for the rock songs, David said he was also impressed by the way the system handles acoustic songs describing it as "very clear".

"Because it's very clean for acoustic stuff we're going to use the same system for Crosby, Stills, Nash and Young when I get back."

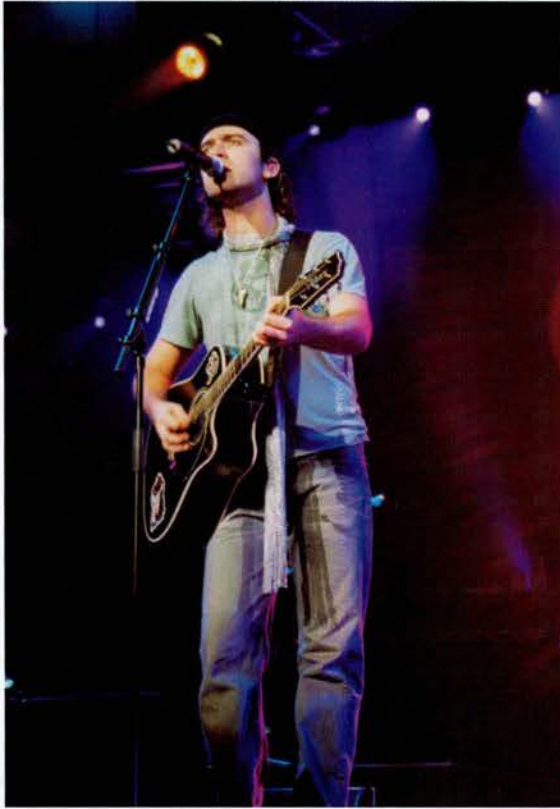
The system at the Rod Laver Arena in Melbourne consisted of 40 flown boxes, 36 subs, plus some small front-fill speakers in front of the stage. With 210° coverage from the Vertec boxes, David gave the audience a stereo perspective by using panning in his mix and alternating the columns into left and right side.

(continued over)

American rock act LIVE was the last of the big international groups to tour Australia prior to Christmas. Their nine gig arena tour took in Wollongong, Newcastle, Brisbane, Adelaide and Canberra, with two shows in both Sydney and Melbourne. Mandy Jones went to take a look...

FOH Engineer - David Lohr





"A lot of the guitar stuff that I do is panned away from centre, the same with keyboard which is panned off in varying degrees and even the drums are panned off a little bit, so to get the perspective everywhere in the room you need to alternate the columns."

Out at front of house David described the set-up as "standard fare". He used his console of choice - a 48 channel Midas Heritage 2000 with a 16 channel expander, standard compressors and Lexicon and Yamaha effects. Dynamic equalisation and a levelling amp were used on the vocals of lead singer Ed Kowalczyk.

"I have a tap delay for Ed's vocal and a harmoniser for the background vocal to spread it and there's a couple of other tricks engineering-wise that I've learned over the years, but I only use the standard reverbs and effects."

David said while the stage "looks" loud, in fact his priority is to keep the stage volume down so the band doesn't have to compete with it.

"We have isolation boxes for the guitar players with gooseneck mikes mounted inside them ready to go, so the guitar amps aren't very loud on stage but it appears that they would be. We do have two very large stacks but there's only one set of speakers, it's a bit *Spinal Tap* but a lot of the business really is about show, it has to look like what you're listening to, even though you might not be using it all.

"All I'm trying to do is take relationships of instruments and things that we're doing on the records and just make a live show out of it, not recreate the record, but the balances of things need to be somewhat like the record. There's a lot of tricks they do with telephone voice or different tricks on the record, but they don't want to dwell in effects, they want to perform their music live and not get caught up in trying to recreate the record live. And a lot of people don't want to go and see a show and hear it's exactly the same - they want to hear the arrangement or something done a little differently. Otherwise you can just sit home and watch the video or listen to the record."

Concert Video

Concert video suppliers *The Big Picture* were asked to supply video coverage for the Sydney and Melbourne shows by promoter Michael Coppel. Having previously toured with LIVE during their Australian tour in February 2000, Dennis Murphy explained they had a fairly good idea of what the band wanted in terms of coverage.

"They hadn't been using video that extensively in

the shows and what we did last time was very well received," said Dennis. "Obviously they're a really great guitar band so it's quite easy to cut pictures to their music. This time when they approached us they actually expressed an interest in using an English director that they really liked but we gently reminded them that we did it last time. When they were reminded of that they went and checked and remembered how happy they were, so we did it again this time."

Dennis said they provided a "pretty stock standard rock and roll spec" consisting of three cameras (Sony D30 and D35) and a couple of remotes.

"Camera 1 is an on-stage handheld on stage right, camera 2 is a long lens out at the front of house position and his job is to follow the lead singer tight all night, camera 3 is in the pit on the stage left position so he covers the guitar and variations on the singer. We work to a basic brief and anything else on top of that is a bonus. Two Sony XC999 miniature cameras are used on keyboards and drums and I tend to jump on them and use them all the time."

Two 20 x 15 front projection screens were hung on either side of the stage and two Barco 6400 Realities were used for projection. While most of the projected images were made up of live footage from the show, the band supplied some footage for playback over one song.

"They supplied us with a clip of what would appear to be amateur footage shot in the aftermath of the September 11 terrorist attacks on the World Trade Centre and we just basically overlay that over their last song 'Overcome' and it is very strong, it's a real moment in the show which is very nice."

Dennis explained their standard set-up is a proven system after four years of use, however their newest toy a Sony DFS700 is a switcher which will help them in the transition to 16:9 format.

"Because of legislation if you deliver anything to television stations it has to be in 16:9 format and acquired digitally, but that's pretty expensive for guys like us who are independently owned. For us it has to be a phased introduction so this little switcher means you can switch between 4:3 and 16:9, and it's got selectable inputs so you can choose between serial digital, component or standard composite or YC, and it's got some great little on-board effects."

Dennis used only two effects in the show - a water ripple effect which the band thought was pretty cool, and a stop-motion effect for another song.

"Every night we record the show on VHS for the band, and the way I look at it is no news is good news. You *always* hear about it if they don't like it!

"Our job is to visually capture an act and then transpose that onto a screen, and the way you direct it can either enhance or degrade that. You know visually if something is working or not working regardless of whether you like the act. With this show - the band is going off and the crowd is going off so it's pretty hard not to get fired up about it."

With a four person touring crew, Dennis explained his company encourages dual role-ing as a way of increasing the experience of the operators and making it a more cost-effective exercise. The crew is made up of Dennis as Director, co-owner of the Big Picture Joe Bonanno as senior camera/projection, Dave Hendy on handheld camera/projection, and Mark 'BJ' Walkton on FOH camera.

"Dual role-ing is pretty standard in rock and roll touring where your camera guys will set-up the projectors and screens as well so it makes it better value for money. We have a neat little crew on the tour. We pick up a local person to do CCU and we've done enough of this over the years that we've got locals in each city."

Lighting

LIVE's Europe and Australian shows were American Lighting Designer Abigail Rosen-Holmes (aka Abbey Holmes) first experience with the band. Throughout her career as an LD, Abbey has designed for big-name artists including Janet Jackson, The Cure, Amy Grant, Thompson Twins, The B-52s, Talking Heads, Adam Ant, Peter Gabriel, and Roger Waters including The Wall in Berlin, 1990.

Her involvement in the LIVE tour was not confirmed until quite close to the commencement of the tour so Abbey's designs for the set and the rig were slightly limited by time and availability. With the help of an English lighting company she tracked down some panels of grey drape that could be used as a cyc for the tour and came up with a design concept.

"We knew it would be a small, simple system so we wanted to get a sense of depth out of these three grey panels at the back. The other idea was to take truss which everyone has in rental stock and put it into some interesting shapes and positions that you wouldn't expect. The main shape is the flying V section of truss which is also the title of the album, V for five, so that was kind of a nice thing to be able to do. And it was great to get some lights floating in space to give it a sense of depth and also to put them into a bit more of an interesting position than just straight overhead." Abbey's rig consisted of Icons, VL5s, StudioSpots and Mole-lites with scrollers.

"In Europe it was just Icons and VL5's but there weren't as many Icons available in Australia as we'd used in Europe so the fixtures that were Icons in Europe were substituted with StudioSpots here.

"The mix and match of the moving lights had to do partly with that substitution due to availability and because I like to use the Icon control system. I think the fixture is very sophisticated and so is the console. The Icon hard edge fixture can be more elegant and forgiving in how it gets from one state to another than most of the other hard edge fixtures. Most of them are not attractive when they change gobo or colour, and even though you see the change with the Icon it can be quite nice and quite interesting. And it's fairly bright.

"What's really remarkable about them is the fixture must be ten years old now and in my opinion no-one's made a hard edge fixture which is more interesting to use than the Icon, which is really surprising when you think about it."

Interestingly, Abbey said the Icon is her favourite fixture to use for live music.

"I wouldn't necessarily put it in a permanent installation on a long running show because they take quite a lot of maintenance, and they're probably a bit too large and sophisticated for some of the corporate or industrial work that I do, but I think they're great for music."

For the LIVE tour, Abbey said she spoke most to LIVE guitarist Chad Taylor about the look of the shows. His input was simple - make sure the band can be seen.

"One of the first things he said and was very clear about was that he really wanted the band to be able to be seen. There are so many shows that are beautiful light shows but they're not really about the lighting of the performer, so that's one thing that's predominant in the design.

"I felt, listening to this record compared to their earlier ones, it has a little bit more of a rock feel than some of their earlier ones, and a little bit more stripped down clean - a back to basics feel, so I've tried to reflect that in the lighting as well."

Abbey explained there was more movement in the show than she would have normally had, mainly due to the fact that there weren't any rehearsals for either leg of the tour.

"The show was put together the fast way, so in some places there's movement just because that's how we ended up, but I don't think there's too much gratuitous waving around though. There's movement between the looks rather than on-going movement if that makes sense."

In choosing a palette of colours, Abbey said hotter colours seemed to feel more appropriate especially for the bigger numbers. And with gobos, Abbey was able to turn to her collection of custom gobos she has built up through previous designs.

"I'm lucky because I have quite a good collection of abstract images that I've built up over time so that was one area where we didn't get hurt by there being such a short amount of time. I do tonnes of stuff in my shows where I use them as projection looks, but to be honest this show has a lot less of that than I'd normally do. It can be a sort of soft feel in a way, and also it's not a very big lighting system and it takes quite a lot of lights to do that, you have to take nearly half your rig and aim it at the drapes so there's much less than I'd use in other shows."



Top: Big Picture's video set-up
Above (left to right): Mark Walkton, Joe Bonanno, Dave Hendy and Dennis Murphy of 'The Big Picture'

Lighting Designer Abigail Rosen-Holmes



Staging Sweeney Todd



Set in London, 1846, Sweeney Todd is the tale of a vengeful demon barber who slits his clients' throats. The production, with shades of the Elephant Man and Dickens, conjures up the fetid stinking streets of London against a background of giant cogs and wheels of the early industrial age. Great shrouds and wreathes of steam, smoke or fog swirl in the dark lanes, mixed with the blood and bones of Sweeney Todd's victims.

Madeline Murray takes a look at the production...



This production was a first for Opera Australia for several reasons. The set was built under a contentious tender scheme called Opera Conferencing, which may make sense to economic rationalists, but proved expensive and impractical in the long run. Since Sweeney Todd is a musical rather than an opera, it was mic'ed. And Trudy Dalglish, LD, used 14 moving lights in her design, the most ever used at OA. Since OA works in repertory, with a fast turnaround of shows every day, the sound and lighting of this major musical had to be as efficient as possible.

Economic rationalism

A requirement for OA's federal funding is that some set building must be put out to national tender. This sounds economical, but ends up creating new problems. For Sweeney Todd, the workshops of OA, Adelaide Festival, and the Arts workshop Western Australia tendered. The West Australian workshop won.

"They did a very good job," said technical director John Moulton, "but I have to say that the tender process is not something that we enjoy going through here. You don't have the time to make the alterations that come out of rehearsals. It gets very expensive if you're dealing with a party that is not on site. That was one of the real hassles. Things change in rehearsal, it's a difficult and expensive process. Anyway, we got there.

"For example, we had about \$5000 worth of modifications done to the barber's chair, which is something I didn't desire.

"Everyone thinks a cut throat razor can't be too hard, but that was another really expensive item with changes that came out of rehearsal.

The logistics of repertory work

The main stage device is a huge set that appears out of the darkness, backlit by a blinding beam of light, and travels in a straight line to centre downstage. Once in place, it then revolves, and is three sets in one. Upstairs is the

demon barber's shop, where he slits the throat of customers. The elaborate chair turns into a chute, which sends the bodies down to the shop below, where they are minced into Mrs Lovett's pies. The set revolves to reveal the two storey judge's house.

Since the set had to move in a straight line, and in a circle, OA had to build a false floor before they could put the pie truck onto that, and make a revolve in the false floor. They could then align the slot that brought it downstage with the slot in the revolve and turn it that way.

A normal musical would have used automation, but since OA work in repertory, they change the set, lights & sound twice a day. So they try to keep a show's structure as simple as possible. In a typical 36hrs, they would rehearse Sweeney in the morning, change into Lohengrin at 2 for the performance that night. At the end of the evening, they relight and refocus. The next crew comes in at 8am to bump in the set for the rehearsal of Tales of Hoffmann. At 1:30 the crew strike Hoffmann. At 5pm they focus the lights and bump in the set for a 7:30pm performance of Sweeney that night. "If it weren't for the dedication of the staff we just couldn't do it. I don't say that flippantly – they really are dedicated," Moulton said.

Moving lights

It sounds as if Sweeney Todd was a mutual love affair between Trudy Dalglish, designer Peter England and OA's head electrician Colin 'Geordie' Alexander. They love each other's work, attitude and talent. The first thing Dalglish did when I called her was rave about England's set. "You could put a work light on that set and it would look gorgeous," she said. "It's true! It actually looked fantastic under work lights! That was our first show together – he is a set designer who puts dimension in a set. I'm used to doing musicals with flat upon flat and cloths, stuff like that, so it was just wonderful. And Peter England is one of the few set designers who will actually sit with me while I plot.

"The Opera is a bit weird to work with because it's a standard rig, and they have to do changeovers within three hours. I don't know how they do it. To refocus three hundred lamps every three hours is fantastic. Though I think they love me because they only had to refocus 40, since we had moving lights.

"The whole lighting design was based on shimmers. The general cover was supplied by lights at ankle height, which gave a really nice, nasty shadowy effect to the whole set. If you had someone downstage centre and they were lit from the ankles up, they threw huge shadows of themselves on the other side of the set, and we used foot lights to the same degree. In the marketplace we had all the cast's shadows thrown up against the back wall."

When we see London in the first scene, it is a hallucination of fog, and a Dickensian throng throwing huge shadows onto the set. The

shadows are so giant and tangible that they become part of the set.

"We were trying to create that sewer nasty seething Gothic look. I lit quite a lot of it in lime green though you never would have known. To try and get that gaslight feel about it.

"It's the first time OA have used moving lights, I used about 30 or 40 out of their standard rig, then we had 10 Martin MAC600 fresnels and four MAC500 profiles. They did all the special stuff and the colour. The moving lights gave saturated colour for various things like city on fire.

"They derigged some 2K fresnels onstage to put up the moving lights, but all the cables were run so they just had to plug it in. Two moving lights FOH stayed for the whole season. We thought we might have a problem with fan noise for FOH but we haven't had any complaints. We had two high side follow spot positions, which created some really nice arcles, and worked well for the dramatic moments.

"It's a funny theatre to work in. It's the premier theatre in the country, but it feels a bit like a school auditorium. After working in all the lyric theatres around Australia, I find backstage fairly archaic."

Slip rings and smoke machines

Sweeney had 24 channels of onset dimmers in the revolve, running off slip rings. OA have had the slip ring system for a while, but used it to its fullest capabilities with Sweeney.

"Mecs physically push the truck downstage," Dalgleish said. "When it's in position, a floor electrician reaches in and plugs the dimmer racks in. Because it revolves with a slip ring that was a bit of a hassle. I never even heard about the hassles of that. They kept it all to themselves and let me get on with making pictures, and that's where Geordie is a godsend, he is just fantastic, really helpful.

"He'll solve all the problems. I wasn't aware that it was a problem till about halfway through the run when we couldn't do one of the revolve cues in time because of unplugging the dimmer racks."

The fog and mist swirled around the London streets with just the right amount of sinister mystery. Geordie in the control room ran five smoke machines and two Aqua Fog dry ice machines through the lighting desk. "The Aqua Fog is a brilliant machine, controlled by switching the fan on and off. A sealed unit is really effective compared to the old 40 gallon drum," Geordie said.

The sound

Sweeney Todd is a hybrid opera/musical so the cast and orchestra were miced. This is a radical step for the opera, which is usually unmiced. When OA do operettas, they amplify the principal's dialogue only. As sound designer, Bruce Cook's job was to liaise between the director, musical director, opera company and technical crew. "Gale Edwards would talk to me if she wanted anything changed and I would

come up with a way of making that happen for her, then discuss it with the mixer David Turnbull to figure out how he could get his hands around doing it. They wanted a specific sort of sound, fairly 'cold and hard'. That's how it was explained to me. They tend to talk in emotional terms, then I have to work out a technical way of making that happen! This request was met by simply not enhancing either the voices or the orchestra with reverb at any time."

This was the first time that OA has done such a big amplification job. "That's why I was brought on board," Cook said. "I spent ten years with System Sound and worked on most of the big Cameron Macintosh musicals. My presence also lightened the work load on the opera theatre's resident sound supervisor Severin

(continued over)



Gloves and Accessories for the Entertainment Industry

Gloves should fit like a glove...

Setwear understands that there are different sized hands, and that you want a glove to last.

Ezy-fit (pictured) and Pro-Leather Gloves
 Sizes from Sml to XXL
 *Also available - HiHeat Gloves - to withstand temperatures approaching 1000°C

SETWEAR

Setwear products are available from **Connections**
 Stand O19 at ENTECH or 1800 635 514 after the show
 See the full range at www.setwear.com

Opera On Stage



Sieben who was responsible for sound and audiovisual on all the season's other OA productions.

"Normally in a big musical you'd have everyone on radio mics and a large sound desk at the back of the stalls. But we only did about 12 performances of Sweeney Todd in two months. We couldn't put in a huge extra sound system for each performance. It would have been far too expensive, and there wasn't time to do it. We usually have only three hours prior to each performance to rig the sound and test everything!

"You can't do the sound until you've got the performers onstage. With a standard musical, you'd be in the theatre for about two weeks before opening night, rehearsing the cast onstage. Because of the nature of rep, we were very restricted in rehearsal time. We had to keep everything as simple as humanly possible, not just for logistics, but also for David Turnbull who was actually mixing the show, so that he could get his head, and hands and ears around it. There wasn't enough time for him to physically learn the cues if everyone was on radio mics. We just used 11 Shure UHF U1 radio mics for the principals with DPA 4061 miniature mics.

"For all the ensemble work, we went back to an ancient technique of shotgun and foot mics, just to try and keep it simple. Using shotgun mics for musicals is a bit of a compromise, but it was really the only way we could physically do it. That was the biggest challenge for us – to produce high quality sound using some very old techniques.

"For the operas, there are mics in the orchestra pit to provide foldback to stage for the performers. The shotgun mics are positioned around the stage to provide vocal foldback to the orchestra pit and these are mixed together for program sound that is fed to the dressing rooms, the green room, and used for archival recordings. So some of the mic infrastructure was already

there." All the mics in the orchestra pit were Neumann KM100s, the shotgun mics were Sennheiser MKH60s, 70s and 80s, and the foot mics were Crown PCC160s.

They used a small 32 channel MIDAS 'Venice' mixing console which could fit into an area in the dress circle no larger than 3 seats wide by 2 rows deep where OA has their company seats. David Turnbull mixed the sound there, taking the radio and foot mics direct with a split of the shotgun mics and stereo mix of the orchestra from the sound desks in the control room.

"Just to train someone to mix a normal musical takes about two weeks of intensive training," Cook said. "It requires as much concentration as any performer on stage. You not only have to know who is singing what line, but how they sing it, where to put the fader for their entrance. A lot of it is so quick that you can't follow a script – you're concentrating on what your eyes are seeing and not what your ears are hearing. That's why we had to do this as simply as possible for David Turnbull, to minimise what he had to memorise. So when the chorus came on, all he had to do was push up one or two sub groups."

All the sound equipment as well as the staff was provided by the Sydney Opera House. The speaker system was JBL HLA speakers (which Jands installed as a permanent system in 1999), supplemented with some EAW JF50 speakers for front fill. The stage foldback system was comprised of four Meyer UPM1s and two UPM1Ps.

The orchestra was mixed in the control room by Severin Sieben via a 40 channel Amek SR9000 sound desk, supplemented with a 10 channel AMEK Bullet console to split the stage mics to the front of house desk at line level. Sieben also looked after the sound effects that were replayed from an Akai DD1000 digital recorder. Lana Lazareff or Andy Wyles monitored the radio mics backstage.

Walsh Bay (continued from page E3)

rest of the stage equipment – that is dimmers and control, stage communications, closed circuit television system, forestage lift – basically everything except the sound system which has not yet been awarded.

"It's interesting to note," Irving said, "that the selection of stage lighting luminaires and control system has deliberately been deferred until nearer the time of practical completion, due to the rate of development in those areas"

The lifts

The Walsh Bay auditorium is on two levels, including a wraparound balcony with side boxes, to give the most intimate theatre possible for 850 seats. The stage area is versatile, so there is a fully demountable proscenium inside a large opening (hence no fire separation) between the

auditorium and the stage. The stage can be extended forward into the hall by a three part lift, which can also extend the auditorium or make an orchestra pit. The Serapid lift, which operates like a huge chain window opening system, has a centre and two ends, so that different stage configurations are possible.

The Linklift 100 also solved some site problems, as some parts of the site are below sea level. "The Serapid lift is clever because it eliminates the need for caissons, representing a major time and cost saving to the builder".

Third partnership

The third partnership is with the PA People. "They're good guys," Buckley said. "We've been partners before. They will handle stage lighting DMX distribution, stage manager's systems, CCTV, and all the backstage paging.

The Spec...

- 65 power flying hoists, 500kg swl each
- 10 spot line hoists, 250kg swl each
- 1 Stage Technologies Nomad console and integrated control system
- 1 divisible orchestra lift, in 3 sections
- 1 false proscenium arch
- 1 grid access hoist
- 1 main curtain and pelmet
- stage manager's console, paging, CCTV
- 600 dimmer channels for stage lighting
- 24 wired lighting bars and cable reelers
- DMX reticulation system
- cat5 ethernet structured cabling
- house lighting control
- programmable working light control



The Electric Canvas Paints the Town

When Sydney Festival Director, Brett Sheehy heard about the Electric Canvas' architectural projection capabilities, he was immediately inspired to include an exciting and fresh visual arts project as part of his first festival for 2002. Brett's concept was to illuminate some of Sydney's colonial buildings with bright and vivid colour in support of his goal to bring the festival to the people on the streets of Sydney. It was decided that the three buildings that would be given this unique treatment would be Customs House at Circular Quay, the centre portico of the State Library opposite the Botanical Gardens and the front façade of the Hyde Park Barracks which forms the backdrop for the Festival Club during January.

In June 2001, the Festival asked The Electric Canvas to produce a demonstration on Customs House and on the State Library for the Festival, The City of Sydney and

potential sponsors. In just over a week The Electric Canvas produced twenty unique colour and texture treatments for both of these buildings. The result of the demonstration was an immediate approval by the Festival and The City and the signing up of the sponsor for the event. The concept from this point was named Neon Colonial and became one of the Festival's own commissions for the 2002 Festival.

The art department at The Electric Canvas set out to create as many unique and striking designs for each of these beautiful buildings as possible with the view of producing a different image for every day of the Festival, some twenty one images per building. The technique involved taking an accurate photographic survey of the facades and combining that with accurate onsite measurements to produce a computer template that could be used to accurately apply colour,

Left to Right: James Rowe, Sam Young, Peter Milne, Glenn Williams, Brigitta Eidum, Vanessa McDonald, Peter Ross

Neon Colonial Credits

For Sydney Festival:

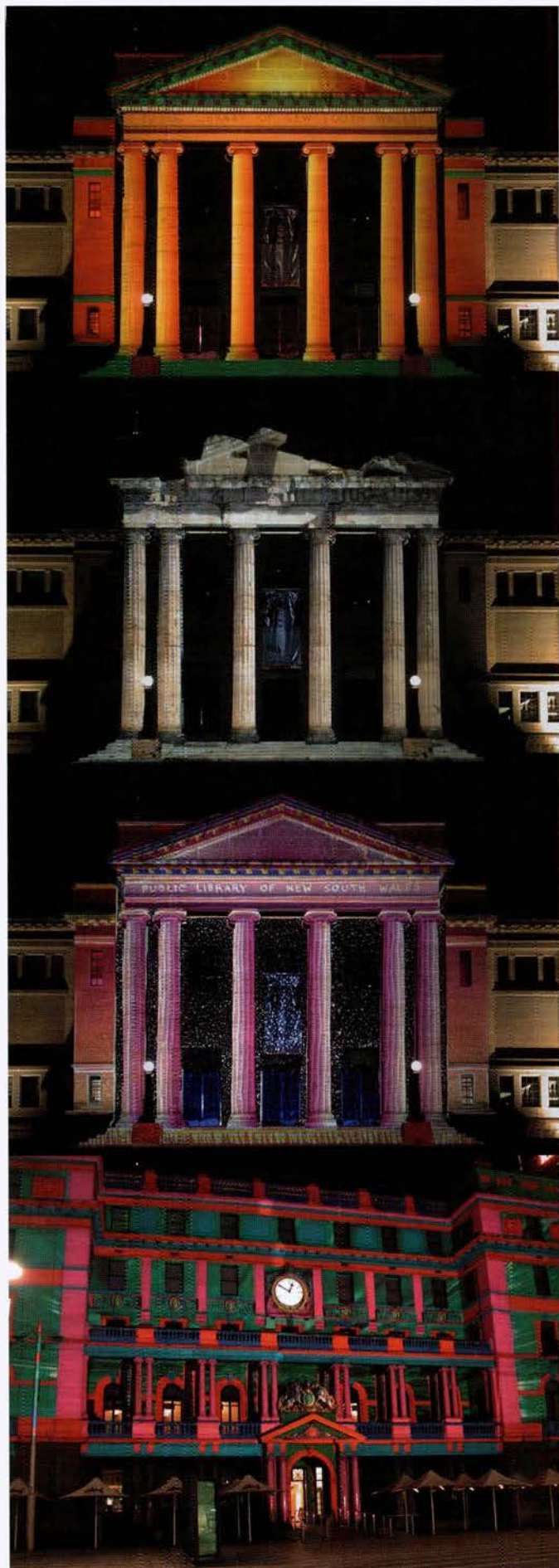
Brett Sheehy – Festival Director
John Bailey – Head of Production
Sue Saxon – Visual Arts Co-ordinator
Annette Alderson – Production manager

For The Electric Canvas:

Peter Milne – Production Designer
Sam Young – Artist
Brigitta Eidum – Artist
James Rowe – Artist
Vanessa McDonald – Artist
Glenn Williams – Head Technician
Peter Ross – Operations Manager



Architectural Effects



shape and texture.

The Electric Canvas' 7kW PIGI projectors were used to project the film transparencies back onto the buildings taking great care to install the projectors exactly at the point where the original surveys were taken. This is necessary to ensure that the details of the architecture were accurately aligned when projected back onto the building. The projectors were mounted in secure and solid scaffolding to prevent movement and vibration. The artistic techniques used in Neon Colonial varied from flat and contrasting colour treatments of the various architectural features, to hand-drawn overlays, graphic treatments, architect-style sketching and photo realistic manipulations.

Although the project was intended to be non-literal and purely abstract in its concept, one of the images that has attracted the most comment was a treatment of the Library portico based on a Greek ruin. The Electric Canvas team used photos of the Parthenon re-shaping and scaling the features to exactly fit the façade of the Library thus creating the ruin of a two-thousand-year-old building.

Although the original intention was to display one treatment on each building per night of the Festival, organizers decided to run the first sixteen images on Customs House as a mini show on the opening night to take advantage of the captive audience that arrived on foot from the Opera House after the free opening night performance of *The Celestial Bells*. Towards the end of the Festival, the Sydney Festival asked The Electric Canvas to re-program the projections to provide a similar sort of show on Customs House and the State Library at the beginning of each night so that public requests to see more images in a shorter amount of time could be met.

The projections ran nightly during the Festival from 9pm to 1am and the projector sites were totally automated so that the lamp start up, electronics and computers were all sequenced automatically. The only operator intervention was to load up the program for the next night's image and check the line up at the end of each night. During the Festival, the equipment ran very reliably with only two short down times due to lamp failures.

Neon Colonial was warmly received by the public with groups gathering before 9pm at each venue in anticipation of what that night's image would be. Without exception we found that the public were mesmerised and intrigued by the projections.

Public response to the event was immediate and substantial with great press reviews, colour photo spreads in newspapers, television, radio interviews and even international media showing a good deal of interest. For a number of years the general consensus was that projection onto buildings was either inappropriate or ineffective due to ambient light or inadequate intensity. The Electric Canvas has disproved this belief hopefully opening the way to project onto more beautiful buildings all over the country.

A number of photographs of the Neon Colonial project can be found on The Electric Canvas' website at www.theelectriccanvas.com.au and The Electric Canvas will be exhibiting their equipment and work at ENTECH (Stand C7) in February.

On display from France will be the new 2.5 kW HMI PIGI-S designed specifically for theatre and corporate use.

Peter Milne will also be presenting a seminar (L4, Wednesday 6 Feb, 11am) with Graham Walne on colour and projection at Entech.

Top: The various faces of the NSW The State library
Bottom: The Barracks as Francis Greenway originally intended?

ENTECH

The organisers are deeply appreciative of all who have participated in the assembly of the museum at ENTECH. Industry support was essential to make it happen, and industry support is *what we got*. Many, many thanks!

Particular thanks to these organisations:

Bytecraft Entertainment
Canon Sound
Amarisco
Showcorp
Billy Hyde
Jands
Pollard Productions
Staging Rentals
Glenn A Baker Enterprises
Connections
Blueberry Ash Cases
Premier Lighting
Revolver Audio

Stereo Recording and Microphone Techniques

4 sessions - \$750 - commencing 23 March 2002

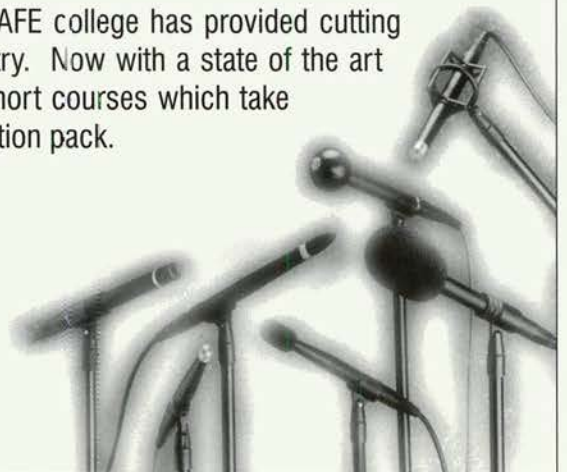
An exploration of acoustic music and atmospheric recording for the audio purist...

For over 35 years Film and Television at North Sydney TAFE college has provided cutting edge training for the Australian film and television industry. Now with a state of the art sound studio facility, we are proud to present a series of short courses which take audio training to a whole new level. Call now for an information pack.



NORTHERN SYDNEY INSTITUTE - NORTH SYDNEY COLLEGE

PHONE (02) 9942 0099



Set Construction & Staging

18 sessions - \$1500 - commencing February 2002

Interpreting and breaking down scripts

Drafting plans

Interpreting plans

Communicating with a set designer

Art department roles

Materials and purchasing

Basic rigging

OH&S

Scenic art

Marbling

Rag rolling

Graining

Construction techniques

Bumping in and Bumping out

Set Handling

Call now for an info pack!

NORTHERN SYDNEY INSTITUTE - NORTH SYDNEY COLLEGE

PHONE (02) 9942 0099



Sound Engineering & Recording

18 sessions - \$1650 - commencing 13 February 2002

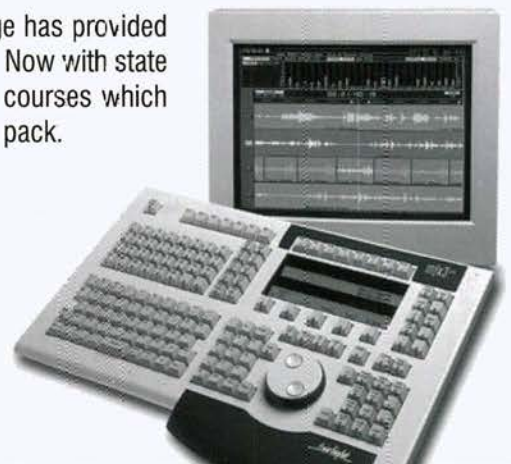
**Quality training utilising the latest in digital technology.
A course aimed at providing an all important
grounding for a career in professional audio.**

For over 35 years Film and Television at North Sydney TAFE college has provided cutting edge training for the Australian film and television industry. Now with state of the art sound studios, we are proud to present a series of short courses which take audio training to a whole new level. Call now for an information pack.



NORTHERN SYDNEY INSTITUTE - NORTH SYDNEY COLLEGE

PHONE (02) 9942 0099



SHORT COURSES ROLL OUT FOR 2002

Set Construction and Staging course new for 02

What a year 2001 was at North Sydney College and 2002 is set to be much bigger. The short course programme that was launched last year with Fairlight based training goes into full swing in February when we commence a full short course sound training programme that includes courses such as; Sound Engineering and Recording, Stereo Recording and Microphone techniques, Screen Sound and Location Sound Recording.

These courses are added to a list that already includes Digital Audio Postproduction and the Fairlight Digital Audio Workstations Advanced Operators Course. This programme includes courses that can suit the needs of industry professionals as well as those that are looking for training that can provide an in road to the industry. Courses are conveniently timetabled to suit clients with a heavy work commitment, something that is not always the case with mainstream TAFE courses.

2002 sees the launch of our first non-sound short course. Our Set Construction and Staging course fills a big training void that has been noticeable in related industries for a long time. The irrepressible Alistair Thornton kicks the course off on February 13th. Alistair has many years of experience in set construction and staging as well as training in that field. Projects that Alistair has more recently worked on include the Star Wars project that was undertaken here in Sydney. The course covers all aspects of set construction and staging and provides skills that are invaluable to those working in a variety of industries including; film, television, theatre, concert production, corporate presentation and event / exhibition staging.

For more information on all short courses either log on to our website on www.filmandtvcourse.info, call us on (02) 9942 0099 for a brochure or of course - visit our stand at ENTECH.

ENTECH

WEBSITE

The North Sydney College Film and TV Website has been launched. It is still evolving however it already contains extensive information. For more information about courses or facilities log on to; www.filmandtvcourse.info

NORTH SYDNEY TAFE AND CONNECTIONS JOIN AT ENTECH

North Sydney College and Connections have recently joined forces to fill a training void that has been left by a lack of training in the areas of Live Sound and performance Lighting. Connections expertise and industry awareness, melded with North Sydney College's training experience and infrastructure has resulted in a short course programme that is invaluable to anyone pursuing a career in the live sound and lighting industries (for more info go to the connections website at www.conpub.com.au).

In order to launch our new partnership both North Sydney college and Connections will be showcasing our courses at ENTECH. We have combined to create a major stand at the show in order to provide a detailed outline of our training programme.

Expert staff from both the college and our sponsors will be on hand to give details of courses and demonstrate techniques. The TAFE stand will comprise a fully working production facility incorporating a recording studio, sound post suite, 3 camera TV studio and non-linear video edit suite. There will be musical acts performing live on our stand throughout the show, not only for your entertainment but also to provide source material for the purpose of demonstrating various production methods.

Rod Pascoe will be on hand to answer questions about our Stereo Recording and Microphone Techniques short course and will be demonstrating various methods using the DPA range of microphones. Theme and Variations (exclusive NSW agents for Steinway and Sons) have provided with a stunning Steinway B-211 6'11" Grand Piano. This is a wonderful instrument and a sensational means of demonstrating recording techniques as nothing sounds like a Steinway.

Graham Waineray from Fairlight will be demonstrating their new Dream Satellite system. This is an ideal opportunity for punters to get some details about our Fairlight based training courses. We will also showcasing student films on the big screen as well as music clips that will actually be cut at ENTECH using one of our Final Cut pro Suites and source material from our performers. The live performances will also be cut together on the big screen as Television teacher and leading vision switcher Melissa Power demonstrates live television techniques as well as give details of television courses.

NORTH SYDNEY COLLEGE AWARDS THE INDUSTRY FOR SUPPORT OF GRADUATES

This year's ENTECH awards sees the presentation of the inaugural North Sydney College Film and TV Section Award for Support of Graduated Students. This award recognises a particular companies support for formal training through the employment of students that have graduated from our courses. Scott Watkins-Sully is very much looking forward to presenting the award on the evening of February 5th.

CORRECTION AND APOLOGY TO THE DANES

When compiling last months TAFE Talk I made a slight mistake when reformatting Rod Pascoe's article "Home on The Range." I referred to the splendid (and it turns undistortable) DPA 4007 high transient omni condenser microphone as the 4077 - no folks the name hasn't changed it is still most definitely the 4007. I apologise to DPA and to all Danes that may be reading this column. It's bad enough that we pissed them off by redesigning the Opera House, now we're renaming their flagship microphones. The Lads at D2A (DPA's importer) have however recognised my contribution to microphone design by presenting me with the Scott Watkins-Sully signature series 4077. Available from leading toy stores, it's bright green, plastic and contains it's very own reverb spring. It makes an appearance whenever I phone or visit the D2A office and I'm sure it will find it's way to the ENTECH stand somehow! Sorry DPA and thankyou for your continued support.

See you all at ENTECH!
Scott Watkins-Sully

CHARTS



SONG TITLE: Say What?
 BAND: 28 Days
 PRODUCER: 440 & 28 Days at Apollo Control
 PROGRAMMER: Andy Baldwin
 RECORDED: @Woodstock Studio, Melbourne



SONG TITLE: Turn to Me
 BAND: Vanessa Amorosi
 PRODUCER: Axel Breitung, Bishop Audio, Hamburg
 LICENCED: CBK Prod, Australia



SONG TITLE: No Choice
 BAND: The Cruel Sea
 RECORDED: Magoo
 STUDIO: Rockinghorse Studios
 MIXED: Magoo @ Studio 301 & Rockinghorse
 MASTERED: Steve Smart @ Studio 301

PROUDLY PRESENTED BY
 Sound On Stage
 42 Belmore Street,
 Surry Hills, NSW, 2121
 Ph +61 2 9281 0077
 www.soundonstage.com.au



New South Wales

ARTIST	PRODUCER	ENGINEER	SESSION
A#Sharp Jeff Cripps +61 2 9153 9988 24tk Analogue/32tk digital, 3 live rooms			
Cool Calm Collective	Jeff Cripps	Jeff Cripps	CD
The Sneakers	Jeff Cripps	Jeff Cripps	CD
Black & Blues Jeff Cripps	Jeff Cripps	Jeff Cripps	CD
The Wolverings Jeff Cripps	Jeff Cripps	Jeff Cripps	CD
Bush Tracks Pty Ltd Ruth Miller +61 2 6689 1290 Air conditioned digital multitrack studio			
Geoff Jeffro Andrew	Jeffro/Dave Highnet	Dave Highnet	Album tracks
Durga Babies	M Turner/T Tonkin	Dave Highnet	Album tracks
Damien Gerard Sound Studio Marshall Cullen & Di Dofel +61 2 9555 1710 2" 24 tk Analong/Pro Tools Digital			
James T	James T	Russell Pilling	Album
Elysium	Elysium	Russell Pilling	Album
Sneeze	Sneeze	Russell Pilling	Album
Monstrous Blues	Monstrous Blues	Russell Pilling	Album
Fragile	Fragile	Russell Pilling	Album
Gangstar Studios Dave Dwyer Rebecca Dwyer +61 2 4739 0451 48 tk digital studio			
Bernie Segedin	Dave Dwyer	Dave Dwyer	Album/Mixing
Andre Eikmeier (Giant)	Dave Dwyer	Dave Dwyer	Pre-production
Aerial	Dave Dwyer	Dave Dwyer	Pre-production
Glister	Dave Dwyer	Dave Dwyer	Album
Sarah Charwood	Dave/Rebecca Dwyer	Dave Dwyer	Pre-production
Milkbar Recording Studios David Sykes +61 2 9516 4559			
Neve/Euphonix Multi Format surround sound tracking & mixing facility			
Duncan James	Andy Gill	Paul de Como	Album Tracking
Waikiki	Paul McKercher	Paul McKercher	Album Tracking
Lusid	Steve James	Tony Wall	EP Mixing
Lindelle/Universal	Tony Cvetkovski/Hayden Bell	Tony Cvetkovski	Album Mixing
The Whitlams	Daniel Denholm	Daniel Denholm	Album Tracking
The Quiet American	Simon Leadley	S. Leadley/P. Rodger	Film Soundtrack Recording
Rockinghorse Anthony Lycenko +61 2 6688 4005 48			
Neve V series Console Protools mix24 plus Studer 24trk monitoring			
International Soul Circus	Alan Murphy	Anthony Lycenko/Jim Arnold	Single Tracking/Mixing
Able	Brendan Anthony	Anthony Lycenko	EP Tracking/Mixing
Stringmansassy	Artist	Anthony Lycenko	Album Tracking
Women in Docs	Anthony Lycenko	Ben McCarthy	Album Tracking
Soundwarp Meredith Brooks +61 2 9905 7144 Mastering			
Marama	Dave Grindley	Meredith Brooks	Single
Barrington Davis	Barrington	Meredith Brooks	Album Restoration
Passion Flowers	Lee	Meredith Brooks	Single
Anthony Wright	Anthony Wright	Bill Syrratt	Album
The Lyrical Madmen	Drew Archer	Meridith Brooks	EP
Studios 301 Steve DeFina +61 2 9698 5888 Recording studios for all genres			
The Whitlams	Daniel Denholm	Daniel Denholm	Recording
Silverchair	Dave Bottrill	D.Bottrill/A.Hagop	Recording album song
Hope	Paul Grant	R Lush(Orchestral)/Tony Wall(re-mix)	Orch recordings, vocals & Mixing
Platonic	Tony Wall	Tony Wall	Mixing
Speedstar	Steve James	Steve James/Tony Wall	Recording
Velvet Sound Recordings Dave McCunn +61 2 9267 2915			
Pro Analogue & Digital recording, mixing, editing & transfers			
The Vanity Unit	Wayne Connolly	Wayne Connolly	Album Tracking
Tim Hall	Jeff Lang	Adrian Grigorieff	Album track & mix
David Campbell	Craig Porteils	Craig Porteils	EP track & mix
Mirablue (USA)	Artist	Daniel Clinch	EP track & mix
Welter	Elliott Weston	Tony Wall	EP mixing

PROUDLY PRESENTED BY
 Neotec Audio
 61 Honiton Ave West
 Carlingford NSW 2118
 Phone +61 2 9873 3994
 www.neotec.com.au



Queensland

ARTIST	PRODUCER	ENGINEER	SESSION
Coral Sea Studios/ Select Sound	Jan Sarchfield +61 7 4059 2888	Digital Recording Studio	
Myrrha		Diane Cilento	Nigel Pegrum
Stage play Soundtrack			
David Hudson (Snakebite)	Select Prod (Mannock & Pegrum)		Nigel Pegrum
CD song			
Stargate Music Productions	Dash McIvor +61 7 3260 6294		
Paris Protools Adats Logic New & Vintage Outboard			
Ian Muir	Dash McIvor	Dash McIvor	Album
Brian Lord	Dash McIvor	Dash McIvor	Single
Stan Lenz	Brendan Radford	McIvor/Radford	Mastering
Darin Ferguson	Ferguson/Crick/Ivor	Dash McIvor	Single
Blue Stranger	Dash McIvor	Dash Ivor	Album

Victoria

Earcandy Tony Hunt: earcandy@bigpond.com			
Kayla Rain	Tony Hunt	Tony Hunt	Singles
Meisha	Tony Hunt	Tony Hunt	Singles
Chrissie Kiss	Tony Hunt	Tony Hunt	EP
Lo Ricco Sound Studios Marcello Lo Ricco +61 3 9701 6220 Recording Studios			
Bleier		D Bleier/E Perfect/ M Lo Ricco	Demos
Kirsty Webb		Lucy Wharington	Single
Bernadette Conlon		Bernadette Conlon	Album
Peter Faulkner		Peter & Lisa Faulkner	Demos
True Form Recording Neil Gray +61 3 9391 0907 24tk digital Recorder, Classic analogue console & outboard			
Indecisive	Neil/Band	Neil Gray	EP
Sacred Cows	Band	Dean Fisher	Mix Live Album
Johnny Love	Neil/band	Neil Gray	Demos

South Australia

Earsight Steve Fieldhouse +61 (0) 407 970 425			
PT 5.1.1 TDM MixPlus system for Tracking, Mixing, Editing, Remixing & soundtracks			
Found Objects	Steve Fieldhouse/Chris Lambert		CD Tracking & Mixes
UNGKAS	Steve Fieldhouse/Band	Steve Fieldhouse	CD singles
Renegade Funk Train	Band	Steve Fieldhouse	Tracking/Mixing

Western Australia

Disk Edits Pty Ltd Neville/Catherine +61 8 8340 1377			
Audio Mastering & Post Production, Surround Sound Suite			
Driven	Village Roadshow	Travis Grace	DVD/5.1 & DTS Encoding
For Love or Country	Roadshow	Travis Grace	DVD/5.1
Toombstone	Roadshow	Travis Grace	DVD/5.1 remix
Spy Kids	Roadshow	Travis Grace	DVD/5.1
Stickmen	Roadshow	Travis Grace	DVD/5.1
Poonshead Sam/Rob +61 8 93394791 Audio Recording, Productions & Mastering			
Last Year's Hero	Rob Grant	Rob Grant	Demo
Verona	Rob Grant/Band	Rob Grant	Recording
Disgraceland	Rob Grant	Rob Grant/George Kallis	Mastering
Superscope	Rob Grant/Kevin Borruso	Rob Grant	Mastering
Spiderkatt	Rob Grant	Rob Grant	EP
Satellite Recording Studio Darren Halifax +61 8 9470 4003 Protools mix plus 64tk			
Maybe Someday	Russell Bailey	Darren Halifax	EP
Marie McDonough	Marie McDonough	Darren Halifax	Demo
Floating Widget	Floating Widget	Darren Halifax	EP
Little Black Dress	Little Black Dress	Darren Halifax	Demo
Just Jazz School of Dance	Just Jazz	Darren Halifax	Sound for stage show



SONG TITLE: Heavensent
 BAND: Killing Heidi
 PRODUCER: Paul Kosky for Wah Wah Music(Sony)
 RECORDED: @Metropolis Audio, Melbourne
 MIXED: Nick Launay
 ADDITIONAL RECORDING: Fishtank Studios, Sydney
 MASTERED: Don Bartley@ Studio 501, Sydney



SONG TITLE: Run
 BAND: George
 PRODUCER: David Nicholas with George
 RECORDED & MIXED: David Nicholas
 ENGINEER: Justin Tresidder
 RECORDED @ Festival Studios, Sydney
 ASSISTANT ENGINEER: Evan McHugh
 MIXED: @ Mangrove Studios

CLASSIFIEDS

FOR SALE - Meyer Sound System

4 Meyer ULA-1a speaker cabinets
 2 Meyer USW style sub-woofers
 2 Meyer M1 processors
 1 QSC USA 900 amplifier • 1 QSC MX 1200 amplifier
 1 Aust. Monitor 1K2 amplifier
 inc. cases, amp, rack, cables etc. \$10,000 plus GST
 2 Sony FX200M LCD video projectors c/w cases \$16,000 ea
 3 Mitsubishi X200 LCD video projectors c/w cases \$8,000 ea
 Call Showcorp 02 9428-5888



de Sine
ROADCASES
Custom Case Specialists
www.desine.com.au
 Ph: 07 3899 2971 Fax: 07 3899 0155

Take control of your business today!

Save Time, Save Money, Save Headaches

Production Assistant Software.

Equipment hire & sales, Quoting, Invoicing, Labour hire, Scheduling, Contact management & much more. Customisable, modular system. 100% Australian owned, made and supported. Realistically priced software for the small business owner. Get some of your life back!

Download a 60 day demo now!

www.productionassistant.com.au

UNIQUE OPPORTUNITY

To purchase colour changing searchlights



5 x 4 Xenon Space Cannon Ileos searchlights with cases. As used during the Sydney 2000 Olympic Games at Stadium Australia. Special Offer at \$50,000 each* or all 5 units for \$200,000 plus GST*

Call The Great Outdoor Lighting Company 02 9428 5888



Need Good Crew?
 Welcome to the services of
Australian Crewing
Entertainment Personnel
 Audio Lighting Staging Audio Visual
 Phone : 61 29565 5716
 Fax: 61 29565 5934
 Email: kim@australiancrewing.com
www.australiancrewing.com

POSITION VACANT

Australia Business Manager **Excellent package**

Our client is an established international brand manufacturer of professional sound reinforcement systems, now investing in a worldwide program of business expansion and new product development. They seek an exceptional business manager with experience of the Australian market who is able to spearhead the setting up and running of their business here. Professionalism, attention to detail, energy and a detailed understanding of the market are all essential, as is a willingness to roll up your sleeves and do what is needed to ensure success.

Contact us at Applications@interfacio.com with your employment history and covering letter explaining why you think you are the best person for this exciting and challenging position.

Interfacio is the industry's first and only specialized global recruitment service. Contact us to find out more at interested@interfacio.com



AUCTIONEERS

VALUERS

INTERNET MARKETING SERVICES



LOCKWOOD & CO PTY. LTD.

ACN 095 971 449

www.lockwoodcompany.com.au

Important - Never to be repeated

Auction Sale

State-of-the-Art Exhibition Equipment

Wednesday 20th February 2002, at 11.00am

(Venue in Melbourne to be Confirmed - refer to our website or contact our office)

MAGNIFICENT LATE MODEL EXHIBITION, PRODUCTION, AUDIO VISUAL AND PRESENTATION EQUIPMENT, 19.66 SQUARE METRE VISUAL DISPLAY SCREEN, MARQUEES, SPECIALIST FULLY FITTED EXHIBITION TRAILERS, VEHICLES

These assets represent an excellent opportunity to acquire late model, superb quality Exhibition and Production Equipment. A Sale not to be missed.

- ¥ **Special Note:** Offers for the Sale of Complete Sections / Entities will be Considered Prior to the Auction. Intending auction purchasers should check that all lots remain in the sale.
- ¥ **Note:** A Variable 3%, 5% and 10% Buyers Premium & GST Apply to this Sale.
- ¥ Inspections Strictly by registration with the Auctioneers. Registration from intending purchasers for inspection is mandatory. Registration forms available on our web site or by contacting our office.

SEE VISUAL PRESENTATION ON OUR WEBSITE FOR MORE DETAIL. A SALE NOT TO BE MISSED

To The Order of: AMP Life Ltd due to the conclusion of the Centenary of Federation Exhibition

Contact **Mark Roberts** on (03) 9676 9111, 0419 226 144
 or Email: markr@lockwoodcompany.com.au

CATALOGUES AVAILABLE ON LOCKWOOD WEBSITE

Auction Terms Buyers should confirm whether any lots have been withdrawn from sale. 20% cash deposit required. Balance Cash or Bank Cheque.

201 Williamstown Road, Port Melbourne, Vic 3207
 Tel: (03) 9676 9111 Fax: (03) 9676 9222
 Email: admin@lockwoodcompany.com.au

MY GIG - A Day in the Life of an Operations Manager

Name: Brett Davies
 Age: 32
 Occupation: Operations Manager
 Company: Darebin Arts and Entertainment Centre
 Location: Melbourne

Brett Davies' early beginnings were in the Warrnambool music scene at the age of 16. Playing in bands and "pushing black boxes" for front-line bands touring through the area, Brett began to learn the ropes of lighting and audio and after filling in for a sick member of crew, found himself promoted and on the truck to Melbourne with the band *The Chantoozies*.

From there Brett worked in theatre, learned automation and worked as a rigger. Determined not to go down the same path as friends who had specialised in one field, Brett chose instead to do them all. He worked at Richmond Recorders for an extended period under Lobby Lloyd in 1987 while operating lights for touring bands, and then in 1990 joined the Cameron Mackintosh organisation to work on *Phantom of the Opera*, and then moved from show to show.

In 1998 he took *Countdown The Musical* on the road with author and director Brian Mannix, whom he had known on and off for several years, and since then has worked in nearly all capacities of the industry including film and television.

After a few years living and working in Sydney on various theatrical projects and with a daughter on the way, Brett looked for a more permanent position and moved back to Melbourne to become Technical Supervisor at Darebin Arts and Entertainment Centre. Within months the position of Opera-

tions Manager of the centre came up. Brett was the successful applicant and has been at Darebin for the last 18 months. He lives in Eltham with his partner Yolande Robertson and their 13 month old daughter Ruby.

9am:

A typical day begins with meetings. We try to have about three meetings a week, so my day starts with talking to the Centre Manager where we review what has to happen during the week and beyond while chatting over a cup of coffee. Then I'll go around and see all the other staff when I can.

Most of my day is spent inputting data into the computer, so I spend a lot of time taking phone calls from clients and meeting with them, and then updating all the information onto our software. We use a program called Events Perfect and it's number one in my book. We manage all our financials off it, all our events, all our contacts, it does everything we need.

We don't produce shows here as such but I production manage a lot of the shows and events that come in to a certain degree, particularly the ones that don't have stage managers or crew and the ones that do I work closely with them as well. All the production schedules, lighting plots and plans are emailed to me.

Together with the Functions Manager Nishan Philips, we have 300 - 400 events coming through a year, so all the plots and plans we have to study as well as clients ringing back to change details or order equipment becomes very time consuming. At the same time we're processing the care-taking of the building through



(PLEASE TURN THE PAGE)

Moves...

AV Technology have moved to a new purpose-built complex in Commercial Drive, approximately 2 km from our old offices in Southport, Qld.
 5 Commercial Drive, SOUTHPORT QLD 4215, Australia. Phone, fax and web details are unchanged:
Ph +61 7 5531 3103.
www.avtechnology.com.au

AMPOWER have also moved, to 18 Vautier Street Geelong North VIC 3215. Call +61 3 5277-3331

CRESTRON PACIFIC have established their regional HQ at: Unit 5, 62A Albert St Preston VIC 3072. Call +61 3 9480-2999.

Opps...

Last issue, we told you all about Elite Sound and Lighting moving premises, and then put their fax number as their phone by mistake (they did not have the correct number at time of publication). Here is the correct contact phone:
+61 2 6294 0729

Stolen...

Stolen 28 Dec 2002: Allen & Heath 14:4:2 Wizard Audio Mixer (blue face) serial number 144224020514; 2 x Sony VCD Narrow body players (Grey) Serial numbers 3385295 and 3373667 1 Shure Beta 57a Microphone 80 Music CDs in a Old black CD case with stickers everywhere.

Everything was in new condition and engraved with "WEW" \$500 reward, no questions asked.

Matt Walther's Entertainment World
 Phone 0410 6000 96

Births...

Things must have been quiet eight to ten months ago. Congratulations must go to:

Tony and Fran Davies (Chameleon) for the birth of their daughter, Carmen

John and Janelle Grimshaw (Connections) for the birth of their daughter, Ashleigh, below.



Visit Cannon Online for great deals on new, ex-olympic and second hand equipment.
OPEN 24 HOURS EVERY DAY AT:
www.cannonsound.com.au

CLASSIFIEDS

GOBO

Greyscale Glass, Colour & Steel

Lighting by Design

First with the glass technology to OZ
now standard in Martin 918 and Mac500.
Original designs & innovative ideas.

Tel: 0755 377 002 Sales@LBD.com.au
Fax: 0755 292 226 www.LBD.com.au

(Nice) Office space to rent

Now ENTECH is virtually over for another 2 years, we have some excess office space here at the Connections HQ. We've got a neat loft office, plus a mezzanine office. They would be suitable for a two or three person outfit. They have lockable access, plus we can bundle ADSL internet access, furniture and some PABX lines if you need them. Or BYO. Our modern airconditioned place is in sunny North Parramatta, near to all the good stuff.

Call Julius on 0408 498-180

Connections




An amazing range of the world's best **SOUND EFFECTS** available now from **ZOMBA PRODUCTION MUSIC**

PH: 9817 8800
FAX: 9817 8988
Email: music@zomba.com.au

FOR SALE

Meyer UPA1a \$2800
Pair, 3 x DBX166 \$550 each, Yamaha PC1602 & 2002 amps \$750, REV5 \$1200, EVL80 mics \$110, JBL 18" mini subs \$1900 pair, Pioneer DJM500 mixer \$1700, Clearcom Master \$380 + more - Call Keith at Revolver Audio 02 9698-3288

The gobo Factory

GLASS

STAINLESS STEEL

*Custom-made and Catalogue Range
Customised Message & Theme Sets*

Quality, Service and Competitive prices

Ph: 61 3 5439 3770 Fax: 61 3 5439 3601
Email: gobos@netcon.net.au
Website: www.gobo.com.au

FOR
**CUSTOM CASES
SPEAKER ENCLOSURES**

TUFFA

CASES & CABINETS PTY LTD

Ph (02) 9153 9373 Fax (02) 9153 9329
Unit 5, 15 Lorraine Street Peakhurst 2210

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

Drapes and Stages

from **Staging Rentals**
"Your complete staging service"

Big range Top quality On time
Friendly, professional advice

Ph: (02) 9519 6300
Fax: (02) 9519 6489
1 Pyrmont Bridge Road
Camperdown NSW 2050
mail@stagingrentals.com.au
www.stagingrentals.com.au



STAGING RENTALS

THE AUDIO DEPT.

Wireless Microphone Specialists.
20 years experience. Large inventory of Sony UHF systems, Shure UHF and VHF systems, and now Garwood In-Ear monitors.
Short or long term hire for all applications, sales and full service.
Authorised Sony Wireless Service Centre.

Call for a quote.
(03) 9415 1868.

MAJOR NEW Version



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

- **Australia's No.1** - Save your valuable time, look at the best software with local service first.
- **Download a demo now!** www.rentp.com

RentalPoint Software
(formerly HirePoint Software)
Contact: Stephen Collard, SF Business Dev.
Ph 0500 895 896 Mob 0407 541 290

RentalPoint2000 Hire Software



Staging • Lighting • Sound

We Supply Human Resources For Concert Productions, Press Conferences, Launches, Corporate Seminars

Ring For Free Quote

Office: (02)9792 7770
Fax: (02)9792 6660

www.MagnumOnThe.Net

SOUND LIGHTING AV

Taking Aim

I've been a connections reader/subscriber since "Channels" and of late have been finding myself a little disappointed with the lack of real content, excessive amount of advertising and the frequent, so called "Market Reports" which seem to have very little input from the Connections team itself and rather rely on the submissions of the distributors of the products being reported. It amazes me how you can put a "Fender" or Mackie Speaker cabinet in the same report space as say JBL, EAW, Nexo etc.

The Market Reports are not very helpful and often only seem to cover products everybody already knows about anyhow... a brief description copied and pasted from the distributor/manufacturer's web site an Australian contact and a retail price. that's about it... Seems like filler to me!

Even the actual article's or shootouts seem like a big ad... not every product released is a good product ya know...

[...]

Perhaps a little more attention to detail and a little less copy and pasting is required.

That's It...

Adam Boon

Professional Audio Services
webmaster@paservices.com

(Ed - We actually agree with you on the Market Reports, but were committed until this issue to stick to the format. From March you will find these much more slick, to the point - and hopefully relevant. Re the advertising, without it there would be no mag - however, we always publish more content than ads by a page ratio of no less than 60/40 - I'm sure you would agree that there are often interesting ads that are worth a read!)

Distressing the Distressor

An interesting article on Powderfinger PA in the November issue. You did make an error however when you describe the Empirical Labs "Distressors" in the rack as a digital devices, which they are not.

The Distressor is best described as a hybrid device as it combines the best parts of two worlds. The unit has a wild and powerful digital sidechain but the audio path is completely analogue. The circuitry in the audio path is switched in different modes so that it almost becomes the thing that it is emulating. This is why they work so well.

Another device that works with this hybrid digital and analogue concept is the cute little "Really Nice Compressor" by FMR Audio. The Really Nice Compressor is designed to be clean and neat while the Distressor is designed to be wild and reckless.

Warren Huck
Hux Electronics
+61 7 3355 7555

MY GIG (continued)

the local Council so I have contractors coming in and out all the time to do maintenance in different parts of the venue.

I also look after the quoting and invoicing of clients, which means there is a close working relationship between myself and the Acting Box Office Supervisor, Laura Milke and our Acting Centre Manager Rod Wilson. So a typical day here is usually flat out and for a centre of its size we don't have the number of permanent staff that other centres might, so you definitely feel it at the end of the day.

Breaks: We take lunch when we can, but a lot of the time it's impossible with the work-flow - it's not at all like a regular 9 to 5 job.

I'm not very habitual. I don't have my regular cup of coffee in the morning but I'll grab it when I can. Sometimes I do find myself having a cigarette outside once in a while but I've mostly given up, partly because of my 13 month old daughter and partly because I ran out of health (all of a sudden your body changes and everything starts to slow down and I'd noticed I was always out of breath). January and February are very quiet here at the Centre, so we are able to take breaks on a more regular basis.

5pm: I knock off at 5pm and the techs look after running of the performances. We have two full-time technicians here - Denis McGrath (Rooster) and Kirsty Littlejohn. They are both excellent in their jobs and a great support to my me. I don't get that much 'hands on' time in the venue with this position. This was brought up when I took the job on, they asked me if I would miss it (course not!). I did have a pretty good idea that I would but I was looking for a new challenge.

Now we structure it so that if the opportunity comes up where the techs need to have some hours off, I'll go and manage an event or operate the lighting desk or sound desk, so I get my fix every two or three weeks of 'creative happiness'.

I wear a pager and until recently, have been on call 24 hours, 7 days a week but it looks as though that may change. It can be stressful being on call all the time because when you're settling down to dinner there s

nothing worse than taking a sip of your wine and the pager buzzes. That has happened numerous times for security reasons or technical problems. It's amazing how much stress it puts on you.

It's not all glamour and sometimes the stress of this industry can make you wonder why you're in it in the first place - I think you're either born into it or you're not. We've all said this at one time or another: "I've had a gutful of this crap, after this show I'm gettin' out." Sure.

I'm not sure how long I'll be here. There's been a complete change of staff in the last 18 months and the place has a really fresh look about it. I might be at the Darebin Arts Centre for a few years yet and I do want to achieve while I'm here. I think you need to look at the big picture everyday of your life. If and when I leave, I hope it's with a sense of achievement and good relations with my fellow staff, that's the best way to measure yourself, and depending on what other positions are offered to you in the meantime, I guess you can measure your success by that too.

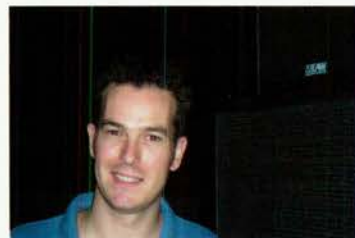
Revolver Audio lives on

Revolver Audio is alive and well in Sydney. One of only a few surviving audio companies from the 1970's - indeed we can only think of three others - Revolver is undergoing a slight expansion under the guise of new general manager **Keith Clarkson** (below).

Founder **Lee Conlon** is busy building lighting devices under the Showcraft banner, this line of business enjoying repeat export sales for its DMX and colour scroller products.

The traditional Revolver business of large format sound reinforcement rolls on with new Overture 218 dual 18" subwoofers, loaded with RCF drivers.

Keith is expanding the inventory, making smaller corporate work easier. Call them on +61 2 9698-3288.



Light Years

Lighting designers here on the west coast are thankfully busy if my failed attempts to get them together are any arbiter. I wanted to report to you from a round-table discussion about how different generations of lighting designers approach their art. In their absence you'll have to be content with my ramblings.

Firstly, and as I've often written in these columns, younger designers have been born into an industry where there is more respect for the contribution which lighting can make and they have therefore been consulted earlier than the older generation would have been when they started out. I've written about this in earlier columns so I won't repeat myself except to say that it's rather helpful if the LD can be engaged before the model is glued down and that happens more and more today than it used to do. Now young and old designers alike can enjoy more freedom to be creative with better equipment and I think older designers are being re-invigorated as a result.

Today, designers simply have more choice, of everything. In the beginning there was 'Cinemoid', at least in the UK, Strand's colour medium dominated and it was these colours we used first of all. For many older designers 17 steel blue, 3 straw, 51 pale gold and the rest of the small family are still as comfortable as an old pair of shoes, even if today we don't wear them too often. The introduction of new colours was rarer than today and therefore a special event, I recall the excitement at the new paler blues 67 steel tint and then paler still 69 Ariel blue. These coincided and were probably triggered by a move away from drawing room comedy and towards gritty realism in which white light became the norm – it's principal protagonist at London's Royal Court Theatre giving this name to a notably UK lighting company. We all knew that this meant less use of 47 apricot, christened by Bentham in response to Tyrone Guthrie's admonition that stages looked as though they were "bathed in apricot jam". The new drama gave us a chance to play with 56 pale chocolate, 27 smokey pink and 60 pale grey. Today many older UK designers are comfortable with Lee because, by the addition of the prefix '1' to the old Cinemoid numbers they don't have to learn a whole new set. Equally I count myself as one of an older group who have made a conscious effort not to keep using the colours we grew up with and when lighting in Boston I amused the crew by inventing a new colour mix for each production. The dominance of Rosco there also provided me with a stimulus to experiment.

Some years ago using ColorFader for the first time – a wonderful device that, through 3 scrollers produces virtually any colour you want – I was able to discover still more ranges (such as Gamcolor) which the device's computer was set to provide.

Another potential generational difference lies in

the approach to masking. Years ago the default was to mask everything, now perhaps almost the reverse is the case. In between was a period in which one had to ask what the policy was because it couldn't be discerned from looking at the set model – masking usually being absent from that anyway. In the past many theatres simply flew out the masking at the end of one production and then lowered it in for the next, it never changed. Whilst this remains a feature of some touring theatres, and makes a degree of sense in houses with predominantly one-night stands, in drama especially it hindered the development of both set and lighting design by delineating a constant frame in which everything was to be seen. Masking too in the past tended to be wings and borders and up-down masking was very rare, perhaps because up-down bars were also rare.

The absence of masking does make life easier for the LD, shots are not restricted and plotting is easier because you don't have to look at a screen or ask a disembodied voice what is giving that awful slash down the backcloth.

For many LDs the plotting session used to be a painful experience because, in the absence of memory boards, the lengthy plotting session gave both director and designer the time to change their minds and the fun of experimenting had to be balanced with keeping the board on side and finding extra paper and erasers. Pre-plotting on manual boards was perfectly feasible but time rarely allowed this to happen and thus the plotting session tended to be the first time both director and LD had seen the lighting take shape. In these circumstances unless a good visual language had been developed between the two then plotting sessions could become tense as lengthy changes were made. The restrictions placed on what cues could be achieved were also accompanied by the question from the director "what's the board here? Oh". Mistakes in operating were more likely, especially when complex presets had to be done quickly, but to balance this operators had the freedom to make changes every night as the show developed and designer-operators often learnt their craft this way.

Through the impetus of rock tours now the rig itself is part of the design and we've moved from gold or grey fixtures to green to black and to chrome. LDs today have more choice of lighting manufacturers and rigs tend much more to be a mix (and also of light sources themselves) than they would have been 30 years ago. I suspect this has required LDs to be even more knowledgeable about the idiosyncrasies of equipment than their forefathers and this reawakens the old debate about the balance between design and technology skills in LDs and how we should train them – itself another unthinkable concept years ago.

Looking at these developments inevitably makes one wonder what someone like me will be writing about in another 30 years!

"...operators had the freedom to make changes every night as the show developed and designer-operators often learnt their craft this way."



A Load of Claptrap

Give the band the clap they so richly deserve

Remember the Syn-Drum? Whenever I hear that "Deeouuu" sound now that starts high and ends low, it just screams 70's/80's to me.

It was an interesting effect for the first couple of hundred times, I guess, but the sound rapidly became a musical cliché.

Eventually every cabaret band from here to breakfast had them, mounted above their ordinary toms, forever dropping Syn-Drum fills in ad nauseam. Instead of synthesizers that could sound like drums, we now had a drum that could sound like a synthesizer. Nobody, it seems, ever asked "Why?"

And what about Simmons, who as far as I can remember made one of the first sets of electronic drums. Band after band in the 80's would have some guy standing (never sitting) down the back of the stage, dressed in his New Romantic finest, perfectly coiffed mullet hair, silently flailing away on these things while the poor sound engineer tried to erase the hum that threatened to overtake the rest of the band. Electronic drums of all kinds were a staple of New Wave/New Age bands, and just about the only thing they had in common was that they would all hum as soon as you plugged them into the system. If bass amps hum because they don't know the words, what excuse does a drum kit have?

Anyway, one day back in the distant past we got hold of another little gadget made by Simmons, called a ClapTrap Handclap Synthesizer. Talk about simple – it was just a box that went "Clap" every time you pressed the button on the front panel. Something that every drum machine has had ever since, but to us then it was a great novelty. You could trigger it from an external source, or set it to clap all by itself, a bit like a phat metronome I suppose. There was also a button marked 'Humanizer' on the front that randomized the timing slightly, just like real handclapping, but it was the 'Manual Trigger' button that was the easy way to do it.

Like the drums, it only had an unbalanced output, and its owner wanted a balanced XLR out fitted so it might stand a better chance of plugging into the system without humming.

Col performed the necessary work, and when we checked it out it seemed to connect quite silently to the mixer, but just to be on the safe side he said, "Aren't you working with the Flames tonight? Why don't you take it with you on the gig and give it a bit of a go?"

So, I put it in the drawer of the effects rack with a spare set of patch leads, and headed

off down to Avalon, where the Flames had a gig at the Air Force base.

The Flames were a cover band led by a singer called Craig. I think even he would admit that he wasn't the world's best singer, but he was a charismatic front man who wisely had a female singer alongside him to (a) give the audience something better than him to look at, and (b) handle the high notes.

Coupled with the obligatory pair of whining popstar guitarists, they were an easy band to work for as long as you didn't take them too seriously (taking themselves seriously was their job!). They played a mixture of last year's hits, old covers, and even older covers. I mean, jeez, if they played songs that I used to play in bands, then they were extremely old covers.

You know what it's like when you get a new toy for the system. You can't wait to use it on anything you possibly can. I was itching to use the ClapTrap, and had it plugged into a spare channel ready to go, but as the night progressed I couldn't find any song that it might remotely fit into.

Then the band started up an old song by The Vibrants – There's Something About You Baby.

Bullseye. After I heard the intro 'Dada dada dada da da – clap clap clap' I knew I had the right song.

"Come on everybody," encouraged Craig "I want you all to clap along with me."

A few half hearted claps could be heard from the audience, and then the band was into the song. I missed the first lot of claps at the start, but I was ready and waiting for them in the middle. As soon as I heard the 'Dada dada dada da da' riff again, I jabbed the button on the front panel three times

'CLAP CLAP CLAP!' Three enormous claps with maximum reverb resounded around the room. Oops – maybe the channel level was just a tad high.

It was a long room, and sadly the claps were about half a second late by the time they bounced back and hit the band.

Chaos reigned. The band dribbled to a halt, stunned, all looking and pointing at each other.

"What the fuck was that?" enquired Craig, to no-one in particular.

I waved from the front of house desk. He glared at me, and then counted the band back into the song.

"OK, we'll try it again," he yelled, and then glared at me once more - "And this time we'll do it on our own!"



Picture: Searching the Internet for a photo of the unit (I neglected to take one at the time!) came up with this MusicAid ClapTrap. MusicAid went on to become Simmons, and this appears to have been the forerunner of the Simmons ClapTrap. Photo from Andy's Synth Pages, www.synth.clara.net/claptrap.htm



Trade Show Calendar

ENTECH - Australia's Entertainment Technology Tradeshow

Feb 4 - 6 2002 Darling Harbour, Sydney
www.conpub.com.au +61 2 9890 2111

SIEL

Feb 3 - 6 Feb 2002 www.siel.com

USITT - Conference & Stage Expo

Feb 13 - 16 2002 +1 315 463 6463

MusikMesse - Pro Light & Sound

Mar 13-17 2002 Frankfurt am Main
www.messefrankfurt.com

SIB International

Mar 24 - 27 2002 +39 0541 744 111

NAB - The Convergence Marketplace

Apr 6 - 11 2002
Las Vegas www.nab.org

PLASA - Shanghai

Apr 16 - 18 2002
Shanghai www.plasa.org

NSCA - Expo "Reach the Summit"

Apr 25 - 27 2002
Colorado Convention Centre, Denver
www.nasca.org

Infocomm - China

May 8 - 10 2002

AES - 112th

May 11 - 14 2002 +1 212 661 8528

CEA Australia

May 15 - 19 2002 www.cedia.com

Lightfair - International

Jun 3 - 5 2002
Moscone Centre, San Francisco
www.lightfair.com

ABTT

Jun 19 - 20 2002
United Kingdom +44 20 7403 3778

PALA - Pro Audio & Light Asia/Total Events Asia

Jul 10 - 12 2002
Hong Kong +65 227 0688

NAMM - International Music Market

July 19-21 2002
Nashville TN www.namm.org

PLASA

Sep 8 - 11 2002
Earls Court, London www.plasa.org.uk

IBC

Sep 13 - 17 2002
Netherlands +44 20 7611 7500

Infocomm Europe/Photokina

Sep 25 - 30 2002
+49 221 821 2958

CEA Expo 2002

Sep 25 - 29 2002
Minneapolis, MN

LIW

Oct 8 - 10 2002
United Kingdom +44 20 8232 1600

LDI

Oct 18 - 20 2002 Las Vegas Conventions Centre
www.ldishow.com

Music China

Oct 16 - 19 2002
Shanghai www.messefrankfurt.com

SMPTTE - 144th Technical Conference & Exhibition

Oct 23 - 26 2002
Pasadena Convention Centre

Emexpo - Elec Media & Equip Expo & Conference

Oct 24 - 25 2002 Stadium Exhib Centre, Seattle
www.emexpo.org

SBES - Sound Broadcasting Equipment Show

Nov 13 - 14 2002 Birmingham, United Kingdom
www.sbes.com +44 13 9832 3700

Connections Advertiser & Brand

EASYFINDER!

Please.... tell them you saw it in Connections!

Company Name	Phone	Website address	Page Number
18 Sound	+39 05 2294-1596	(email) zucchi@eighteensound.it	16
Amber Technology	+61 2 9975-1211	www.ambertech.com.au	19
AON Risk Services	+61 2 9253-7000	www.aonrisk.com.au	43
Australian Audio Supplies	+61 2 4388-4666	www.ausaudio.com.au	39
Bose	1 800 659 433	www.bose.com	27
Bytecraft Entertainment	+61 3 9587-2555	www.bytecraftentertainment.com	45
Chameleon Touring Systems	+61 2 9310-5222	www.chameleon-touring.com.au	44
Clearlight Shows	+61 3 9553-1688	www.clearlight.ccm.au	45
CLS	+61 3 9682-6111	www.cls.com.au	47
CMI Professional Products Group	+61 3 9315 2244	www.cmi.com.au	43
Connections Industry Training	1800 635 514	www.conpub.com.au	32,33
Connections - Setwear	1800 635 514	www.conpub.com.au	67
dB Sound / Interlink System Solutions	+61 2 9638-0777	www.dbsound.com.au	47
ENTTEC	+61 3 9819-2433	www.enttec.com	45
Epson	+61 2 9903 9080	www.epson.com.au	37
EVI Audio	+61 2 9648 3455	www.eviaudio.com.au	5
Jands	+61 2 9582-0909	www.jands.com.au	2,41,IBC
LSW	+61 2 9568-2100	www.lightsounds.com	17
Lots of Watts	+61 2 9638-0302	www.lotsofwatts.com.au	24
Mackie Industrial	+61 2 4388-4666	www.mackie.com	13
McLean Audio Services	+61 3 9429 5381	www.mcleanaudic.com.au	51
Meyer Sound Australia	+61 7 3252-4493	www.meyersound.com	23
Navitar Inc	+1 412 321 0076	www.buhloptical.com	36
Oztronics	1300 766 669		48
Production Audio Services	+61 3 9415-1585	www.productionaudio.com.au	6
Selecon	+64 9 360 1718	www.seleconlight.com	15
Show Technology	+61 2 9898-1111	www.showtech.com.au	21,BC
Showtech Rigging Australia	+61 3 9645 4133	www.showtechaustralia.com.au	35
Sony	+61 2 9887 6666	www.sony.com.au	11
Stage & Screen	+61 2 9383-4544	www.stageandscreen.com.au	10
Syntec International	+61 2 9417 4700	www.syntec.com.au	31
TAFE	+61 2 9942-0099	www.tafe.nsw.edu.au	71,72
TAG	+61 2 9810-5300	www.tag.au.com	29
TRC - The Resource Corporation	+61 3 9877-8233	www.trc.com.au	43,47,48
ULA	+61 7 5510-1333	www.ula.com.au	3
VXCO	+41 32 675-3489	www.vxco.ch	20
Walne, Graham		www.graham-walne.com	59
Yamaha Music Australia	+61 3 9693-5111	www.yamaha.co.jp/product/	25

Advertising rate guide

MAIN SECTION DISPLAY AD'S

inc GST *Rates in A\$

Mono (B & W)	Casual	5x year	11x year
Full page, mono	1828	1646	1470
Half page, mono	1097	988	889
Third page, mono	645	604	547
Quarter page, mono	565	482	415
Full colour	Casual	5x	11x
Full page colour	2337	2106	1912
Junior page 130x180	1502	1386	1271
Half page colour	1242	1145	1047
Third page colour	1050	984	917
Quarter page box	754	698	650
Quarter page strip	834	772	715

TRADER, CLASSIFIEDS, FORUM EMPLOYMENT

Book by 20th month prior. Priced as follows:

• Column width is: 1 col: 2.8cm. 2 Col: 5.8cm. 3 Col: 9.0cm, etc. Any size accepted.

• Price is per Column cm: **Black & white \$14, Colour \$18.**

• No art charges for text, Logo or pictures \$20 ea

Main Section Ads need to be booked by 15th of the month. Call Julius, 1-800-635-514 or 0408 498-180 - anytime!

Balls of Steel



**Crown has it all,
incredible performance,
reliability under harsh
conditions and the best support
in the business.**

**It can make the difference from you
being a punter to the
absolute player.**

**To check out the
Crown experience call
Jands on (02) 95820909**

W E L C O M M E
TO THE *NEW PRODUCT.*



SHOWtechnology

SHOW TECHNOLOGY AUSTRALIA PTY LTD ABN 89 062 241 785
102 Derby Street, Silverwater NSW 2128 • PHONE 61 2 9748 1122 • FAX 61 2 9748 1499
EMAIL claypaky@showtech.com.au • www.showtech.com.au

Tel. +39-035-654311
Fax +39-035-635976
www.claypaky.it



PROFESSIONAL SHOW LIGHTING