

ENTECH
THIS MONTH - SEE SHOW GUIDE!



CX111 FEBRUARY 2016 \$5.99 AU

Fight Club
UFC 193
at Melbourne's
Etihad Stadium

Spyglass Rises
Inside NW Group's
new company

Dante Via
Connect Everything

ROADSKILLS
Cold Chisel
Sam Smith
20 Questions
with Paul Guthrie

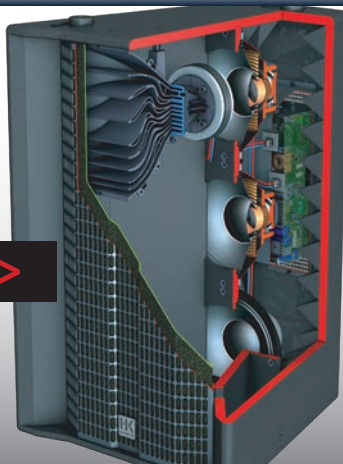
GEARBOX REVIEWS: Soundcraft Vi7000 • Robe BMFL Blade • VUE Audiotechnik h15N + SystemVUE
• Sennheiser AVX • TMB Solaris LED Flare
CX NEWS: Ticketek's Soundwave Disaster • Big Picture takes The OB Group • Vale: David Grant
• Vale: Steve Wickham • Norwest Sold • Brand Power • ARCA Takes Off



LINEAR 5 LTS A

THE NEW PERFORMANCE CLASS >

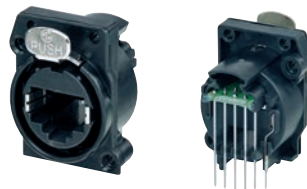
- 3 x 8" drivers in one box
- 1" compression driver
- Multi-cell transformer horn
- 1000 watts RMS



LONG THROW
ULTRA COMPACT
ECONOMICAL

More information: www.cmi.com.au/ltsa

etherCON
the new range of
data connectors for
CAT5e and CAT6A



More than just connectors.

We put 40 years of experience and our passion into our products. The etherCON Series is a ruggedized and lockable RJ45 connector system, optimized for pro audio, video and lighting network applications.

Join us on facebook | www.neutrik.com | www.experience-neutrik.com

NEUTRIK
SETTING STANDARDS SINCE 1975

For product enquiries, contact the Australian distributor,
Amber Technology.

www.ambertech.com.au



dLIVE



Design for Live

The phenomenally powerful XCVI Core puts dLive at the heart of tomorrow's sophisticated live audio systems, while its class-leading user interface keeps the engineer focused on mixing in the moment.

GET HANDS ON WITH THE DLIVE AT

ENTTECH
ROADSHOW

WITH SPECIAL GUEST ALEX SCHLOSSER

ALLEN & HEATH

DLIVE.ALLEN-HEATH.COM

More info? Contact TAG

(02) 9519 0900 info@tag.com.au tag.com.au



A U S T R A L I A ' S E N T E R T A I N M E

CX Network

[PRESENTS]

ENTECH ON TOUR



/CX MAGAZINE



@CX_ROADSHOW

HILLS.



**PHILIPS
Entertainment**



australia



LEXAIR



PRG



**SHS
GLOBAL**



audio • lighting • staging



BOSCH
Invented for life



[A JULIUSMEDIA GROUP PRODUCTION]

NT TECHNOLOGY ROADSHOW

[FEBRUARY]
2016
AUSTRALIAN
TOUR



www.cxevents.com.au

ONE DAY ONLY
11am - 6pm
4 x Seminars
2 x Shootouts
Happy Hour
4.30pm



Melbourne Park Monday 8th Feb

Sydney Australian Technology Park Wednesday 10th Feb

Brisbane BCEC Monday 15th Feb

Adelaide Convention Centre Thursday 18th Feb

Perth Exhibition & Convention Centre Monday 22nd Feb

CONTACT STEVE@JULIUSMEDIA.COM



CX111 2016. CONTENT

Inside this edition

αDIGITAL αNEWS αtra αTV αEVENTS αMAGBLOG αGEARBOX αTheHUMP αLIGHT Tonight

α EDITORIAL

8 EVENTOPIA

α NEWS

10 Ticketek's Soundwave Disaster, Big Picture takes The OB Group

11 Vale: David Grant, Vale: Steve Wickham

12 Norwest Sold, Brand Power, ARCA Takes Off

α NEW GEAR

14 Allen & Heath, Clay Paky, Riedel, Roland, ShowPro & more!

α FEATURES

20 Fight Club - UFC 193 at Melbourne's Etihad Stadium

30 Spyglass Rises - Spyglass/Norwest Merger

34 Dante Via - Connect Everything

α GEARBOX

42 Soundcraft Vi7000

46 Robe BMFL Blade

48 VUE Audiotechnik h15N + SystemVUE

50 Sennheiser AVX

52 TMB Solaris LED Flare

α REGULARS

26 The Mill Report - with Andy Stewart

40 Listen Here - with Andy Stewart

54 Roadskills - with Cat Strom

66 Industry Women - with Toni Venditti

68 BizTalk - with Julius Grafton

73 The Great Ham Steak Incident of '76 - with Duncan Fry

• Cover Image: Cold Chisel - Jimmy Barnes
Photographer: Bob King



DIGITAL NETWORK

cx-mag.com, cxmagblog.com,
cxevents.com.au, cx-tv.com : CXtra, Gearbox,
News, TheHUMP, LightTonight, Roadshows



View CX Magazine on your chosen device today!
High resolution, dynamic layout,
full of interactive features & video links.

AU \$5.99 • Annual Subscription AU \$49.00

SEARCH: CXNETWORK.COM.AU



UNLEASH THE POWER

INTRODUCING LEOPARD AND 900-LFC

Tremendous power-to-size ratio, ultra-low distortion, and unprecedented clarity define these new LEO Family members. You'll hear the difference.

MEYER SOUND AUSTRALIA | AUS 1800 4 MEYER | NZ 0800 3 MEYER

sales@meyersound.com.au



EVENTOPIA

In 1978 entrepreneur Harry M. Miller started a ticketing company called Computicket, which failed to return all funds to promoters once their event was completed. He went to jail for fraud and served ten months eating porridge.

This led to a ticketing industry code of conduct which is currently driven by Live Performance Australia, whose members agree to operate within the code. A key provision is that ticket funds are held in trust and released to the promoter after the show.

In recent years anonymous online ticketing systems materialised and this led Ticketek, the industry leader, to create a virtual ticketing firm called Eventopia. It is not hard to imagine the boardroom discussion over at (the former) Nine Live. (Ticketek is now part of TEG Live, owned by an Asian vulture fund called Affinity Equity Partners).

There is no suggestion of anything fraudulent to follow. This is an 'imagined' boardroom discussion, but the essential facts are admitted by Eventopia in various media reports since Soundwave and Echo (NZ) collapsed in December.

"Boss, we have a solution!"

"Err, what?"

"The virtual agents are eating our lunch. So we will set up our own!"

Boss turns to legal counsel. "Will this fly?"

"Yes, your immense-ness", counsel trills. (There is no suggestion the CEO or boss at Eventopia is, indeed, immense).

"It won't be signed to that annoying LPA code of conduct, as it will be a different legal entity. Taa daa!"

Genius instigator: "We have a USP (Unique Selling Proposition) for the promoters - we'll advance them the ticket funds up front!"

Boss recoils in horror.

"Good lord man! Are you SERIOUS? We would give the likes of AJ Maddah the ticket money BEFORE the gig?"

"Yes", the genius replies..... interrupted by counsel:

"The solution is that the promoter signs a contract agreeing to pop the money into a trust account until the event. That way, if they fail, they just send us the money back from trust!"

The boss is overwhelmed with gratitude, and sends a self congratulatory email to the Affinity HQ in Beijing or Hong Kong or wherever, advising that TEG Live will lift sales a few million in short order.

While this is a tech magazine for the production biz, what these greedy and inept people do affects us. Had AJ Maddah not had access to funds in advance, chances are he would not have been able to operate and thus not pay many firms in the industry. But he seems less of the villain in this, I think.

• See News page 10, and Biz Talk page 68

- Julius



PUBLISHERS PANEL

SYDNEY

Email: juliusmedia@me.com

Phone: +61 2 9882 6727

Mail: Locked Bag 30 Epping NSW 1710 Australia

MELBOURNE

Email: jason@juliusmedia.com

Phone: +61 407-735-920

AUCKLAND

Email: mail@juliusmedia.com

Phone: +64-9-801-0952

PEOPLE

Publisher: Julius Grafton

Business manager: Steve James

Technical editor: Jimmy Den Ouden

AV editor: Jason Allen

Creative director: Lee Murray

Digital content editor: Jack McSweeney

Regular contributors:

Andy Stewart, Cat Strom, Duncan Fry, Toni Venditti

CX-TV hosts: Meg MacIntosh, Sophie Eshman

CX-TV [www.cx-tv.com]

Accounts: Emily Lim

Accountants: Kieren Martin, Watkins Coffey Martin

Official airline: Virgin Australia

Lawyers:

Gibert + Tobin (Defamation),

David Rydon DPR Legal (Commercial)

Banki Haddock Fiora (Copyright)

CX Magazine is published Monthly in Australia

by Juliusmedia Group Pty Ltd (ACN 134170460)

under license from CX Network Pty Ltd (ACN 153165167)

Web: www.juliusmedia.com

Printer: Printed in Australia

Member of Live Performance Australia

Member of ACETA



SYSTEM 10 PRO

2.4 GHz Digital High-Fidelity
Wireless System



Audio-Technica's **System 10 PRO** rack-mount digital wireless is so simple to use, so dependable, and so automatic, you never have to think about it. Set it up anywhere, turn it on and it's good to go.

System 10 PRO delivers an interference-free operation in the 2.4 GHz range far from TV and DTV channels and is packed with new thinking and innovative features. The durable half-rack chassis houses two receiver units that can be operated locally or released and mounted remotely (up to 120 metres) via CAT5 cable.

Up to five chassis and 10 receiver units can be linked and used simultaneously in a stable, easy to set up system featuring 24-bit/48 kHz operation, clear, natural sound quality and three levels of diversity assurance: frequency, time and space.

More info on System 10 PRO and Audio-Technica wireless? www.audio-technica.com.au



NEW from Audio-Technica, the System 10 base and boundary microphone compatible with your existing **System 10 PRO**. See it first at

ENTTECH
ROADSHOW

 **audio-technica**
always listening

Ticketek's Soundwave Disaster Own goal infuriates promoters

The collapse of A.J. Maddah's Soundwave 2016 was anticipated by most production suppliers who were refusing to transact without money up front. Many were still waiting for payment for the 2015 event with millions owed to crew, audio, lighting, staging and trucking firms.

In October the Soundwave 2015 company went into receivership owing north of \$20 million. Maddah had proposed to return some profits from the 2016 event, as a form of leverage to ensure supply of production and services. While some suppliers signed on for that deal, many told CX they would only work on the 2016 festival tour for cash up front.

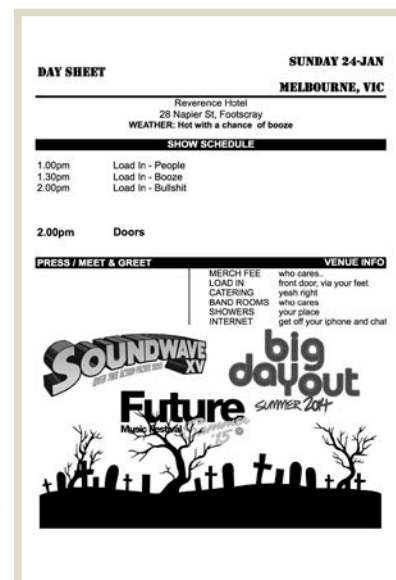
The event (scheduled for late January) collapsed in mid December. But the refusal of Eventopia, a Ticketek subsidiary, to refund punters for tickets threw the live performance industry into disarray, with bad headlines and social media uproar. Live Performance Australia issued a press release reminding ticketing agencies that they should abide by the industry code of conduct, and Ticketek unhelpfully stated that Eventopia was not a member of L.P.A.

Venue managers, promoters, media, punters and various government regulators bombarded Ticketek and its ultimate owner, Asian venture fund Affinity Equity Partners. They pointed out Eventopia's terms and conditions and Australian consumer law clearly fell in favour of refunds as nothing had been supplied. The standoff damaged consumer confidence in the live performance industry.

Just days later, Eventopia relented and advised ticket holders they would make refunds. Previously they had invited ticket holders to approach Maddah's company for a refund. Maddah himself made the simple point that while Eventopia had indeed advanced him most of the ticket funds for Soundwave, they knew full well he had spent the money on deposits and event expenses.

As for the live production industry, the loss of Soundwave and a raft of other outdoor festivals is being felt. Several dozen event professionals had a gathering late January at the Reverence Hotel in Footscray organized by former Soundwave production manager Nick Marson.

"Some of us have been working on festivals this time of year for the past 20 years or so, and now find that with the recent demise of all of Australia's summer festivals we are either unemployed or under employed at this time of year", he said.



Big Picture takes The OB Group Same management, bigger picture

Big Picture has announced the acquisition of The OB Group. Founded in 1992 by Colin Rothenberg, The OB Group primarily services the medium size broadcast market. The majority of The OB Group's work is for pay TV and free to air television networks and has an outstanding reputation for value and customer service.

Colin Rothenberg will continue as head of sales and business development into the future. The OB Group will operate from Big Picture's head office in Sydney. "Big Picture's technology, resources and expertise will compliment our facilities and provide further capability via upgrades and expansion to our broadcast and service offerings" Colin said.

Big Picture is a leading video services provider in the region, with offices in Sydney, Auckland and Melbourne. "The addition of The OB Group to Big Picture will greatly enhance the range of solutions and packages we can provide our clients" Managing Director Joe Bonanno commented. "This



[PICTURED]-JOE BONANO & COLIN ROTHENBERG

was naturally the next step for Big Picture". "The OB Group shares a similar culture and commitment to that of Big Picture".

"We aim to provide exceptional service to our customers and be at the forefront of live event and broadcast technology. We wish to expand on the exceptional platform Colin has established over the past 23 years and further upgrade the facilities and capabilities of the OB Vehicles". The OB Group's contact details will remain the same.

Vale: David Grant Events Genius

In 1987, David Grant established David Grant Special Events after a career on the production side of theatre and television, then in advertising and journalism. DGSE helped pioneer the events industry and has remained at the trailblazing forefront of events ever since.

That's the intro par for his website, and it defines (probably) the most astute, switched on, charismatic and intelligent guy in the events community. He was a genius, a leader and a schmoozer.

David died before Christmas from a brain tumour. "If the phone rings and it's David Grant on the line, drop everything and pay attention", Mark Taylor wrote in CX several years, profiling David.

"He's pushed tens of millions of dollars into our industry and changed if not created the various ways we do business today. With a career spanning 26 years DG is arguably our biggest individual financial contributor. And, not just here on our home turf."

"DG is an internationally recognised producer. He's been onboard with the Olympics, summer and winter, since the Atlanta games in 1996. Do the maths."

A brilliant obituary in the Sydney Morning Herald unearthed some legendary incidents where David broke



[PICTURED] - DAVID GRANT

through, such as when Bill and Hillary Clinton entered a function in Canberra and the traditional 'Hail to the chief' was replaced with the big band swing classic, 'Sing sing sing'.

While it lifted the mood and made the Clinton's laugh, it also earned the ire of the Prime Minister's Office who did not hire DG again.

CX knew him by reputation as simply one of the best. He turned up at a lot of industry events and shared his vision. He invited CX to his HQ in Willoughby and gave counsel about our training college - valuable and smart advice, more honest than most.

His passing leaves a void, as there are less truly inventive, innovative and ceiling smashing events producers than there are fingers on your hands.

David Grant is survived by his wife and business partner Katerina, sons Seigfried, Max, Jack and Lewis, parents Bill and Maggie, and brothers Michael and Peter.

Vale: Steve Wickham Lighting Designer

Steve Wickham died early January after a courageous and determined battle against Mesothelioma.

He was highly respected and a strong supporter of our industry. Steve served as a valuable Helpmann Award panel member for many years giving his expertise and support and was lighting designer for the 2002 Helpmann Awards.

Prior to working as the Entertainment Manager at the Star for Echo Entertainment in Sydney, he held the position of Technical Services Manager at The Lyric Theatre as well as several freelance Set and Lighting Design positions over the span of his career.

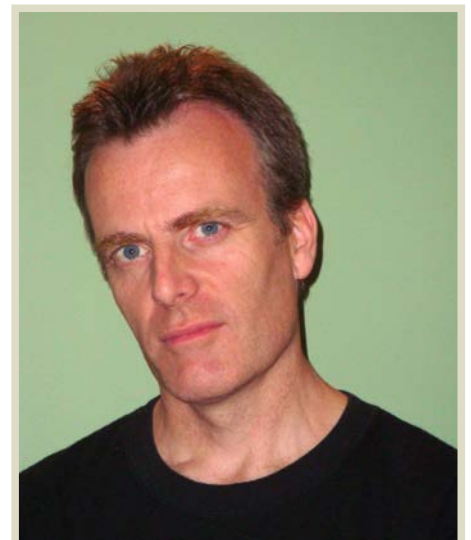
Projects he worked on include The Phantom of the Opera, Mamma Mia, Chicago, concerts such as Bon Jovi, The Rolling Stones and Bruce Springsteen, the first open air production of Cats (toured worldwide) and The Pacific Rim forum at the Sydney Olympics, to name a few.

In 2014 he settled out of court with asbestos manufacturer James Hardie. Steve had a fatal lung condition caused by exposure to fibro in 1994, and took court action that led to startling revelations by a former Hardie CEO.

In the case, new evidence arose that will assist other victims in future compensation hearings. Steve's lawyer found the evidence, which led to Hardie's settling his case on confidential terms.

His case was one of the first involving third line victims, where Steve demolished a structure built with Hardie Fibro in 1994. His lawyer Tanya Segelov, from law firm Turner Freeman stumbled on a book by former managing director of James Hardie Industries, David MacFarlane. His testimony led to the firm settling with Steve. Steve's diagnosis of mesothelioma followed severe lung pains when yawning or breathing deeply, last August. The condition is fatal. "I really hope the case helps others in the future", he said at the time.

He is survived by wife Wendy, and children Bec and Sam.



[PICTURED] - STEVE WICKHAM

Norwest Sold Management Remain



[PICTURED]-G.M.GRAEME WHITEHOUSE &
CHAIR CHRIS KENNEDY

Leading Australasian live production supplier Norwest Productions (now known as NW Group) has been sold and restructured in a deal worth \$27 million.

The announcement reads: "NW Group management and Archer Growth completed a secondary buyout from AnaCacia in December 2015 following successful growth."

The deal provided AnaCacia Capital with a successful exit after almost a decade holding around half of Norwest. In that time they guided Norwest through a series of acquisitions, including McLean Audio Services, Cairellie, Oceania, and Spyglass in New Zealand.

Archer have allocated further capital for future acquisitions, and other avenues of organic growth that support its strategy of providing 'full service' audio lighting and video production solutions across Australasia. Which means they may acquire existing firm(s).

Chair Chris Kennedy told CX that existing staff shareholders, of which he still has the largest holding, are happy and will remain at the helm.

ARCA Takes Off

AC/DC support ignites roadcrew association

Until AC/DC signed the poster commemorating the 123 crew who have died since the 1970's, the Australian Road Crew Association had struggled to exist. But the poster artwork changed everything.

Support Act cut a deal to collect tax free donations to support needy crew. The Sydney Morning Herald ran a widely read feature in a Saturday edition. A project to digitize and release desk tapes from forgotten gigs by major bands in the 1980's was embraced by many.

Now ARCA is moving properly, with a small but growing income stream and a new website with historical pictures. Another reunion is planned for Melbourne after Easter. And ARCA membership is tipped to break through 300 surviving crew after a membership drive at ENTECH this month.

Tax free donations can be made at <http://supportact.org.au/donate/> and make sure you write ROADIE in the field supplied so the funds are dedicated to crew.

Brand Power ENTECH Booms

THE NEW ZEALAND LIGHT SOUND AUDIO VISUAL ENTERTAINMENT ROADSHOW

[JULY 2016]
NEW ZEALAND TOUR
Auckland
Wellington
Christchurch

2016

CX

CX Network [PRESENTS] ENTECH NEW ZEALAND ROADSHOW

f /CX MAGAZINE @CX_ROADSHOW

www.entech.nz
[A JULIUSMEDIA GROUP PRODUCTION]

Buying back the ENTECH name and database has lifted the CX Summer Roadshow to another level, with pre-registrations doubled for this month's touring tradeshow. More exhibitors and a much larger audio and lighting shootout are helping attract more trade visitors.

Over the ditch the first ENTECH NZ is also exceeding expectations with an extra truck planned to cope with extra exhibitors. The NZ show is in July and visits Auckland, Wellington and Christchurch. CX has commenced publishing a New Zealand edition of this magazine which is attracting healthy advertising flows.

With 30 exhibitors in Australia, ENTECH is right-sized for the production industry. A survey of exhibitors has pointed to a slight change for the following event in 2017, which will run on Tuesdays and Thursdays. Exhibitors rejected a proposal to increase the maximum stand size which will remain as is.

October will see the first ICTech Roadshow, aimed at the installation audio visual market and heavy on educational seminars and workshops. Juliusmedia will also stage the second SecTech Roadshow in May, in partnership with Bridge Publishing. That roadshow serves the security technology market.

Luminex

Network Intelligence



Audio

Video

Lighting

For complete integration of sound, lighting and video, choose Luminex Managed Gigabit Ethernet Switches. The GigaCore product range is composed of Ethernet switches designed to cope with the most demanding AV installation. From tour to installation, Luminex switches offer a reliable and user friendly platform to transport any of the industry IP protocols at wire speed.



Come see our products, come meet the PAVT Team at

www.pavt.com.au

Over 30 years in Business

Production Audio Video Technology Pty Ltd

4/621 Whitehorse Road, Mitcham 3132, Victoria PH: 03 9264 8000 sales@productionaudio.com.au

New & Note Worthy...

ALLEN & HEATH

BOSCH

CHRISTIE

CLAY PAKY

DB TECHNOLOGIES

HK

JBL

LEXICON

RIEDEL

ROLAND

SHOWPRO

TASCAM

Clay Paky Scenius Spot



Scenius is the new moving head spotlight at the top of the Clay Paky range. Its advanced optical unit and the new 1400W OSRAM discharge lamp provide a much higher light output than with previous generation 1500W lamps. Its wide 8°-50° zoom combined with a modern focus tracking system concentrate maximum luminous efficiency precisely on the effect you wish to project, and the focus may be set to be fully automatic.

The lamp produces a 6000 K colour temperature that does not vary over time. The colours cover a broad spectrum, even including pastel shades, thanks to a CMY system, a 7 color wheel and a linear CTO filter. Scenius Spot also includes 2 rotating gobo wheels (each with 6 interchangeable gobos), a rotating prism, an interchangeable graphics wheel, and a highly precise iris. The fixture can also be used in wash mode by inserting a new design of frost filter. It can be run at 1400W or in energy saving mode at 1200W.

Australian Distributor: Show Technology
www.showtech.com.au or (02) 9748 1122

JBL EON618S

JBL Professional has introduced the EON618S, an 18-inch, 1000W, self-powered subwoofer. With a purposefully designed large-volume enclosure to support true low-frequency extension, the EON618S rounds out JBL's EON600 product family and is tuned to perform optimally alongside EON610, EON612 and EON615 full-range systems.

Powered by a 1000W Class D amplifier, the EON618S features a maximum SPL output of 134 dB, with a frequency range of 31Hz - 150Hz (-10 dB), a frequency response of 42.5Hz - 150Hz (-3 dB), at a light weight of 35 kg. The EON618S features premium handles, a standard M20 threaded pole cup and an extremely rugged enclosure. DSP Parameters, including presets for EON600, EON200 and other manufacturers' full-range loudspeakers, can be controlled via a Bluetooth app for iOS and Android. Selectable crossover presets are available through the EON Connect app.

Australian Distributor: Jands
www.jands.com.au or (02) 9582 090

Roland V-1HD



The V-1HD is a high-definition video switcher that makes it easy to connect and switch video cameras, smart phones, computers, tablets, Blu-ray players and other HDMI video sources with a simple push of a button or slide of the T-Fader. It supports professional compositing effects such as picture-in-picture and keying allowing for graphic insets, titling and Chroma key, ideal for news broadcast or corporate training productions.

The V-1HD has 4 HDMI inputs, two HDMI outputs, two effects knobs, and includes a full 12 channel audio mixer. It can be controlled remotely via USB or MIDI, and via the V-1HD RCS software for Mac, PC and iPad.

Australian Distributor: Roland Corporation Australia
www.rolandcorp.com.au or (02) 9982 8266

Allen & Heath ZEDi-10/FX

Following the recent launch of the ZEDi-8 hybrid mixer / interface, Allen & Heath has released two more ZEDi models, the ZEDi-10 and ZEDi-10FX, from its acclaimed ZED analogue console range. Designed for recording/gigging artists and AV rental and installation companies, the new ZEDi models combine a compact mixer with a 24bit 96kHz 4x4 USB interface. The units also have flexible source routing options to adapt to different workflows, and are bundled with Cubase LE music production software and the Cubasis LE mobile music production app.

The ZEDi-10 and ZEDi-10FX feature 4 mono channels with separate XLR and TRS jack sockets, one stereo channel and a second stereo input for reverb returns or playback. The mono channels include DI high impedance circuitry for the jack sockets. Additionally, the ZEDi-10FX includes an in-house designed FX system which encompasses multi-FX models, combining reverbs, delays, doublers, chorusing, and other modulators to create a dynamic and varied suite of studio quality sound effects.

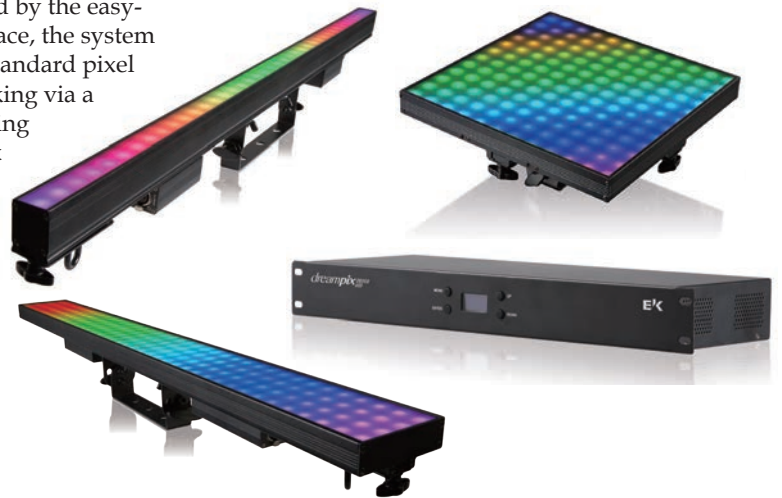
Australian distributor: Technical Audio Group
www.tag.com.au or (02) 9519 0900



ShowPro dreampix

ShowPro's dreampix series consists of four models of pixel-mapping LED fixtures; STRIP, TUBE, TILE, and BAR. Powered by the easy-to-use, 1 RU DREAMPIX DRIVER 600 ArtNet interface, the system has been designed to work with popular industry-standard pixel mapping tools. All fixtures support power/data linking via a single XLR4 cable, with one dreampix driver powering up to 24 x dreampix STRIP, 16 x dreampix TUBE, 6 x dreampix TILE, or 6 x dreampix BAR. Multiple drivers may be networked in daisy-chain via EtherCon I/O.

Australian Distributor: Show Technology
www.showtech.com.au or (02) 9748 1122



Bosch PAVIRO

PAVIRO is a high-quality Public Address and EN54 Voice Evacuation System (certificate pending). It integrates with additional equipment to deliver high-quality sound thanks to its 24-bit digital processors, superior digital-to-analogue converters and outstanding Signal-to-Noise Ratio. The flexible system architecture makes it ideal for small-to mid-sized offices, regional airports, mid-sized hotels, factories, schools, and department stores. The PAVIRO system comprises a Controller with DSP (4 Channels and 12-Zone router), a 24 Zone Router (4 Channels), a Power Amplifier (2x500W Class D), a Call Station, and a Call Station Extension. 20 routers can be used per each controller supporting up to 492 zones.

Australian Distributor:
Bosch Communications Systems
www.boschcommunications.com.au
or (02) 9683 4752



- ALLEN & HEATH
- BOSCH
- CHRISTIE
- CLAY PAKY
- DB TECHNOLOGIES
- HK
- JBL
- LEXICON
- RIEDEL
- ROLAND
- SHOWPRO
- TASCAM



HK Audio
LINEAR 5 LTS A and
LINEAR SUB 4000 A

HK Audio's active, bi-amped LINEAR 5 LTS A makes use of HK Audio's proprietary Multicell Transformer technology to deliver 138dB maximum SPL up to 50 metres. The cabinet houses 3x 8" (16 ohms) Neodymium low-mid drivers and 1x 1" (16 ohms) Neodymium HF Driver. The LTS A's features, price, footprint and speed of setup help users save on people-power, truck space and time. Its design allows it to be stacked on the ground or on its head, or to be clustered with ease.

LINEAR SUB 4000 A is a flexible 18" subwoofer powered by a 1200W Class D amplifier, delivering high maximum SPL. Its robust wood housing is built to withstand the wear and tear of daily use, making it perfectly suited for professional gigs and installation in clubs. LTS A and L SUB 4000 A are particularly effective when used together, but both are compatible with all existing LINEAR 5 series components.

The HK Audio Linear 5 LTSA has an Australian RRP of \$3499 and the HK Audio Linear 5 SUB4000A RRP is \$4999.

Australian Distributor: CMI Music and Audio
www.cmi.com.au or (03) 9315 2244



Christie
Vive Audio LA2 and LA3S-3ohm

Christie have introduced the LA2 premium screen channel loudspeaker and the LA3S-3ohm premium surround channel loudspeaker. The speakers continue the Christie Vive tradition of using ribbon-driver technology to provide timbre-matching, enhanced voice intelligibility and low distortion. Designed to support all of the leading cinema audio formats including Dolby Atmos, 7.1 and 5.1 surround sound and Auro 11.1, Christie Vive Audio can be configured to provide the optimal audio solution for any cinema space, from post production studios and screening rooms to traditional auditoriums and premium large formats cinemas.

Australian Distributor: Christie Digital Systems
www.christiedigital.com or (07) 3624 4888

Lexicon
QLI-32



Lexicon's 32 Channel QuantumLogic Immersion Processor is designed to deliver up to 32 channels of cinema surround sound. The QLI-32 interfaces with a theatre's media source and existing cinema processor to provide a multi-dimensional listening experience with left, center, right, surround, rear and height channels, all via HARMAN's proprietary Quantum Logic Immersion surround-processing technology. In doing so, the QLI-32 provides theatres with a cost-efficient and easily deployed upgrade path to significantly-improved immersive cinematic sound.

The QLI-32 is equipped with 8 channels of analogue input (25-Pin Connector), 8 channels of AES input (RJ-45 Connector), and a BLU link input/output (2 RJ-45 Connectors). Processing includes a 1/3 octave graphic EQ for each output channel and a Parametric EQ for low frequency extension. The unit can be controlled over Ethernet via a web based interface.

Australian Distributor: Jands
www.jands.com.au or (02) 9582 090



**PRODUCTS RELY ON
PASSIONATE PEOPLE**
MEET YOUR NEW COMPANION

Bryce loves his Martin family of Vipers and Auras almost as much as little Heidi.

**Entertainment
Installations**



MAC Viper Performance

MAC Aura

Martin
by HARMAN



SYDNEY 102 Derby St Silverwater NSW 2128 T: 61 2 9748 1122	MELBOURNE 8/339 Williamstown Rd Port Melbourne VIC 3207 T: 61 3 9681 7511	BRISBANE 3/459 Tufnell Rd Banyo QLD 4014 T: 61 7 3267 3177	PERTH 18 Milly Court Malaga WA 6090 T: 61 8 9248 8119
--	---	--	---

www.showtech.com.au | www.martin.com

ALLEN & HEATH

BOSCH

CHRISTIE

CLAY PAKY

DB TECHNOLOGIES

HK

JBL

LEXICON

RIEDEL

ROLAND

SHOWPRO

TASCAM



**Tascam
DR-701D**

The DR-701D is TASCAM's flagship recorder for single-shooter video production. A timecode generator is included for location reference, which can be jam synced from a SMPTE generator, camera, or smart slate. The HDMI in and out allows a DSLR camera to start recording on both devices, and video clock prevents drift between sound and picture.

Four mic inputs can be individually recorded and mixed to a stereo track, for a total of six-track recording. For additional tracks, multiple units can be cascaded together. The lightweight yet rigid chassis is forged from a magnesium alloy. Tripod mounts on the top and bottom of the unit allow the unit to mount under a camera, attach to a follow-focus cage, or used stand-alone.

**Australian Distributor: CMI Music and Audio
www.cmi.com.au or (03) 9315 2244**

**Riedel
AES67 card for Artist**

Riedel Communications have developed a new AES67 client card for their Artist series digital matrix intercom systems. This simple add-on card makes it possible for users to take advantage of AES67 audio networks. With the existing AVB card for Artist and this new development, Artist now can accommodate both AVB and AES67 audio networks.



The new AES67 client card is easily installed into the Artist mainframe and then configurable through the Director software. The interface will also allow AES67 connectivity between the Artist and Smartpanels, as well as other 3rd party devices. The card features 8 independent AES67 connections to service multiple devices.

**Australian Distributor: Riedel Communications Australia
www.riedel.net or (02) 9669 1199**



**dB Technologies
INGENIA Series**

The INGENIA series of loudspeakers consists of four active models with power ranging from 400W to 900W RMS. They are equipped with premium low frequency transducers from 6.5" for IG1T and IG4T, 8" for IG2T and 10" for IG3T. Compression drivers range from 1" for IG1T and IG2T to 1.4" for IG3T and IG4T. All models come with the new Digipro G3 digital amplifiers, SMPS technology with PSU auto-range, and efficiency that ensures there is no need for cooling fans. INGENIA's horns are horizontally symmetric and vertically asymmetric. The horizontal dispersion is wide and constant;

the vertical dispersion is narrow in the upper part and wide in the lower. This is because the INGENIA speakers are designed to work in single or stacked configuration with the two horns coupled one against the other by overturning the upper speaker on the lower one. The INGENIA speakers are equipped with an "infrared-core handle" on top, so when a second INGENIA speaker is stacked on another there is a quick exchange of information between the two DSPs, which auto-setup to operate as a single speaker.

**Australian Distributor: National Audio Systems
www.nationalaudio.com.au or (03) 8756 2600**

RØDELink™

F I L M M A K E R
W I R E L E S S A U D I O S Y S T E M



Series II
2.4GHz digital
transmission



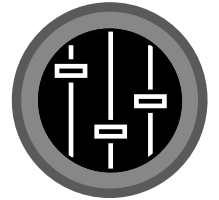
128-bit encrypted
signal



Omnidirectional
lavalier microphone



One touch
pairing



3 level gain
control



Up to 100m
range

RØDE
MICROPHONES

www.rodalink.com



FIGHT

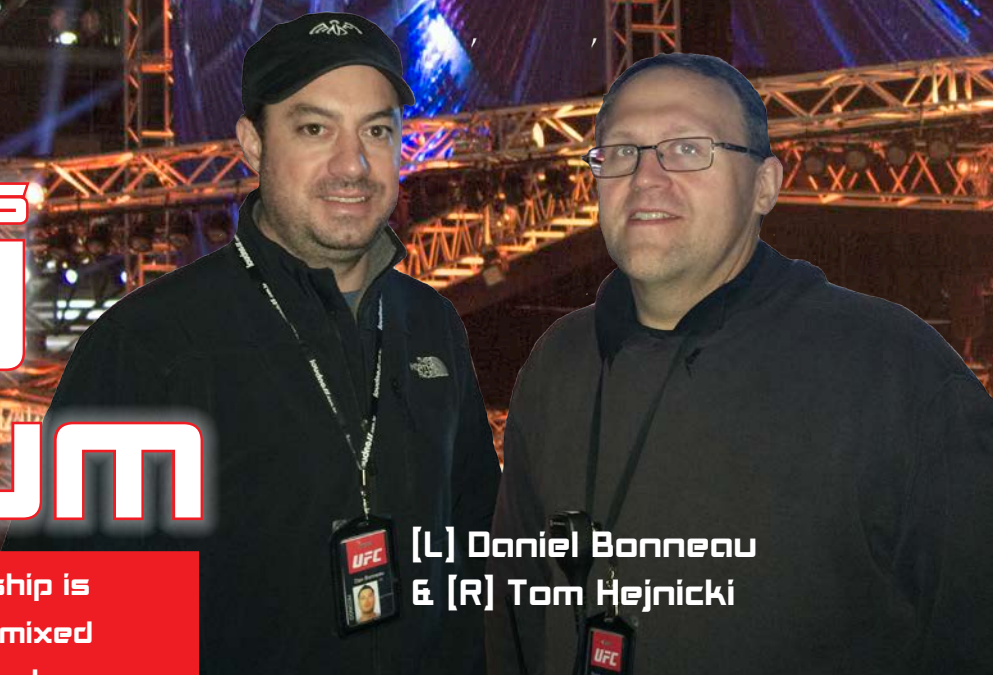
CLUB

UFC

193

at Melbourne's Etihad Stadium

The Ultimate Fighting Championship is a global phenomenon, bringing mixed martial arts to a live audience and an enormous pay-per-view subscriber base. November saw UFC bring their show to Melbourne's Etihad Stadium, setting a record for the largest attendance ever at a UFC bout with 56,214 punters. With production closer to a rock concert than a traditional Fight, JPJ Audio stepped up by providing a d&b audiotechnik PA almost as intimidating as the contenders. Jason Allen went ringside.....

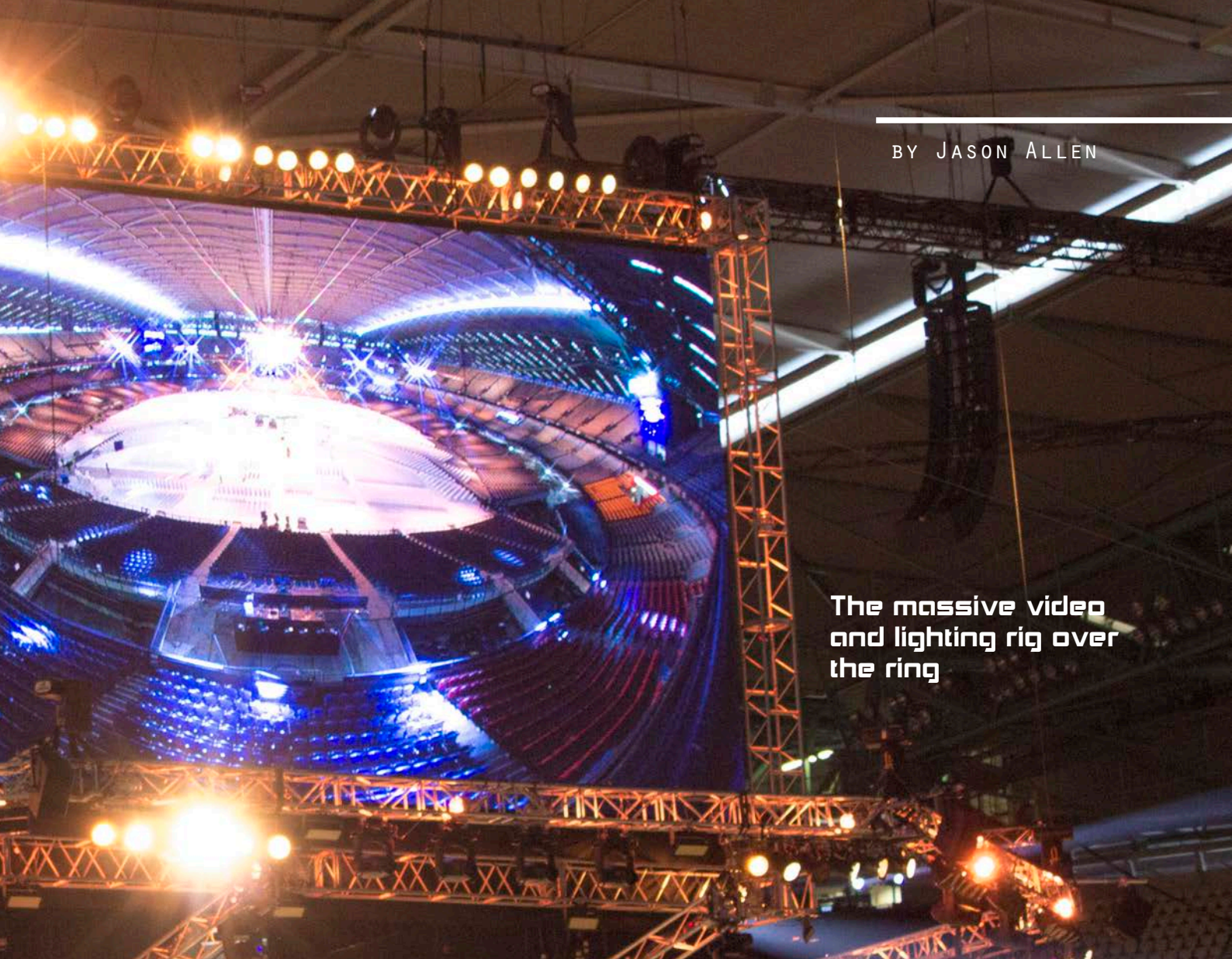


[L] Daniel Bonnaeu
& [R] Tom Hejnicky

Designed by UFC's Director of Audio Production Daniel Bonnaeu and Lead Audio Technician Thomas Hejnicky, the main stadium PA consisted of 112 units of d&b audiotechnik J8s and 20 J12s, augmented by 36 d&b J-SUB and four B2 subs, all powered by 54 d&b D80 and three D12 amps. "UFC 193 in Melbourne was the second largest system design in the history of the UFC," said Daniel Bonnaeu. "Our goals were consistent coverage for every seat in the stadium, vocal clarity, and tight low end for a high-quality immersive experience."

Weighing In

When you present a fight in the round, you're going to need the PA to cover greater area than a traditional stage show. The other challenge is that everything



The massive video and lighting rig over the ring



Avid Venue at FOH

is focussed on the centre of the venue, which, with Etihad's retractable roof, presented some logistical problems. "The basic design was very tight between video, lighting and audio," said Bass Gauci, Audio Manager for JPJ. "But Etihad doesn't have anywhere near the capability to hang eight tonne in the centre of the room. We were forced to move the PA out substantially. Etihad did a lot of work to make it happen, strengthening the roof and bracing. They spent considerable amounts of money, and were working on it for a month before we loaded in."

"The design itself was greatly affected," Thomas Hejnicky added, "as five iterations of PA layout were submitted, with the fifth design selected as the best compromise. However, the anticipated end result changed in no discernible way; a result with which we are very pleased. It is by no means, what

one might consider, a small task to shift large PA components (or reduce component counts entirely) ten to fifteen meters and expect little to no impact on what appeared to be 'near perfection' within the original prediction. I must recognize d&b audiotechnik for their excellent product and stunningly accurate prediction software; and our vendor, JPJ, that not only provided the fully realised system but maintained flexibility with their inventory through the design phase."



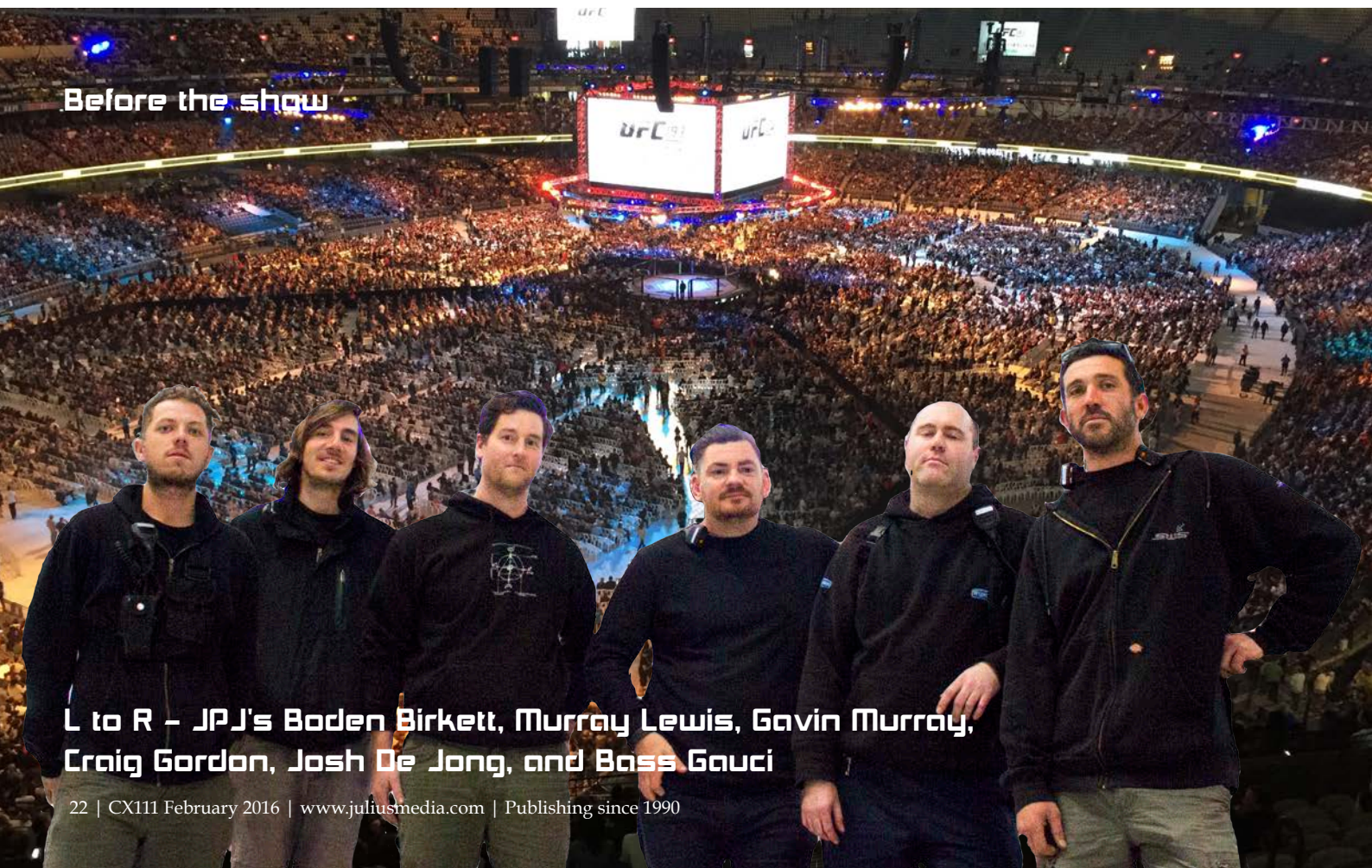
Etihad, ready for action

Get Ready To Rumble

"We spent a lot of time workshopping with the UFC guys," Bass concurred "There were a lot of emails back and forth, and lots of ArrayCalc drawings trying to achieve the best result all round. I worked with Daniel and Tom throughout the pre-production period, and then on-site dealing with any issues. Any time we had to change anything, I was the negotiation point." As with any live gig, last-minute changes

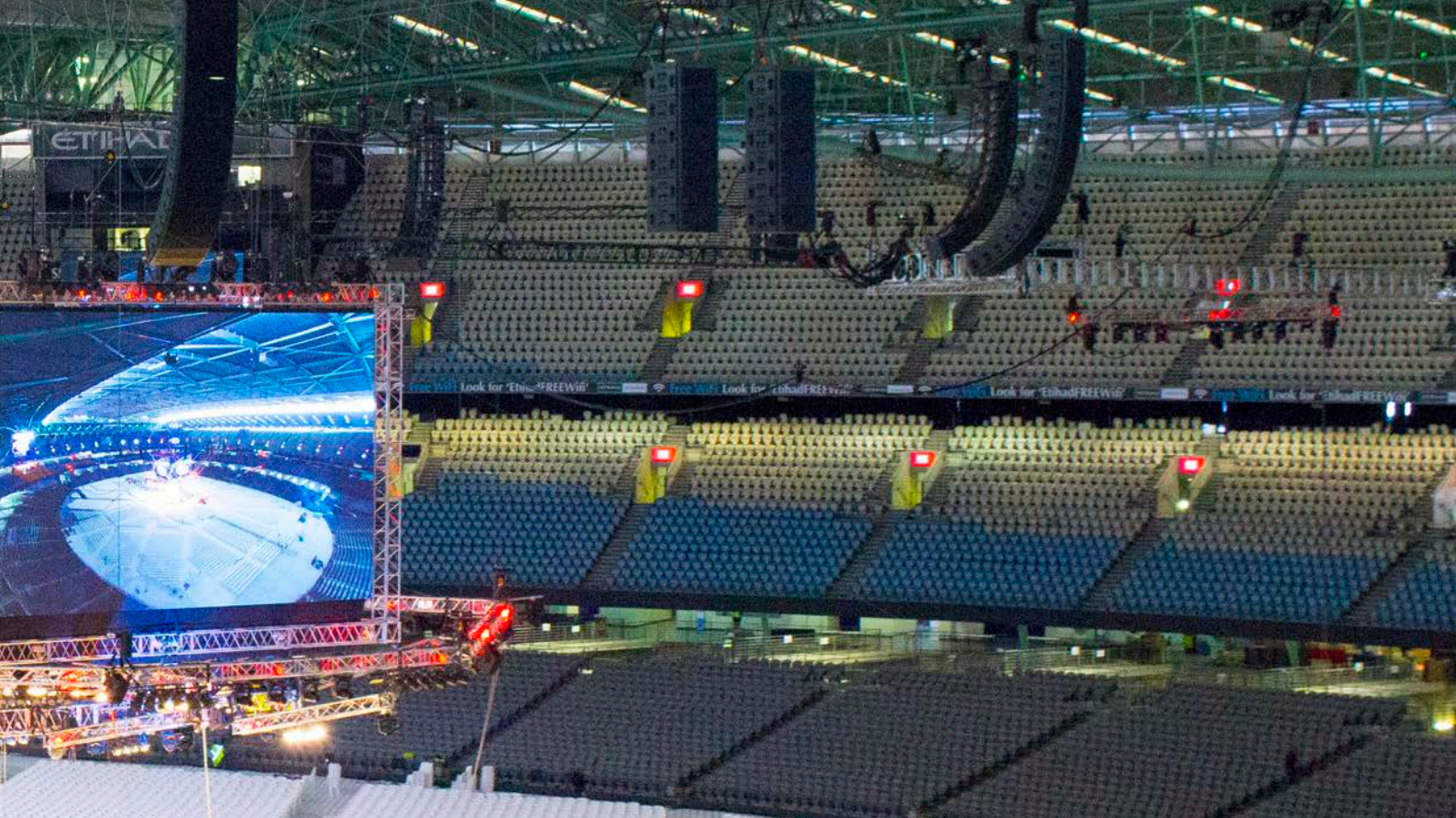
required some last-minute solutions. "We had our amp racks in the air, and they got moved out from where we'd planned" Bass related. "UFC wanted us to do our cabling with cable picks, but we would have lost 30% of our cable length, so we used cable trusses out to feed the PA in the round. That took a bit of negotiation, but it was back to our original plan."

Keeping the show running, a huge Riedel RockNet network was deployed to carry audio not only within the bowl, but to



Before the show

L to R - JPJ's Boden Birkett, Murray Lewis, Gavin Murray, Craig Gordon, Josh De Jong, and Bass Gauci



and from it. "RockNet is a diverse and flexible system which allowed us to creatively adapt and transport audio in every format needed," Tom Hejnicky explained. "We used sixteen RockNet 300 devices in total, for all in-house audio transport including system inputs, tie lines to the truck, and system

drive for two independent PA systems; one for the Main Event and the second for the Weigh-In event. Three additional devices were added on site to assist the OB Truck with audio tie-lines and communication drops throughout the venue. Fortunately, JPJ sent a few spare components to the site which



Showline

Coming to an ENTECH Roadshow venue near you: Our latest Showline control solutions for LED, Show Control, and a little extra. Part of the comprehensive Showline range from Philips Entertainment.

To find out more visit www.philips.com/showline

PHILIPS
Entertainment





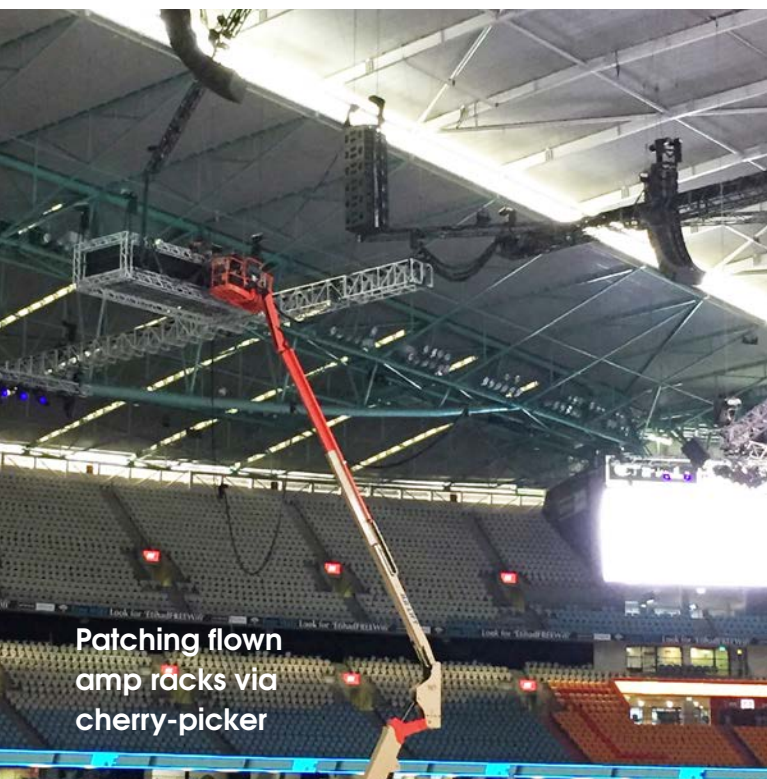
Bump-in

were quickly absorbed and utilised, allowing us to rapidly solve any patch requirement quickly and conveniently." "And it was solid as always!" added Daniel Bonneau. "It's a great product that I recommend to everyone!"

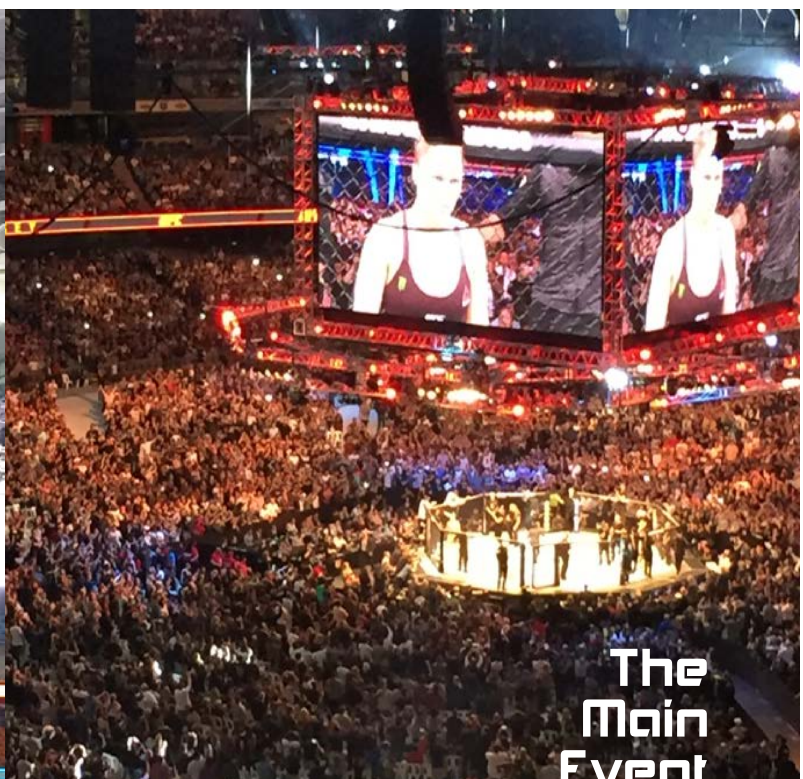
It's a Knockout!

With audio hung from 72 rigging points, last-minute rigging changes and amps flown in custom made cages, what was the most challenging aspect of the gig for JPJ? "Doing something in the round like this is very different," contemplated Bass Gauci. "It was pretty challenging. We had more boxes in this arena for Coldplay, but that was a traditional PA setup. The hardest thing is timing. Everything is dictated by everything else. Everything needs to be ready at the same time. The advantage that moving the PA out 15 metres gave us was that getting down and out was far easier because we were away from everyone else. It went from what would have been a 10 or 12 hour bump-out to six."

As a touring engineer, Daniel Bonneau has worked with production companies around the world. How did JPJ's service stack up? "We sent JPJ offline versions of all software for the console, RockNet System, and Dolby Processing, in addition to the software predictions for both Main and Weigh-In PA systems," he said. "All components were delivered and installed to specification and all pre-sets loaded in their respective devices, allowing us to have a fully functioning turn-key solution, as one would expect in a touring system, even though we were a one-off. We were fully operational in a very timely fashion. JPJ delivered great precision with the installation of the loudspeaker arrays. I personally circled the stadium at every level and was able to verify the predicted coverage and system response throughout the venue. No additional adjustments were required beyond alignment and tuning; it was absolutely right the first time. JPJ should be everyone's first choice when it comes to professional concert sound!"



Patching flown amp racks via cherry-picker



The Main Event

BE **D1** TO COME TO TOWN



BE **D1** TO BURN IT DOWN

Take your band to the next stage. With evolution wireless D1 – the easiest and most reliable digital system. Featuring adaptive high-power transmission, superior live sound and exceptional ease of use. Be D1 to have it.

**BE D1
AND ONLY**



www.sennheiser-D1.com

THE MILL REPORT

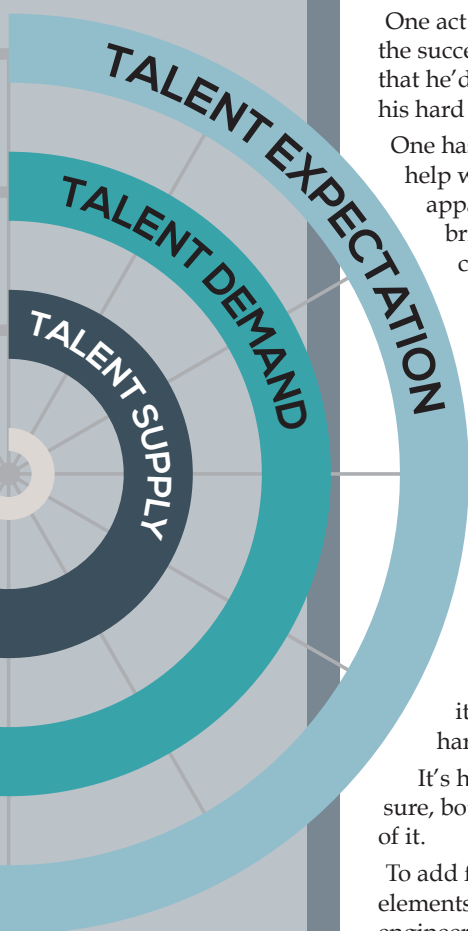
THE TALENT/EXPECTATION

CURVE

I've just spent the last five days turning a poorly performed, badly arranged, well recorded, average song into a fully mixed pop sensation... well at least that's how the client feels.

It's always nice to be appreciated for your skills and insight of course, and it's good to see such bold ambition motivating people to succeed - there should be more of it.

The girls involved in this recent production have extremely high expectations for their song. As far as they're concerned they're going to be the next big thing, and nothing's going to stand in their way. For them, the whole road to success is about willpower and branding... and some decent mixing.



But somehow this recent experience has left me with a slightly disturbed view of music production.

Why? Because only a few months ago I wrapped up an album that today feels like the best thing I've ever worked on. It's a fantastic CD full of amazing songs, catchy-as-hell riffs and lyrics that put a smile, rather than a frown, on your face.

But chances are this album - 'Chords' by Tim Guy - is likely to be discovered by only a handful of people. I could be wrong of course, but statistically at least, an album that's launched on a shoestring that has no real management behind it and very little interest from record companies (so far) is destined to remain 'indie' at best.

By rights 'Chords' should be a smash hit. If the songs or recordings were the work of a famous Australian singer it would go straight to number one. Of that I have no doubt.

TALENT & EXPECTATION

These two recent production experiences are polar opposites in many respects. They sit at the extreme edges of the musical Talent/Expectation curve and are diametrically opposed in almost every respect.

One act has extremely high, almost ludicrous, expectations for the success of their release, the other is so humble about his talent that he'd be grateful if only a handful of people appreciated all his hard work and enjoyed the listening experience.

One has been poorly executed by beginners, with seemingly no help whatsoever from the more experienced engineers who apparently recorded it and said nothing. The other has been brilliantly realised by a bunch of talented people who have collectively produced a masterpiece.

And yet which one of these acts now thinks fame and fortune beckons? Somewhat incredibly it's the beginners, though perhaps this shouldn't surprise anyone.

THE CRAPSHOOT

So what gives here? Why do relatively talentless performers so often possess such an extraordinary sense of themselves while the truly gifted more often than not seem to remain circumspect and fatalistic about their success? Is it simply that great talents naively assume their skills alone will push them into the limelight, while the ones who lack natural ability know deep down - though they'd probably never admit it - that they need to push their branding and hype very hard if they're going to succeed?

It's hard to say with any great certainty, but one thing's for sure, both are capable of succeeding - there is no formula for any of it.

To add further randomness to this uncertainty, most of the elements that come together to generate a hit song are beyond any engineer or producer's control in the first place. Fundamentally, those of us involved in audio production can really only work on the musical side of the equation: the songs, the arrangements, the recordings and final mixes. We certainly can't make a 45-year old male into an 18-year old female, choose a client's fashion sense for

BY ANDY STEWART

Andy Stewart owns and operates The Mill in the hills of south Gippsland.
He's happy to respond to any pleas for recording or mixing help...
contact him at: andy@themillstudio.com.au

them, or pay for their next video. Yet all these factors influence the success of the songs we work so hard to make sound great.

From my own perspective though, I'd much rather produce well written songs penned by a singer/songwriter who can perform the hell out of them, than suffer the torment of dragging a poorly conceived and executed song into line with every skill I possess, no matter how good the 'willpower and branding' of that client might be. In the end I just like making good records I suppose.

And that's the point here really... on some level or other a career in music production is a choice about the process itself - about whether you enjoy the experiences of making music day-to-day. It's less about the success or otherwise of the music once it's out the door.

If you spend too much time and energy predicting which albums might succeed financially or fall through the commercial cracks you'll make your own life frustratingly miserable - not what a music producer should be feeling about his or her own work.

Successes come and go to some degree or other, and 'hits' are only one measure of success in the end anyway. Placing value judgement terms like 'successful' on singles or albums you help create based solely on how many people bought them is perhaps not a healthy perspective for a producer or engineer. Being popular is by no means the only measure of 'success'.

Perhaps two simple questions worth contemplating are these:

- 1: As a producer or engineer, how do *you* measure your own success?
- 2: Are you really only 'successful' if some of your clients have smash hits?

If the answer to this second question is a hesitant 'yes', by inference then are you a failure if all the albums you've helped create throughout your career have sold only in the hundred or thousands, rather globally in the millions? Surely not.

Everyone likes to have success of course, and no-one likes to slave away at anything, whether it's record production or coal mining, without some sense of acknowledgement and achievement, but in the end there are other measures of success that apply here.

For instance, what do your clients think of your work, and what do some of the fans of the music you've produced have to say? Have you had people come up to you at a gig and thank you for making their favourite band sound so good? If you have, doesn't that count for something?

There are countless other measures of success we don't have time to go into here, not least of which are the ones based around the great sounds you produce on albums 'large' or 'small'. Then there's the financial rewards and whether you've perhaps succeeded in feeding yourself and your family over the years, and maybe even gone on holiday here and there. Surely these are also measures of your success?

MEASURING UP

Every producer and engineer on the planet should honestly confront the question of how he or she measures their own success. Why? Because the answer directly affects your job satisfaction.

In the end you need to know who you want to work with and why. It doesn't matter what motivates you per se - money, fame, great songs, magnificent sounding productions... whatever. As long as you're honest with *yourself* about who you want to work with, and understand what truly motivates you - no matter how ugly or shallow this motivation might seem - you'll find clients somewhere along that Talent/Expectation curve to satisfy your career as well as theirs.

VUEPIX®



X series



Curved Flexible Displays

- Highly Flexible, Ultra Thin and Super Light
- Pixel Pitch from 3.9mm - 6.2mm
- Full black LEDs - High Brightness & Contrast
- Advanced Magnetic Connection System
- Patented One-Action Locking Mechanism
- Optional Smart Flash Memory Function

Leaders in LED Screen Technology



VUEPIX.TV | info@vuepix.tv
ulagroup.com
f/Total.Visual.Solutions
1300 ULA GROUP
1300 852 476

TOOLBOX REVIEW

QSC TOUCHMIX-16

It may come as a surprise to some readers of CX that I play live gigs pretty regularly in two different bands: one as a singer/guitarist, the other as a drummer. I've been playing live for over 30 years, on and off, and in that time everything (and somehow nothing) has changed.

The same problems exist today that troubled me 30 years ago. There are always issues of feedback in venues, foldback is always difficult to predict until you hit the stage, and then you really need a good engineer to help you through the rough patch.

But one thing has changed radically – consoles. Digital variants are now far more capable than anything that four people once lugged into venues back in the '80s and '90s. For their size and weight, small digital consoles are a dead-set revolution.

I've been a reluctant convert it must be said, but the new QSC TouchMix-16 has changed all that forever.

I've played four gigs and rehearsed half a dozen times now with the TouchMix-16, and frankly, I'm hooked. I must apologise in advance therefore if this review comes across sounding like it's been written by a TouchMix fanboy... but I really dig several aspects of this console, even if it could have been a whisker larger.

Onboard this pocket-sized marvel are more features than I could possibly cram into this review space, but here's a snapshot.

There are 16 mic pres on XLR – the last four on speakons – 20 inputs in total. There are eight aux sends (7/8 and 9/10 are stereo), and the first six of these feature XLR output – brilliant. There's a phones cue and monitors cue on ¼-inch outputs, below which sit a small group of illuminated switches that control things like talkback, phantom power, aux sends and mute groups. There's a global 'FX Mute' switch, monitor and phones cue level switches, and even quick access to a user manual and setup wizard, neither of which I've ever needed to consult. Last but not least there's a multitrack mixer for recording your gigs via USB!



On the bottom right corner of this laptop-sized console are four smaller user-definable buttons wrapping around a large, peripherally illuminated rotary control knob that performs countless tasks relating to anything that's 'highlighted' on screen.

That's right, the whole box and dice revolves around a six-inch touch-screen that shows you everything, though not all at once. There's a main channel fader/mixer window – note that there are no physical faders anywhere on the console – that's visible by default, or easily reinstated by hitting the large 'Home' button immediately to the right of screen. There are clear and dedicated windows for phantom power arming, the eight auxiliary sends, mute groups and FX, and the multi-track record/playback system.

There's a menu button that gives you access to everything from scene saving (up to 100), remote control settings for manipulating the console via devices like iPads, MIDI connectivity, and much much more.

There are four really tasty sounding stereo FX engines per channel, giving you access to far more powerful mixing options than any analogue console equivalent could ever hope to provide, and somewhat incredibly, there's even pitch correction per channel, which actually works better than half the advanced plug-ins I've worked with over the years. There are also dedicated de-essers per channel that work brilliantly. And all of these features offer a 'simple' mode to help minimise your confusion if you're vague about how any of this stuff actually works.

The beauty of all of this is that none of these advanced features get in the way of a simple setup requiring almost none of them.

So if you're looking for a new compact, phenomenally comprehensive digital console that even the most staunchly analogue simpleton can learn to use in no time flat – which even has its own carry case – look no further than the QSC TouchMix-16. If you can afford the pricetag it's a total winner.

Price: \$2999

Technical Audio Group: (02) 9519 0900 or www.tag.com.au

BY ANDY STEWART



Deakin Edge Theatre , Federation Square Melbourne

How do you achieve great sound in acoustically difficult environments?

Choose Adamson &  **CMI**
music & audio



ADAMSON

More info: www.adamsonsystems.com or www.cmi.com.au

SPYGLASS RISES

SPYGLASS/NORWEST MERGER COMPLETES VISION?

IN 1992 SCOTT DAVIS STARTED HIS OWN AV BUSINESS IN THE FRONT LOUNGE OF A FRIENDS' PLACE IN SPYGLASS LANE, WELLINGTON. "AFTER 5 YEARS IN ELECTRONICS AND 7 YEARS OF WORKING FOR AN EVENT COMPANY I FIGURED THERE WERE A LOT OF THINGS I COULD DO BETTER", HE SAYS.



"EVERYONE ELSE WAS CALLED AV THIS, AND INNOVATIVE THAT, MULTI IMAGE THIS. BUT I BELIEVE CLIENTS SHOULD SENSE WHAT MAKES US DIFFERENT. THE ANSWER AS IT TURNED OUT WAS RIGHT UNDER MY NOSE. 'SPYGLASS' CONJURED THOUGHTS OF A FOCUSED VISION WITH A LOT OF PURIST LENS TYPE INTONATIONS.

Scott leads Spyglass which supplies creative techniques and audio-visual technologies not only in Auckland and Wellington but increasingly in Australia after they merged with Oceania and the NW Group. They have 20+ staff and a fleet of Christie projectors along with everything else you need. They've always been a one-stop shop, co-ordinating external sound, lighting and rigging for their clients' shows - where Spyglass supplied the video and the ideas. Now it really is a full service in-house!

Backing up a few years, Scott cut his teeth in the era of 35mm Kodak Carousel slide projectors all sequenced by Dataton TRAX and pumping out a whopping 3 frames per second! You'd have stacks of projectors 3 or 4 high, with as many wide as you need, usually between 5 and 7 stacks. That added up to thousands of slides for a show!

So what about when the client needed to change their presentation?

"We took a slide film developer to shows too, an E6 processor with bottles of chemicals. We knew the recipe to generate, shoot and process slides in our room overnight! The bottles sat in a temperature controlled water bath.

"For last minute editing of text, I got really good with a silver pen removing or changing a word under a 'Loop' (magnifier eye glass).

"Alignment was critical. You had to have a solid vibration isolated tower behind the screen to position projectors and focus. I'd cuss a bit when someone leaned against the projector tower! We had to have a really good eye to recognize when images were perfect rectangles when aligning systems.

EDITORIAL - JULIUS GRAFTON



No electronic alignment tools - just manual X-Y lenses. There was a knob on the top and one side of the lens barrel to move the image horizontally or vertically. It taught you good habits in getting great images without the pixel subtraction methods of today's electronic tools".

MORE THAN IMAGES

Listening to Scott you quickly glean two things. First he is super clever both in technical and in creative. The ideas flow effortlessly. Then you start to see his passion for the craft and his business. It's led him to devote all his efforts and



THE LOOK

DRAPE HIRE
www.the-look-sydney.com

New Address: 17 Greenfield St Banksmeadow NSW 2019
Email mail@the-look-sydney.com • Ph 02 9797 6068 • Fax 02 9798 9243

spare time to the development of new ideas and a thirst for learning. This is how Spyglass continues to differentiate its offering.

“If you don’t learn and develop, you stagnate and become stale. You may as well throw your brand position out the window! I believe there should always be one person in any organization that is dedicated to R&D to keep the offer fresh. You build loyalty with this freshness and a consistently high level of delivery”. But Scott is also quick to add there is a premium on offer for this position in the market, but there must also be balance in the ‘value’ equation for their clients.

“The opportunity to leap into my own business happened during a fundamental change in the industry as it came to terms with transitioning from film and CRT (Cathode Ray Tube) projectors to content servers and LCD/DLP projection. Soon it was about blending images to extend to higher resolutions, brighter imagery and immersive surround fields of view.”

To illustrate Scott’s thinking... “Obviously I didn’t have big budget funding so I developed my own mechanical blending device in front of the projectors and combined this with particular graphics cards that could generate overlap areas. It was just a series of shutters that I clamped on the front of each projector. Imagine using a piece of cardboard to feather the image. You move it in and out from the lens, it isn’t very mathematical but it looked far better than any electronic system because of the poor projector contrast ratios!”

“I like to be creative, but given my formal electronics training, I have a mix of both technical and creative and feel I can use both sides of the brain. It’s a good tool - I know how the technical will work, and can visualize the idea through to execution.”

“But I’m just one person. And technology is only going to get you part of the way. You need a great team around you and I have been very lucky to work with a fantastically talented bunch of people inside Spyglass. I soon realized once the business built and there was continuity and momentum, it was so critical to have the right people and culture. They count as absolute on the coalface and our clients trust in Spyglass as a team to deliver everyday.

WORK

Spyglass’ day to day ‘bread and butter’ work consists of conferences, awards dinners, product launches and the like. But where they excel is at the pointy end of the industry, jobs that require a high level of technical accomplishment such as for Tourism NZ who toured a giant rugby ball with a ‘360° Dome Projection’ system around the world.

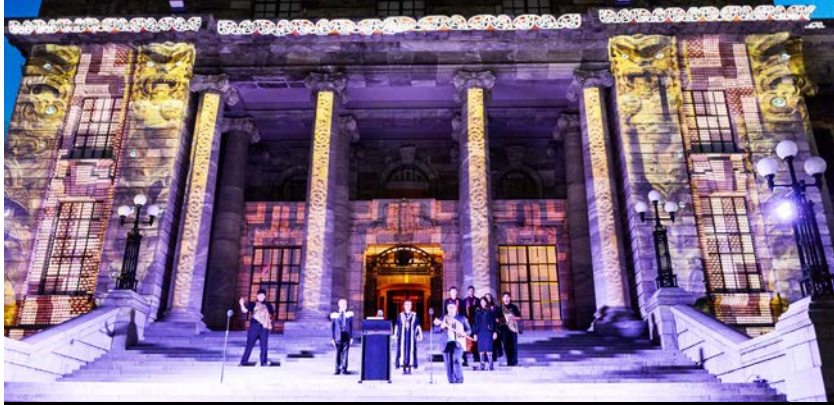
They did a huge show on a 12th century castle in Scotland for a billionaire and his 100 guests, and a Christmas show in Spain in front of 300,000 – both are shining examples of massive architectural projection.

Add on formidable local events like the Rugby World Cup on field projections (in partnership with Electric Canvas) and the annual World of Wearable Art (WOW) show in Wellington.

“We continue to take those big job learnings and build these into our processes so the IP flows down the line and positively impacts our smaller day to day jobs. Our customers can then access high end technology, great planning processes and talented people on their regular day to day gigs with us.”

CLIENTS AGREE

“They have supplied us with technical support since the Louis Vuitton 150th Anniversary event that toured New York, Hong Kong and Tokyo”, reports Mike Mizrahi from Inside Out Productions.



“Scott organised the complex queuing and synchronising system where video, lighting and sound had to merge seamlessly with on stage mechanical wizardry.”

Andrew Davis (no relation) is the General Manager UV & Marketing, Executive at Toyota New Zealand. He also highlights Scott’s technical skills as a key to their relationship.

“For us, Scott has been the creative brain in terms of AV for a number of years and has been excellent at finding those elements of magic that become memorable for our guests. This can often be with effects or the way that he looks to work with technology to deliver fresh and vibrant experiences. Scott is forward thinking and always keen to push the boundaries or come up with new ideas or concepts, he also has the ability to work under pressure which seems to be a common theme for us as our event portfolio seems to keep on growing!”

Mike concurs.

“We wanted a full immersive experience inside a giant rugby ball that we had created for Tourism New Zealand. The film was to be projected 360 degrees inside the ball for viewing by the 220 persons’ audience. The image had to be projected around the space, not casting shadows from projector to projector, it had various focal distances due to the shape of the rugby ball’s interior and the image needed to be split across multiple projectors and rejoined in 3D space.

Not for the faint hearted. But this is where Scott excels as he loves to solve problems."

UPWARDS

Spyglass merged with Oceania, part of the NW Group last year. They've upgraded their studio for a 4k workflow and higher resolutions, added more Motion Graphics capability and piled on massive storage in the server room.

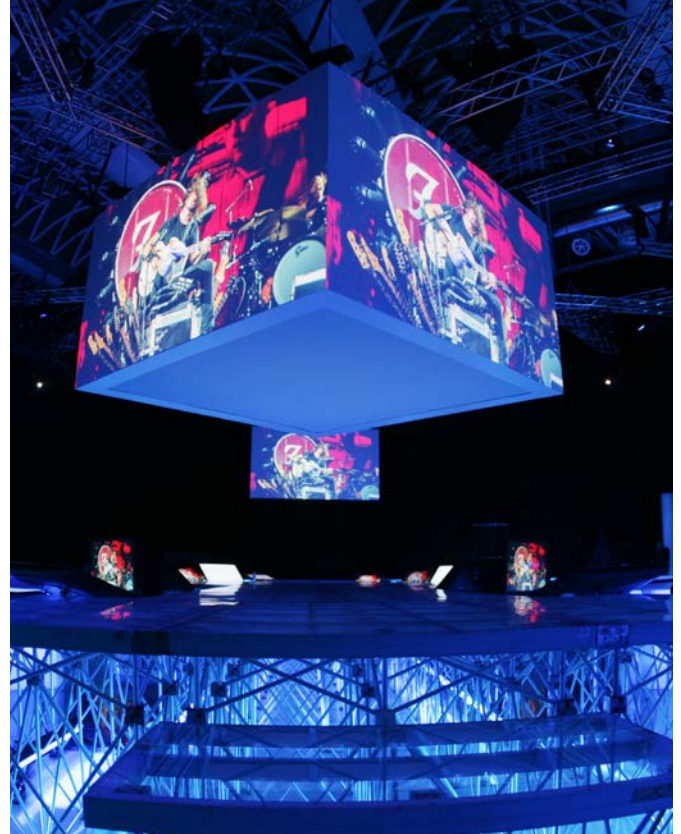
"The brilliant thing about our merger is it has smoothed the workflow lumps through the winter for Norwest Oceania. Traditionally Oceania has a lull in winter, then ramps up for summer. It all synchronizes better now.

"I think day to day the best thing from a clients' perspective is they can get it all under one roof. I can walk down the hallway and have a conversation with audio about finding a way to make the budget work. We don't have to wait for a contractor quote and then haggle about what fits. Answers are instant and you can move on and hatch the plan. Clients are often pushed trying to achieve so much anyway, so the easier we can make it the better," Scott says.

Andrew Davis from Toyota agrees.

"More recently, Spyglass have become part of the wider NW Group which has given them the ability to broaden their equipment and resource offering. This gives a fresh perspective on what Spyglass and NW capabilities are in terms of AV and event support so our challenge is to try and retain all of the benefits we have had with Spyglass whilst leveraging off the broader offering of the NW Group."

Scott offers a glimpse of the NW strategy.



"We plan to build more work over the ditch. Our motion graphics studio is being utilized there more and more. Our 'know how' and experience around everything from conference and awards dinners to architectural projection is something we plan to grow in Australia. Brainstorming an idea is free... come and have a chat"

MANTRA LITE

Mantra features...

INTENSITY Adjust the brightness of any fixture with dedicated faders	PAN & TILT Control the position of your moving lights easily
COLOUR PICKER Intuitive colour mixing & selection	SHAPES Add circles, ballyhoos & other effects to your moving lights
COLOUR WHEEL Quickly select a colour from the pre-defined colour set	BEAM FX Simple touchscreen control for all other fixture functions
ANIMATE Bring your colour & movement to life.	

- > Control Dimmers, LEDs and moving lights
- > Simple 'App' driven LCD user interface
- > Control up to 24 fixtures
- > Animate - the simplest way ever to create a dynamic light show
- > Store/replay up to 100 memories, each containing up to 250 cues
- > On board help menu
- > Full undo and redo
- > Inbuilt template editor - use any fixture from any manufacturer
- > UPS power supply with auto save
- > Perfect for smaller venues
- > Made in Australia

mantralite.lscighting.com
email info@lscighting.com.au

SEE IT AT THE 2016 ENTECH ROADSHOW...

DanteVia

Connect Everything

Dante Via is software from Audinate that turns any channel of audio running in an application on your computer or connected via an interface into a Dante channel. It's a simple premise, but once you start thinking about the possibilities, you realise it's potentially the most useful and disruptive piece of audio technology to come along in decades.

As of September 2015, there were already more than 500 products on the market equipped with Dante interfaces. In November 2015, Audinate announced the availability of Dante Via for Mac or PC, and that number is now almost incalculable. Dante Via has turned every computer, every piece of software that has audio, and every computer audio peripheral ever made into a Dante device. And it does it for just \$49.95 USD. It has broad-ranging applications in every part of the audio production and installation industries, but, as is the way with a completely new type of product, they're not always immediately obvious, so let's go through some examples.

Death to the 3.5mm Jack

Audio for corporate AV and conferencing is a huge business, run to high standards in professional venues on good equipment. So it's a shame that almost every corporate presentation relies on an internal soundcard of questionable quality and everyone's most hated connector, the 3.5mm jack. With Dante Via installed on the room's computer, or even on-hand to be installed on presenter's computers (charge them later), the audio tech can just connect the Cat5 to their network port and then patch the audio to anything in the signal chain - mixer, DSP, or even straight to Dante-enabled loudspeakers.



On a basic level, this means the music in a presenter's PowerPoint or audio in the video file they run comes straight to the operator from the application. But this also means audio from videoconferencing applications and Skype can be handled the same way. Conferences with dozens of computers can be easily controlled and mixed. You can even use it for two-way communication - send a 'ding' to a presenter's internal soundcard and speakers when their time's almost up. You could even set up an application to record their entire presentation, mixed to stereo, on their own computer.

Monitor Everything

For installations that occupy multiple buildings or huge areas like a stadium, Dante Via is a system tech's best friend. From a computer in any location on the network, like your nice, comfy tech office, you can listen to any channel, on any device, at any time. You can check an entire PA from mic input to amp channel by simply patching it in Dante Controller from the source to your computer's soundcard, and listen on those nice nearfield monitors you have set up.

More than just verifying that something is working and getting the right signal, you can actually check people's work. In places like house-of-worship campuses where there's a large amount of volunteer or less experienced audio operators, a seasoned system tech can listen in on each individual monitor or FOH mix and assess if something needs fixing. If you've also connected to the mixing console via control software, you could make the necessary adjustments. And you still haven't left the tech office.

Time to get schooled

Consider a medium sized high school. Each classroom is already fitted with some kind of computer that delivers content from a server. There's also an interactive projector or whiteboard. A pair of powered speakers is connected and mounted on the wall. If the computer and speakers are always on during school hours, you now have a networked PA system that can take an input from a USB microphone connected to any computer on the network, for example, in the front office. You've just fitted the school with a new PA for the price of some Dante Via licenses and a USB microphone, and you didn't have to run a single cable.

WHATEVER YOU NEED IT TO BE

Beam | Wash | Spot

XR 470 BWS
Philips MSD Platinum 20R lamp

XR 350 BWS
Philips Platinum 17R lamp

XR 470 BWS
Osram SIRIUS HRI 330W lamp

- ✓ **New lamp**
- ✓ **High-output**
- ✓ **Powerful features**



The new XR BWS Series from PR Lighting combines all the features of Beam, Wash and Spot luminaires in the one compact, cost effective fixture.

See the XR-BWS on the Jands stand at the ENTECH 2016 Roadshow.

Distributed by

JANDS

www.jands.com.au

PR

PR LIGHTING LTD.

Since 1984

Schools with electronic music labs are a more obvious application; install Via on every computer along with Ableton and ProTools, and the teacher can listen in on everyone's work in real-time, send signal to any other classroom or the recording studio, or chain several computers and interfaces together so students can collaborate. It's pretty standard to have a four channel USB interface as the external soundcard on an average school music computer, with two mic pres, two line ins and a stereo out. If the room has 12 computers, you now have a 48 in, 24 out soundcard.

Everywhere from Here

One of the most disruptive things about Dante Via is what it makes possible with equipment people already have; networks, computers and audio interfaces. Techs will soon be using Dante Via to solve problems or create functionality that we haven't even thought of yet. Ultimately, this means some types of dedicated audio hardware will sell less units, or cease to be sold at all. New ones will likely arise to capitalise on Via's connectivity.

If it's now this easy to get any kind of audio to and from a computer, the next logical step is for software developers to start creating virtual equivalents to replace devices from the real-world of audio installation, starting with DSP. You already have the power in the computer, so why not use it? This could then spread to video conferencing, control integration, and the rest of corporate AV infrastructure. Entire hardware companies could disappear, or become leaders in the software field if they adapt quickly enough.

Get Hands On with Dante Via

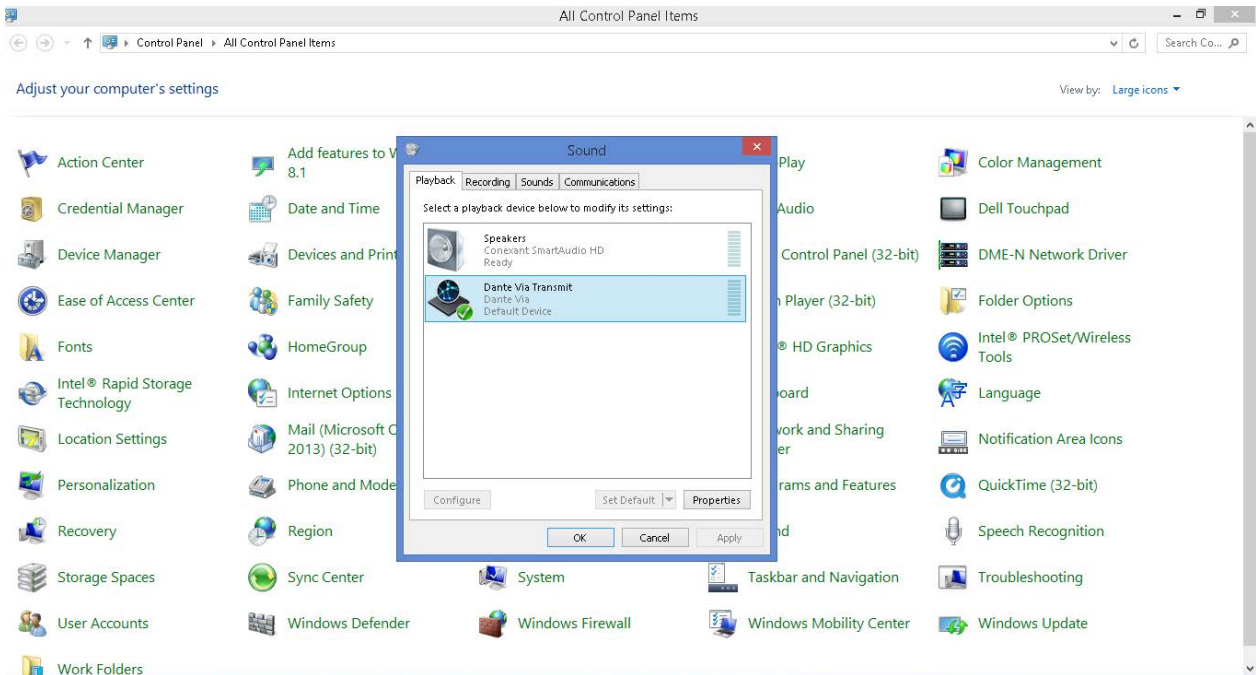
CX's Jason Allen is presenting a free, hands-on, one hour seminar on Dante Via as part of ENTECH Roadshow this February. The seminar runs at 2PM in all cities;

- Melbourne - Monday 8th Feb
- Sydney - Wednesday 10th Feb
- Brisbane - Monday 15th Feb
- Adelaide - Thursday 18 Feb
- Perth - Monday 22 Feb

Registrations are open at <http://cxevents.com.au/>

DanteVia

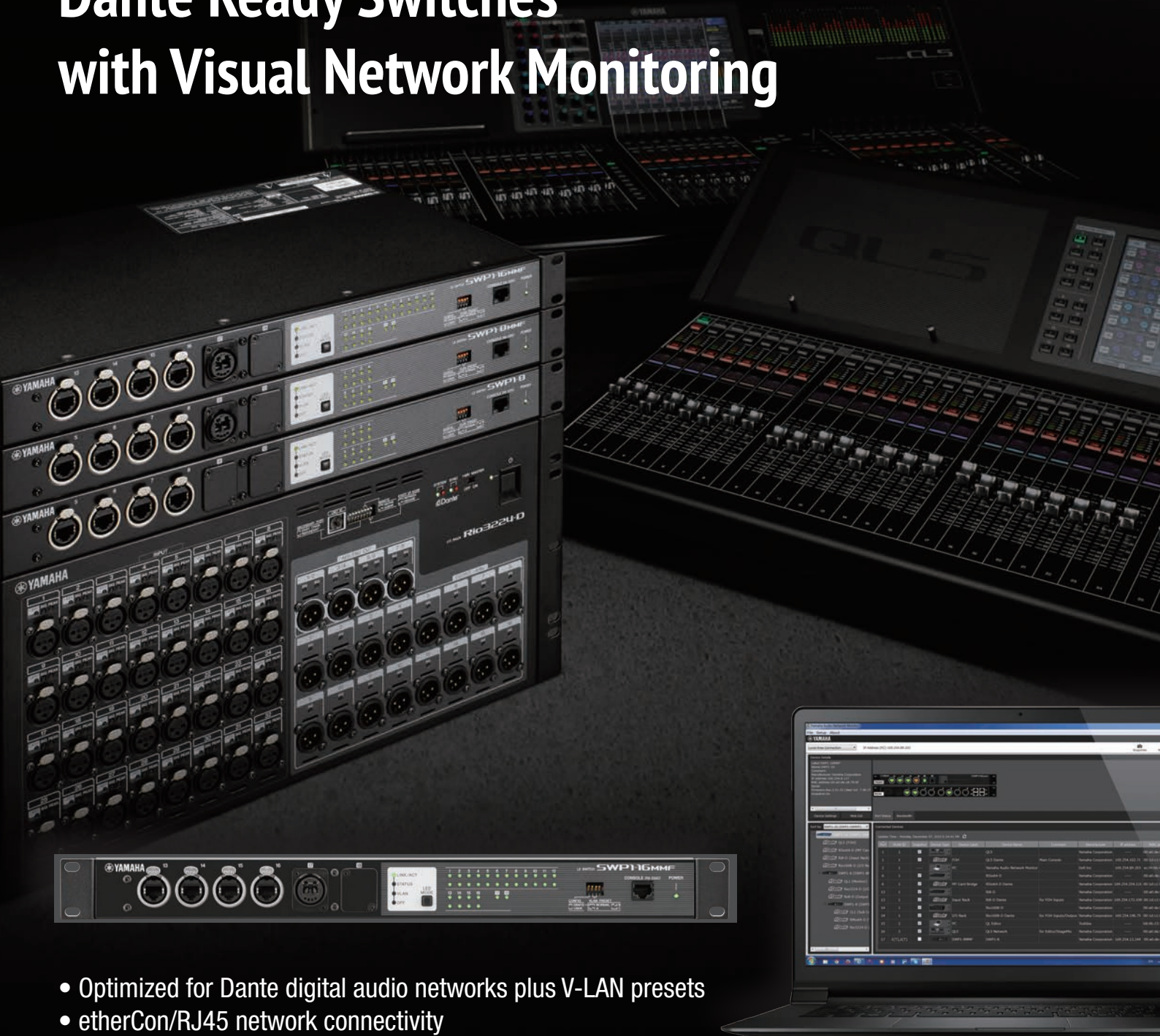
Getting Started



Step 1: If you're running Via on a PC, after installation, go to Control Panel and make Dante Via your default Audio Device.

SWP1 SERIES

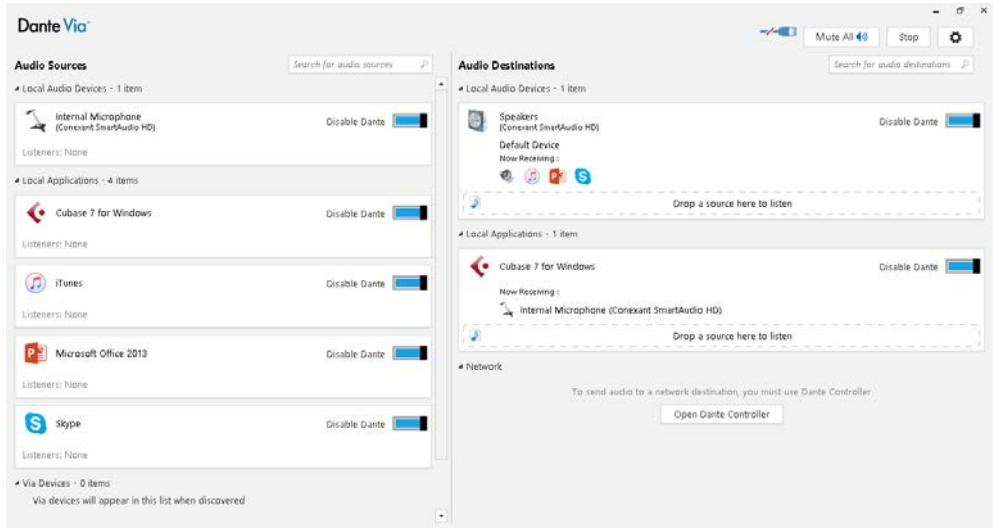
Dante Ready Switches with Visual Network Monitoring



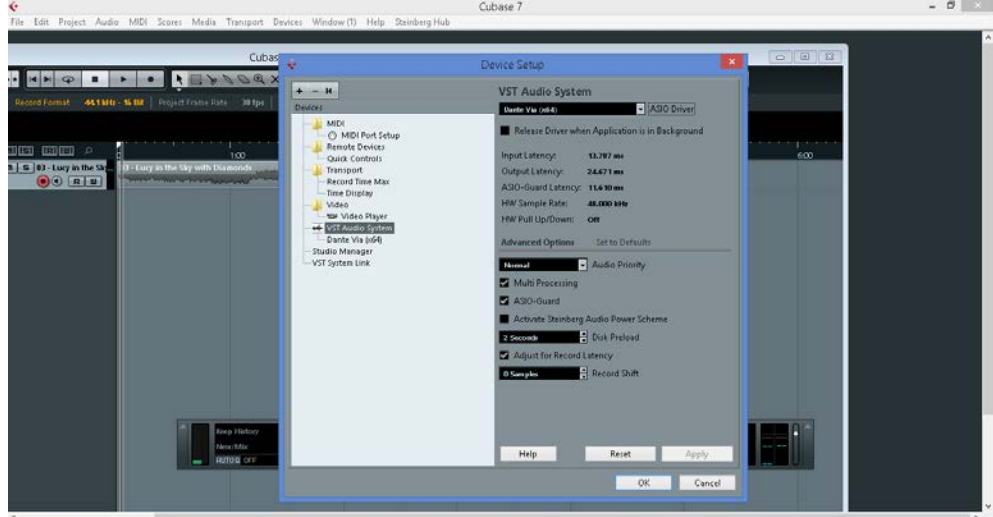
- Optimized for Dante digital audio networks plus V-LAN presets
- etherCon/RJ45 network connectivity
- opticalCon multi-mode fibre connectivity (SWP1-8MMF and SWP1-16MMF)
- Redundant external DC power supply input
- Network visibility with the Yamaha Audio Network Monitor application

For more information, go to yamahaproaudio.com or contact Mick Hughes, Commercial Audio Sales & Marketing Manager at mick.hughes@music.yamaha.com

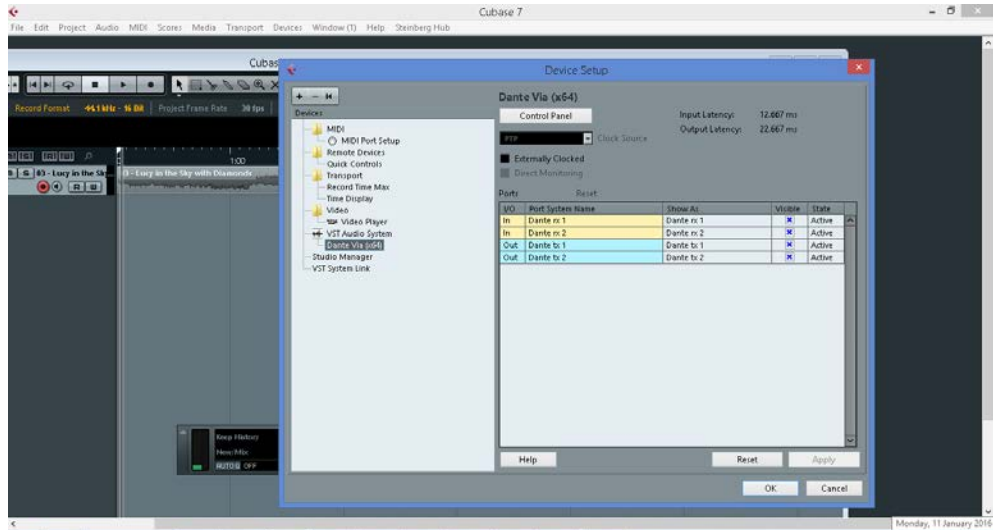
DanteVia - Getting Started



Step 2: Open Dante Via, run through the Activation (registration) process, and hit the ‘Start’ button in the top right (it will then turn into a ‘Stop’ button, as in this picture). Open an application and play audio. It will then appear on the left. To route and listen on your own device, simply drag and drop. To patch to or from another Dante device on the network, open Dante Controller through the button on the right and patch it. It’s that simple.



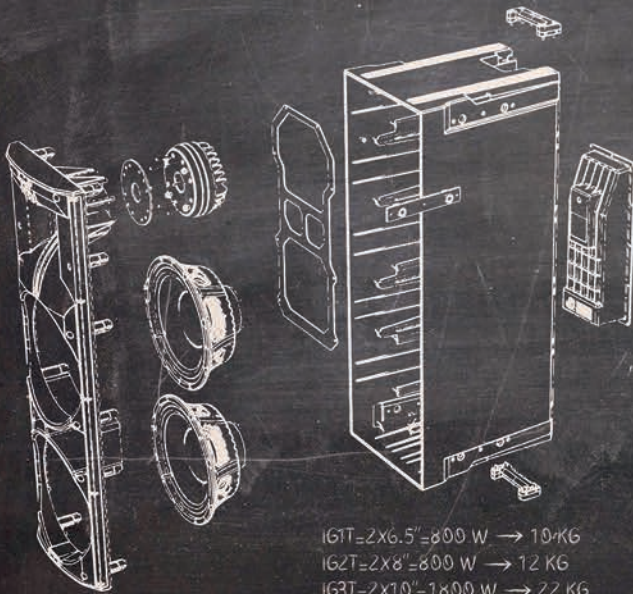
DAW Set-up 1: To use a DAW like Cubase to playback or record, open the application, go into its device settings and select ‘Dante Via’ as its audio driver.



DAW Set-up 2: You can then see and label your DAW’s Dante ins and outs in its connection manager.

dBTechnologies

There is a genius in all of us



≡ = ig²

EPD

ELEMENT POSITION DETECTION

OLED DSP INTERFACE

CEC

DIGITAL STEERING

ASYMMETRICAL HORN

INFRA-RED CORE HANDLE

EXTRA LIGHT

IG1T=2X6.5"=800 W → 10 KG
IG2T=2X8"=800 W → 12 KG
IG3T=2X10"=1800 W → 22 KG
IG4T=4X6.5"=1800 W → 19 KG


INGENIA



INGENIA is not a simple active speaker, not a column system, not a conventional line source system.


INGENIA is simply INGENIA: a new way of thinking sound reinforcement systems for all kind of applications.

All the four models of INGENIA series are designed to work individually, but they can also be coupled by simply turning one speaker upside down and placing it upon the other one.

Compact, modular, flyable, user-friendly and incredibly smart.


INGENIA

www.dbtechnologies.com

dBTechnologies 

info@dbtechnologies.com

NAS
NationalAudio.com.au

T: (03) 8756 2600 | www.nationalaudio.com.au

LISTEN HERE

A^{to}D
CONVERTER

I could count on one hand the number of musicians I know who record, mix or perform in the studio but don't play live. Virtually everyone who inhabits a studio takes to the stage at some point, and the vast majority of these people are technically savvy.

So why then, when they play live, do so many musicians, producers and engineers switch back to horse-and-buggy analogue technology, and worse, think they can do everything themselves from the stage?



I know my *Listen Here* articles have typically related more directly to studio techniques and experiences in the past, but given that it's summer and most musicians I know are out gigging anyway, this issue I thought I'd talk a bit about live gigs and the equipment still being lugged into pubs by musicians of all persuasions.

Specifically, I want to address two issues: mixing without an engineer and the lingering resistance to digital consoles at the 'performing musician' end of the market.

BY ANDY STEWART

ANDY STEWART OWNS AND OPERATES THE MILL IN THE HILLS OF SOUTH GIPPSLAND. HE'S HAPPY TO RESPOND TO ANY PLEAS FOR RECORDING OR MIXING HELP... CONTACT HIM AT: ANDY@THEMILLSTUDIO.COM.AU

As a gigging musician myself I'm well aware of what's involved in playing live in small to medium-sized venues. One of the bands I play in has up to 16 members on stage sometimes - try dividing that payment up at the end of the night!

But despite the technological advances in live equipment over the last two decades several issues still persist that make performing live on a budget difficult for solo acts and bands. And then there are the drunk people...

But one problem stands head and shoulders over all the others - and that's arguably more prevalent now than ever before: the set-and-forget mix.

WHERE'S THE ENGINEER?

With no front-of-house engineer involved in so many of these types of pub gigs, it comes as no surprise that most of them sound ordinary at best. Countless bands try their best to make an educated guess about what might work out front as they setup for their performance, but frankly, once a gig starts they have no real idea what things sound like.

It's no sleight on them. It's hard enough playing the gig, let alone trying to be the front-of-house engineer as well... from onstage no less, where the PA rolls off *above* 300Hz!

In many cases the mix at these sorts of gigs can be so bad that some people are physically forced from the room, while others stick it out only to be frustrated by the mangled sound presented to them: instruments too loud, others impossibly low, vocals muffled and dry (or too wet), inaudible dialogue between songs, no real compression, wild esses, feedback from a poorly tuned PA (if it's tuned at all), brutal spikes from musicians plugging and unplugging their instruments... the list goes on.

What can be done about all this?

The obvious solution is to get an engineer to mix the gig for you so you can devote all your finite energy and brain-space to the most important task at hand - playing a good gig. What you're trying to do when you mix from stage is the live equivalent of mixing an album in the studio with the speakers facing away from you, only worse. Live you have to play the music as well!

I'm as guilty as the next person of performing under these ridiculous conditions most of the time. Sometimes I convince myself I can pull it off - playing and mixing at the same time. But in truth it's a crapshoot. No-one (myself included) can have any real idea what's going on out front from a punter's perspective if they're also playing the gig, even if you're running a foldback send directly from front-of-house. If you're using *dedicated* foldback sends you've got no hope.

I would urge anyone who's serious about playing live in a small venue, who is concerned about sounding good, to wherever possible get an engineer in to help with the mix at the very least. If you can consistently work with someone who's experienced, pulls good FOH and foldback mixes, and is polite to you and your fellow band members they'll be worth their weight in gold. Sure you'll have to pay them, but presumably if you sound much better as a result, you can charge more. Failing that, take a pay-cut and stop putting innocent bystanders through the torture of your crap mixes.

LOOM UP

One thing that a lot of bands don't possess, that also places a physical barrier against any idea of employing a mix engineer, is a multicore. Again, I would urge anyone who's playing live gigs with their own PA to get a multicore that connects efficiently with their console. You can buy one off the shelf, or if you're handy with a soldering iron, build one that's specific to your requirements.

Without this fundamental piece of equipment, putting the console very far from the stage is basically impossible. Add a multicore to your inventory as soon as you can and your setup will be infinitely more versatile.

GOING DIGITAL... FINALLY!

Now... about that hoary topic of digital consoles.

Though it might seem like a distant memory to most readers of this magazine, there are still thousands of gigging musicians out there for whom the digital console revolution never took place.

For these musicians, any idea of parting with their beloved analogue console strikes fear into their hearts. To them, the whole idea of 'switching to digital' constitutes far too much risk, and given how much is involved in setting up and playing without an engineer, I can see why they might think this way. Their techniques might be simple, their setups messy, but at least they're known to work. Digital consoles are seen as mysterious objects - 'far too complicated' for small gigs.

But that's crap. Ignorance of the facts is all that is.

There are so many digital consoles out there these days that utterly wipe the floor with their analogue predecessors, you'd be mad not to adopt the technology available in 2016 if you're performing live. It's time to ditch the basic analogue 12-channel mixer folks, and take the plunge. Once you do you'll realise how foolish you were not to make the switch years ago.

Digital consoles, especially the new-generation models sweeping through the market today, are dead-simple to use. In some cases more so than analogue consoles, while at the same time providing more facilities than a truckload of analogue gear and patch cables could ever hope to offer. In short, they offer *solutions*, and that's what you need live.

Excuses don't help.

It's no good thinking that simplicity somehow protects you from things going wrong. On the contrary: without facilities that can help you solve problems like feedback you leave yourself wide open to utter disaster when problems arise. And they always do.

A good example of this type of next-gen utterly simple-to-use yet comprehensive digital console is one I've been using live all summer - the small-footprinted, super light QSC TouchMix-16.

This digital console is aimed squarely at gigging musicians so it's amazingly intuitive as well as comprehensive.

I won't go into its specs here (I've done some of that in the review on page 28) but suffice it to say I spent only 20 minutes with it in rehearsal one night before deciding to use it live with a 12-piece band. The reason? The console offers a fantastically intuitive interface, meaning that anything you instinctively expect it to do, it does. It provides all the effects, EQ, compression and limiting, de-essing, routing, saving and recording options I require (and then some) inside a console that's as light as a feather and not much bigger than a laptop.

Suddenly my old analogue console looks positively Jurassic. I could never use it again now that I've experienced what the TouchMix-16 can do.

GETTING FROM 'A' TO 'D'

The point here is that digital consoles aren't something to fear, they're certain to make you sound twice as good almost overnight.

If you're still in analogue-land but occasionally contemplate the digital 'revolution', do yourself and your audience a huge favour and make the switch. There's nothing to fear, there are tons of options out there, and choosing what's right for your particular circumstances is no harder than choosing a new car.

Don't over-think it. Just pick the one you like and start driving it. You'll quickly discover that it steers the same, brakes the same and gets you from A to D without incident. The only real difference is that it does everything better, and makes the whole experience far more enjoyable for you and your passengers.

Make the switch. I promise you, you won't regret it.

Sydney | Brisbane

P 1300 USE HME (873 463) F 02 9708 6615
E sales@hme-services.com.au www.hme-services.com.au

HME

Services

DISTRIBUTORS OF QUALITY BRANDS

RAT stands

PROLYTE GROUP

DOUGHTY

kinesys

REUTLINGER
Abhängigkeits-System

SERAPID

STAGEMAKER

A

Engineered solutions for a creative world

Visit us at ENTECH Roadshow in your capital city



I'm pretty glad we installed a ramp in the loading dock here at CX HQ, because it made getting the Vi7000 into our building a lot easier than it otherwise would be. Further helping the process along was the modular nature of the Vi7000 – ours arrived in three distinct pieces.

We reviewed the Vi3000 some months ago now and pretty well loved it to pieces. The interface, the sound, the look and the general usability of the console impressed us no end. The Vi7000 has all of the same goodness, but in a somewhat different package.

Broadly speaking the Vi7000 supports mixing up to 128 inputs into a total of 32 output busses, each of which can be mono or stereo. Eight internal Lexicon effects are available, every output bus has a BSS graphic, and you can swap the normal dynamics processing to a BSS DPR901ii dynamic EQ on up to 16 channels. Naturally the IO options are comprehensive and include Dante, Rocknet, Ethersound, Cobranet, MADI, and of course good old analogue. With extra DSP cards and a reduced channel count, 96kHz operation is optional.

The Vi7000 is comprised of several elements: a stagebox plays host to the bulk of the channel and bus IO connections. The stagebox connects to the Local Rack, which contains all the DSP and processing hardware. The stagebox and Local Rack ship in well-constructed identical rack cases with lids and wheels, ready to tour. The Local Rack is a card-frame type situation, with local IO connectivity via an active external breakout box. Where fiber connectivity is used to the stage box, an additional rack panel provides dual expanded beam fiber connectivity so you're not relying on small fragile connectors.

Soundcraft Vi7000

Vying for attention?

BY JIMMY DEN-OUDEM



In its standard form, the Local Rack includes two MADI interface cards, either both fiber, or one fiber and one cat5. Additional cards such as GPIO, FX, Bridge, Clocks and HD cards are included by default. Five DSP cards ship in the standard Rack, however additional DSP and MADI cards (as well as a Dante card) may be added to suit specific applications.

As you'd rightfully expect on a flagship console there's redundancy everywhere. Should the worst happen and you lose all power, the console will boot up exactly where you left it. Another nice feature is the inclusion of dual power supplies in the stagebox, Local Rack, and surface.

The surface itself links to the Local Rack via a one etherCON, and a couple of XLRs for stereo solo bus and talkback audio signals. The Vi7000 surface has 44 motorised faders spread across five bays. Of these, 32 faders (four bays)

Litecraft
by **ACME**

NEW LED THEATRE RANGE!



Ellipsoidal 300

- Excellent smooth 300W light output
- Beam shaping shutters & gobo slot
- Lens Options from 5° to 70°
- 2 colour temp. options 2700K or 6000K



Theatre Spot 150

- Motorized linear zoom 14° – 55°
- Rotating barn door and hanger
- Low noise under 25db@1m
- 2 colour temp. options 2700K or 6000K



MultiPAR 12FC

- Latest Cree RGBW technology
- No multicoloured shadows
- 16bit
- Flicker Free 1000Hz
- Beam Angle 20°



Cyclorama 200

- 4 dimming curves
- High-precision floodlight effect
- WiForm softlight

Come & check out our new
range at **ENTECH**
ROADSHOW



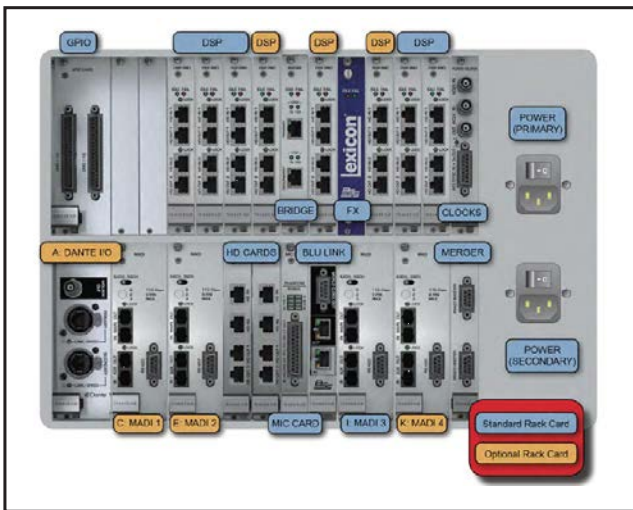
ulagroup.com

f /Total.Visual.Solutions

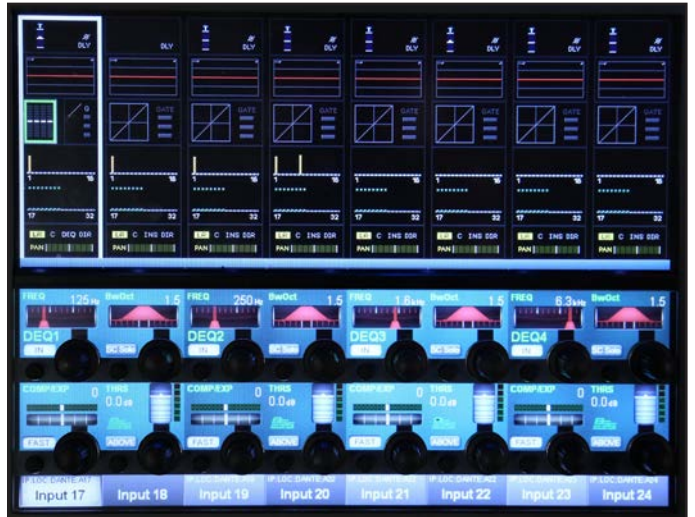
1300 ULA GROUP
1300 852 476



are generally devoted to input level control while the remaining bay handles duties like bus levels, and VCA management. The screen above this “master” bay also handles metering, console setup, scene management and other non-channel related functions. The channel fader layers are all customizable and VCAs may be included on the channel banks if required.



The Vistonics interface is still as good as ever, intuitive and snappy to navigate. The Vi7000 adds a further level of customization with user definable encoder functions for channel strips. Vistonics Mic Monitoring allows the status of Dante connected radio mics to be shown directly on the console screen – that’s way cool! Signal routing capacity has been expanded with additional internal tielines now available, so now you can patch anything to anywhere more times. Patching is more complex only in the sense that more sources and destinations are available.



Latency from stagebox mic input to local line out is claimed as below 2mS at 48kHz, and while I didn’t measure this it certainly sounds believable. The modular nature of the console and Local Rack mean that while it’s less “plug and play” than a Vi3000, the Vi7000 is certainly more flexible and allows for many more configuration options. Need more remote IO? Add a MADI card and another stagebox. You can choose from optical or cat5 connection. External operation of the console is also possible via either iPad or the Virtual Vi software, which can also be used to prep console files.

It’s hard to categorise the Vi7000. In some ways it’s like a Vi3000 which takes itself more seriously. Less of a drop-in analogue replacement, and more of a purposeful choice made at the outset of a production. As much as the 3k is loads of fun, I feel almost like the Vi7000 expects more from me as an operator. It’s very serious hardware, and I reckon subconsciously it encourages you to treat it accordingly. Maybe that’s just because I know how much it’s worth? Whatever. It’s a great console.



BRAND: SOUNDCRAFT
 MODEL: VI7000
 RRP: PACKAGE INCLUDING VI7000 SURFACE WITH CASE, 48KHZ (5xDSP CARD) LOCAL RACK, AND 64X32 STAGEBOX WITH CAT5 MADI IO - \$148,920 INC GST.
 PRODUCT INFO: WWW.SOUNDCRAFT.COM
 DISTRIBUTOR: WWW.JANDS.COM.AU



Premier Event Solutions

AUDIO • VISION • LIGHTING



WELCOME TO A NEW ALTERNATIVE

CMG Audio Visual

Six months old and already creating waves through an uncompromising commitment to excellence, CMG Audio Visual is pleased to announce the expansion of our extensive hire inventory to include Barco RLM-W8 Projectors, Clay Paky Mythos, Midas PRO3 Consoles and Australia's first and only Meyer Sound Leopard Linear Line Array and 900-LFC System.

CMG Audio Visual has quickly become the premier event provider in regional NSW, delivering a truly unique and reliable total AV solution through exceptional audio, vision and lighting services that can be tailored to any budget, style preference or event size. Speak to the specialist team at CMG Audio Visual and discover a new alternative today.

CALL
SEARCH
EMAIL

1300 814 568
www.cmgav.com.au
events@cmgav.com.au



Robe BMFL Blade

now with framing shutters...

BY JIMMY DEN-ODEN



You could make up all kinds of things that the acronym BMFL stands for, but the correct answer in this instance is of course Bright Multifunctional Framing Luminaire. Which is an astute way to describe what it is and what it does.

Let's break it down into elements, but just for fun we'll go backwards. The luminaire bit is pretty obvious and self evident. Like many other moving head fixtures, this one has a light source, optic train, and the head is capable of 540 / 270 degree pan / tilt movement. Luminaire test passed!

The framing feature is where it starts to get interesting. BMFL Blade has a four framing shutter assembly, within which each shutter can be moved in and out of the beam,

as well as tilted. Further to this, the whole framing shutter assembly can be rotated 90 degrees. The tilt facility means you can make all kinds of shapes with the shutters - not just ones with right angle corners. Triangles and trapezoids are no problem. While control over the shutters is 8 bit only, the relatively short nature of the shutter movement means you can still achieve nice precise control. Slow movements are smooth and fluid, while sending big jumps in shutter values sees a snappy, virtually instant response in the beam. They're really fast. Framing? Check!

So just how multifunctional is the BMFL Blade? Well, rather a lot. The fixture has an optical train which could loosely be called "complicated". It begins with a CMY colour mixing system, which is then augmented with another two fixed colour wheels. The first of these features strong, saturated colours while the second wheel adds more gentle colours such as pink and lavender, in addition to a couple of colour



BRAND: ROBE
 MODEL: BMFL BLADE
 STREET PRICE: \$21,650 INC GST
 (NO CASE)
 PRODUCT INFO: WWW.ROBE.CZ
 DISTRIBUTOR: WWW.ULAGROUP.COM



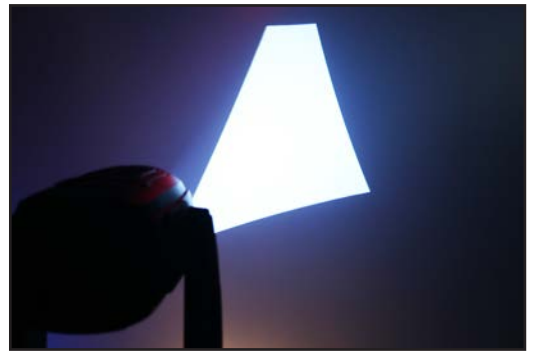
correction filters. The second colour wheel uses "slot & lock" dichroic filters, allowing for end-user replacement. Both the 6 position (plus open) rotating and 8 position (plus open) static gobo wheels also use "slot & lock" dichroic glass gobos. The rotating gobo wheel allows for continuous rotation and indexing. Further beam features include an animation wheel, as well as 6 facet circular and linear rotatable prisms.

But wait, because there's more. The motorised zoom allows for beam angles between 5 and 55 degrees, while a 2 blade shutter allows for strobing up to 10Hz. Very smooth dimming is achieved through another 2 blade system which is separate from the shutter. Naturally focus is motorised, as is the variable three-stage frost. The BMFL Blade is definitely multifunctional, and then some.

But is it bright? The short answer is yes. Very. At 1700W, the Osram Lok-it! HTI is one of the highest output discharge lamps we've ever seen in a moving head fixture, especially one this size. The lamp life is stated at 750hrs regardless if you run it at full tilt, or one of the reduced output (1500W / silent mode) levels. With a CRI of 90, the fixture is quoted as producing 40,000lm at 1700W. We didn't have anything which can measure this output level in the office, but we are satisfied that it's very bright indeed.

The BMFL Blade does everything its name says it should. With the head vertical it stands over 800mm high, and weighs in at almost 38kg. It should look more physically imposing than it does, but thanks to a bit of nice industrial design it looks more like some of its smaller peers (think of the Pointe). The head itself is quite narrow which also lends to the sleek appearance, just in case you cared how it looks when it's turned off. Of course, once you switch it on the fixture becomes somewhat more exciting...

The BMFL Blade is capable of brutishly high output even with multiple beam features engaged. The weird thing is that amidst all this show of force, there is an elegant subtlety. Colours fade from one



to another almost imperceptibly, movement is smooth, focus is sharp when you want it to be yet caters equally well to softer, more abstract beam looks. Even the pan and tilt functions seem to "glide" to a smooth halt, rather than just stopping - perhaps thanks to the Electronic Motion Stabilizer system. Somehow the BMFL Blade is almost a contradiction of itself, and I think maybe this is what makes it so damn beautiful.



Audio Test Set in your hand!

dBbox2... essential equipment for audio engineers and installation technicians

Stereo analogue / AES inputs & outputs, pink noise generator, tone sweep, SPDIF & headphones, A to D & D to A conversion and much more.

Contact us for more information!



VUE Audiotechnik h15N + SystemVUE

All kinds of classy

BY JIMMY DEN-OUDE

Looking at the external finish of the VUE h15 gives you a pretty good idea of the build quality within, and lifting the speaker up should pretty rapidly confirm your theory. Or if you wanted to do things the easy way, you could always just plug it in and have a listen.

h-Class is the flagship range of point source speaker systems by VUE Audiotechnik, and the h15s are about the biggest full-range boxes in the series (the subwoofers are bigger). The h15 is available in two variations – the h15N (narrow) and the h15W (wide). Physically and electronically the two are very similar, the key point of difference being the nominal coverage angles – the wide is 100x50 degrees while the narrow model is 60x40 degrees (HxV). We reviewed the narrow model.

You won't find a top-hat for pole mounting the h15, and with the box weighing just over 40kg this is perhaps a deliberate move to prevent users injuring themselves or using under-rated stands. You will find plenty of M10 fly points allowing for neat permanent installation, as well as a nice pair of well positioned carry handles. The handles and the front grille are nominally black, but there's an ever-so-slight sheen of candy apple red beneath the black. I'm not sure how many coats of paint they apply at the factory, but I suspect it's more than one.

Low end response in the h15 is controlled by a 15" paper cone woofer with 4" voice coil, and 830W RMS of amplification (measured with long term sine wave before protection). At 4" the HF voice coil is certainly no toy, and it's connected at one end to 275W RMS of amplification, and to a Truextent Beryllium diaphragm at the other (okay, so technically the amp connection is at the side of the voice coil, but let's not ruin the poetry of it all okay?). The Beryllium diaphragm was one of the big points of difference VUE brought to the market at its inception, and the idea is that because it provides a better stiffness to mass ratio, HF response of the driver is both more efficient and less susceptible to breakup. More on the practicalities of this later.

VUE h-Class must have one of the most comprehensive electronics modules of any self-powered speaker I've ever seen. There is no mic level input or potentiometers to adjust levels, and indeed the market into which speakers like this are destined to be sold is for the most part a bit beyond plugging a mic into a speaker. What you do get is analogue and AES inputs on XLR (both with loop outputs), plus an etherCON connection for control and Dante input. powerCON input with loop out, and a dazzling array of status LEDs complete the back panel. The only rear panel control per se is a recessed "DSP reset" button, which takes the speaker back to its default settings. How you make it deviate from those defaults is through SystemVUE.

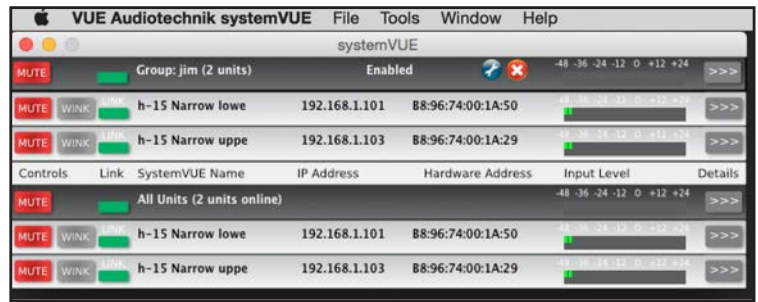
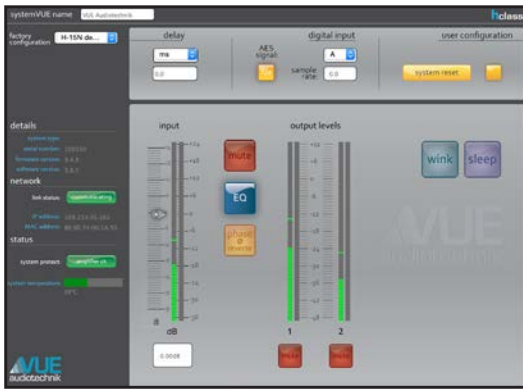
SystemVUE is a Mac or PC based software package which allows control over all Vue h-Class products (and standalone amplifiers)



via Ethernet connection. Network topology is very simple – plug everything into some kind of network switch then run the software. No IP config is required, SystemVUE just finds the connected speakers by itself then presents them in a list.

This in itself is nothing new, but the latest version of SystemVUE does offer several new features over the early generation. Speaker presets allow various HPF settings to be applied to the speaker, input level, polarity and source is selectable, and up to 2000mS of delay may be applied to each speaker. Now with 10 bands of parametric EQ also available, you almost don't need a system EQ anymore. Speakers may be grouped together, and various parameters linked for simultaneous operation across multiple speakers too, which is a nice feature. Finally (or perhaps initially), SystemVUE lets you ID each speaker by flashing its LED, as well as rename boxes and put them to sleep.

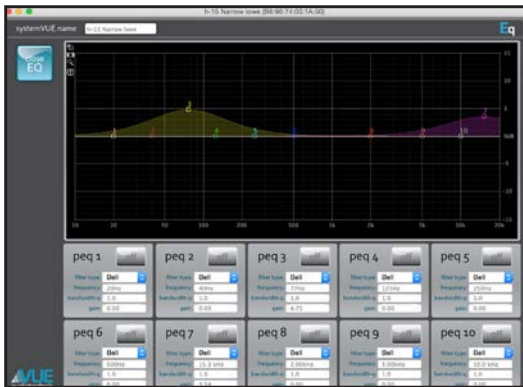
Functionally everything you need from a speaker is right there, and sonically the h15 certainly hits the mark too. We applied pink noise and dialed up the level until both the LF and HF limiter LEDs illuminated. At this point we measured 119.1dBA @ 1m, which makes it the loudest single speaker box we've ever measured. The VUE spec for long term SPL is 120dB, and I'm inclined to put the 0.9dB



difference down to our room and say it meets the spec. That might not sound very special, until you measure a lot of other speakers and realize how rare it is that the box performs according to the data. Props to VUE for truth in the spec!

As to how it sounds when we played some more interesting content, we like the h15. Top end detail is excellent, and HF extension seems higher than we're typically used to hearing from a 2 way box. Vocal presence is the big selling point, and I'd say this is a big part of the character of the h15. Much as it would be easy to be distracted by one section of bandwidth while ignoring another, this is not the case. Low end response is substantial and resolute without being overbearing. There's enough voice coil and amplifier in this box to make it a very substantial full-range speaker.

Truth be told this is not the first time we've looked at an h-Class speaker, nor is it the first time we've been impressed by one. We can see why it's a flagship product. The h15N is representative of the build and sonic quality we've come to expect of VUE, and the addition of Dante input and the new SystemVUE features only adds to the appeal.



BRAND: VUE AUDIOTECHNIK
 MODEL: H15N
 RRP: \$12,175 EX GST
 PRODUCT INFO: WWW.VUEAUDIO.COM
 DISTRIBUTOR: WWW.AMBERTECH.COM.AU

Want a Fast & Easy Solution for Sound Proofing?

MOBILE AIR WALL



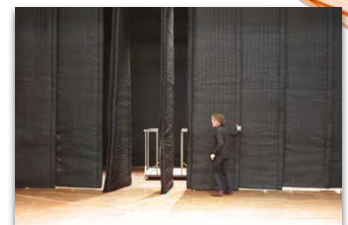
EXPOS



CONCERTS



FESTIVALS



THEATRES



MEGAVISION
 SOUND / LIGHTING

Any Kind of Acoustics, Anywhere You Want!

08 9444 6556
 www.megavision.com.au
 talk2us@megavision.com.au

Conferences

Green Rooms

Trade Shows

Temporary Meeting Spaces

Sennheiser AVX

Simplified wireless sound

BY JIMMY DEN-ouden



A common complaint I hear from camera operators is that the audio capture aspect of shooting is too complicated, especially with the recent proliferation of DSLR cameras being used for video. Maybe Sennheiser has heard the same thing, since AVX looks set to simplify the process.

AVX is a very neat little radio mic system from Sennheiser, operating in the license free 1.9GHz (or DECT) band, so you can use it in Australia, New Zealand, and a bunch of other countries with no problems. Several system variations are available, essentially the difference between these is the transmitter. Choices include a handheld with 835 capsule, bodypack with ME2 lapel, or bodypack with MKE2 lapel. We reviewed an ME2 kit, and were also supplied a handheld transmitter.

I don't normally talk about the unboxing process for review gear, since often I'm not the first person to see

it and the box has long been lost. In this instance I was given brand new stock so I had the chance to enjoy the full "end user" experience of opening the box for the first time. The whole kit is laid out very nicely indeed, and while some items are in small plastic bags the majority of the packaging is recyclable cardboard. No Styrofoam; I like that.

In addition to the bodypack transmitter, lapel mic, and receiver, our test kit included some additional accessories to make life a bit easier. First up a USB charger and associated cable. AVX includes Li-Ion batteries on both transmitter and receiver, and these simply charge via USB. Fully charging either of the transmitters takes about 4.5 hours, while the receiver is faster at 1 hr 15 mins. Additional accessories for DSLR users include a bracket and cold-shoe mount for the receiver, as well as an XLR to mini-jack cable allowing direct connection into the camera.

Full size camera operators will appreciate the compact size and light weight of the AVX receiver. It's built onto a rotatable right-angle XLR plug, so mounting it on a video camera is as simple as plugging it into the mic input then rotating it out of the way. The receiver is a really beautiful piece of design, and indeed I



BRAND: SENNHEISER

MODEL: AVX

RRP: AVX-835 OR AVX-ME2 SET -
\$1,499.00 INC GST EACH.

PRODUCT INFO: WWW.SENNHEISER.COM.AU

DISTRIBUTOR: WWW.SENNHEISER.COM.AU

think it's something of a marvel just how compact it is. The whole kit fits very nicely into the supplied "pencil case".

Both bodypack and handheld transmitters are also well constructed, and reminiscent of the design of the D1 units we reviewed a few months ago. The transmitters auto-range their input level, so there's nothing on there to adjust. The only controls on the bodypack transmitter are power and pair buttons, as well as a mute switch. Similarly the receiver is equally straightforward to operate - again power and pair buttons, plus an AF Output button.

The system comes out of the box pre-paired and ready to rock. Turn on both transmitter and receiver, and after about six seconds a link is established and you're ready to go.

The transmitter and receiver have two-way communication, which allows the transmitter to ramp its power output up or down depending on the signal quality at the receiver. This nice for a couple of reasons, the most obvious of these being benefits to battery life. Speaking of battery life, the transmitter has a small LCD window that displays remaining battery time. Run time on the transmitter is 15 hours using the Li-Ion battery, and an optional sled allows you to use 2x AA batteries instead and get 11 hours runtime.

Runtime on the receiver is stated at >4 hours, and if you need more time than this you can power up the receiver with a charger connected. A short press on the power button shows battery status on a 4 LED bargraph. Pressing the AF Out button adjusts the output level in 10dB jumps, and the same bargraph shows you the selection you've made.

The only weak point I can see in the whole system is the micro USB connectors on the batteries are by their very nature a little fragile, still if the worst happens and you break one, a whole replacement battery can be had for a pretty reasonable price. I like the red LED which confirms charging status on the battery. I also like that if you connect



the receiver to a phantom powered mic input, it uses the phantom power as a trigger to turn itself on or off.

Automatic frequency management within the system allows for up to 12 AVX systems to be deployed concurrently. I think the reality is that most users will probably cap out at two systems, but it's nice to know the scope is there for more. Range is around 100m outdoors, and as expected the system sounds very good. Pairing different TX/RX combinations just requires you to hold down the pair button on each unit for 3 seconds - it's very simple.

AVX is designed to provide quality wireless audio with a minimum of fuss, and that's exactly what it does.

New Product Releases from Bosch Communications

BOSCH
Invented for life

EV & Bosch **Compact Sound Systems**

EV **Premium Ceiling Speakers** with Compression Drivers

Bosch **PAVIRO PA** and **Voice Evac System** with Professional Sound

EV **EKX Speakers** for **Portable & Install Applications**

EV **X12 Sub** for **X2 Line Array Systems**

Hear the X2 Line Array at the ENTECH shootout. See and hear all else on the exhibition floor (portable gear) and in the Amber/Bosch Install and Commercial Products Demo Room.

Bosch Communications Systems 13000 26724 (BOSCH) | Email: sales.communications@au.bosch.com

See and hear them at the
ENTECH
ROADSHOW

TMB Solaris LED Flare

Loads of LEDs

BY JIMMY DEN-OUDEM



I know the Solaris Flare has been around for a couple of years now, but as much as I like reviewing new things I see these things appearing on too many shows not to get one in for review.

The Solaris Flare from TMB is one of the (if not the) most powerful LED fixtures yet to pass through the CX review bunker. It uses 96x four colour CREE LED chips to produce a staggering amount of output - 32211LM according to the photometric data in the brochure. At full tilt it draws 1000W, which just a few short years ago would have been unimaginable for a LED fixture. Scared yet?

Natively the Solaris Flare produces a 36 degree beam, which is tight enough to be something you can focus to a specific area, yet wide enough to cover large sections of an audience if used as a blinder. So is it a blinder, a

strobe or a wash light? All the above really, depending on how you deploy it. The most typical application in which I've seen the Solaris Flare deployed is in bulk along a front truss on very large stages (think stadium gigs). In this position, the designer can use it as an audience blinder, or with a little more tact as a wash light.

As much as the strobing functionality of the Solaris Flare works regardless of where you place it in the rig, I think it works better when you see the light output projected onto something rather than looking directly at the front of the fixture. When the entire light output is concentrated into the area in front of the lens, I found my eyes couldn't really process how bright it is. Projected onto a surface, the overwhelming nature of it becomes more apparent.

Control over the fixture requires between 3 and 56 DMX channels, which seems like quite a lot. The LED grid is split into 12 individual sections (2 columns of 6 rows), and individual control over each section is possible. Another nice control option is to have a background "wash" colour with a totally different strobe colour punching in over the top of it.

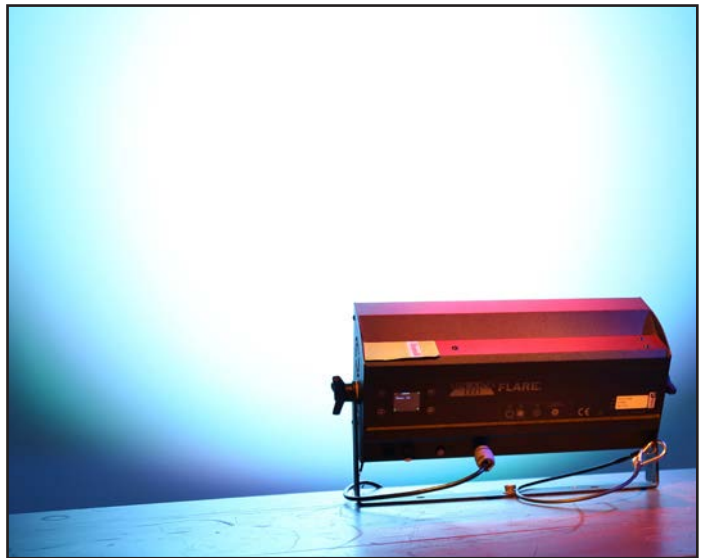
For all the efficiencies of LED it does still generate heat, and quite a bit of it in this fixture particularly. Not surprisingly the Solaris Flare is fan cooled, and also not surprisingly the fans



make quite a lot of noise, responding to the fixture output. It's really a moot point though - you'd never put this light anywhere small or quiet enough for the noise to be a problem.

The build quality of the unit is good, and at 6.5kg it's substantial but still completely manageable for rigging and truss loading purposes. The yoke lock is positive, and our test unit came with a captive safety wire (attached to the fixture, not just the yoke). Connectivity is simple with PowerCon input only, and DMX input and loop through on 5 pin XLR. Control is via four buttons adjacent a compact OLED display on the back of the fixture - it is easy to navigate the menu system and adjust parameters.

For the big outdoor gigs in inclement weather there's an IP rated model available. The LED control stage in the Solaris Flare refreshes at 1200Hz, so you



can dim it on camera without visible flicker. Of course, you'll need to find a camera which can deal with the sheer output of the thing first. ND filter anyone??



BRAND: TMB

MODEL: SOLARIS FLARE

RRP: \$9,990 EX GST

PRODUCT INFO: WWW.TMB.COM

DISTRIBUTOR: WWW.LEXAIR.COM.AU

PRECISION ENGINEERING. HIGH PERFORMANCE. NO COMPROMISE.



PREMIUM JBL TRANSDUCERS

The transducers used in the SRX800 represent the latest technology from JBL Professional. Each component was specifically developed and built by JBL for optimum performance within this system. Both the high frequency and low frequency transducers feature 3" voice coils; the high frequency compression driver makes use of a neodymium magnet while the low frequency woofer uses JBL's patented Differential Drive technology. All of this comes together to ensure that the SRX800 is capable of delivering extremely high SPL across its frequency range with minimal distortion and incredible clarity.

PRECISION CONTROL



PURPOSEFUL DESIGN



2000 WATTS OF POWER



SRX800

High - Powered
SOUND REINFORCEMENT

JBL Professional has made a name for itself by producing great sounding, long lasting portable PA systems. With the introduction of the SRX800 line of powered portable PA loudspeakers, JBL has set the standard for what a fully professional powered PA system should be. SRX800 breaks new ground, bringing together JBL's premium transducers and enclosures, Crown's Proprietary Front-End DriveCore Technology, user-configurable DSP and full HiQnet Network control compatible with a variety of platforms. Integrating industry-leading levels of sound quality, power, control, and durability, SRX800 is a perfect all in one solution wherever high performance, comprehensive control, and pristine sound are required. Each component in the SRX800 Series was purposefully designed and thought through to deliver a perfectly tuned system that is powerful, easy to use, and rugged enough for the most demanding applications.

Distributed by

JANDS

www.jands.com.au

Hear the truth.



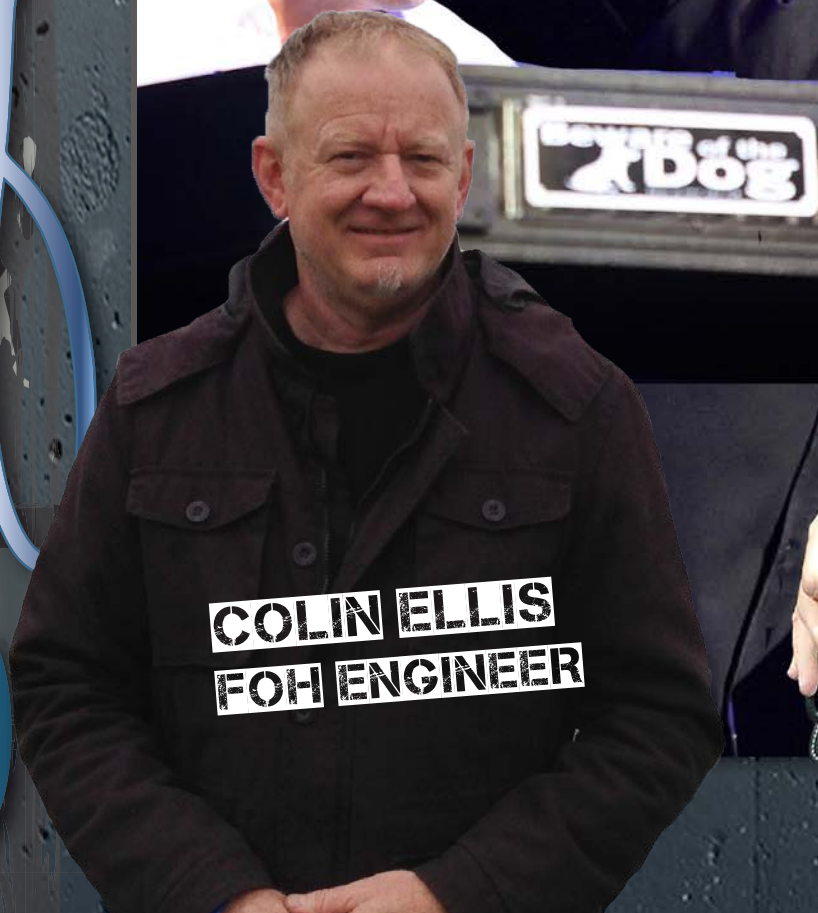
FEBRUARY
2016

ROAD SKILLS



Editorial by Cat Strom

*Jimmy Barnes Photography: Bob King & Troy Constable
Sam Smith Photography: David Youdell
Fleetwood Mac Photography: Troy Constable*



COLIN ELLIS
FOH ENGINEER

A photograph of the rock band Cold Chisel performing live on stage. The band consists of four members: a lead singer on the right, a guitarist in the center, a bassist on the left, and a drummer in the background. They are all wearing dark clothing. The stage is lit with red and blue lights. The background is a dark wall with some equipment visible.

After taking their One Night Stand tour around the country,

COLD CHISEL

played their final gig at the
Sydney Entertainment Centre,
the last Australian band to ever play at this iconic venue.

The significance was not lost on
Jimmy Barnes
who is quoted as saying

"Having finished our Last Stand
tour there in the year
the venue opened,
it's great to now
be playing at their
Last Stand.

We're
gonna tear
the place to
"the ground."

COLD CHISEL



FOH engineer Colin Ellis has mixed the band before, as well as individual band members on solo tours, and this is the second full Chisel tour he has mixed. Experienced in mixing rock shows in large arenas and stadiums, Colin is also very familiar with the band's work.

"Funnily enough I was the drummer in a band called Black Runner and we opened for Cold Chisel at the Stagedoor Tavern in 1979," commented Colin. "Later I became a sound guy and worked for INXS often supporting Cold Chisel."

When mixing Chisel, Colin is careful to ensure that Ian Moss' guitars are well and truly in the mix, saying that the mix for many bands like Chisel often underplay the guitars.

"As well as Jimmy, it's really important to have Ian up there in the mix whereas Don pops in and out with his bits," he said. "Other than that, it's a fairly straight up mix."

An L-Acoustics V-Dosc system, with Kudo side hangs and delays when required, was toured with Colin citing Jimmy Barnes' close relationship with JPJ Audio as one of the reasons as to why it was chosen.

"Jimmy Barnes and Eric Robinson were very close friends and so the band has always been a JPJ Sydney band which means V-Dosc," he added. "I was tempted with this tour to specify a d&b system out of JPJ Melbourne but changed my mind when I remembered that the V-Dosc system comes with Pat Richardson as system tech. Having Pat along is a big thing, he's really good at setting up systems and I have the utmost respect for him."

Out front Colin was mixing on a five-engine Avid Profile console with plenty of Waves and Avid plugins filling up 4½ engines!

"There are a lot of dynamics in the show and there are places where you can really make the dynamics very big," Colin said. "There are times with the piano, vocal and guitar where you can really crank things up and make it really big and spacious. All of the songs are national anthems so the crowd is good."

None of the plugins were chosen specifically for the act rather because they are Colin's favourites. He uses a lot of Ambience reverb as opposed to Hall or Plate, finding them to be a clearer reverb.

"It hails back to the AMS reverb unit which had the ambient setting in it," he added. "It was a real classic back in the 80's. I also use an H-Delay plugin, bunch of C4 Multiband Compressors and PuigChild Compressor plugins.

"I also use a NLS console emulation which is a Waves plugin that emulates three of the world's supposedly best mixing consoles. There's the Neve that Muse record on, the custom SSL that Madonna records on and the old MCI

console that Dark Side of the Moon was recorded on. It's not in your face obvious but you can hear the difference between the consoles, you hear the board change to a different sound. I find the ballads work well on the Neve setting whilst the rock stuff works well on the SSL setting. I didn't use the MCI setting with Chisel although I do with John Butler. It's a very cheap plugin and a good way to make the Profile sound a bit better. The Profile is quite a neutral console without any inherent sound. Unlike other consoles, you have to add the sound into it."

Microphones were fairly standard with a Sennheiser plate mic for the kicks, a Sennheiser dynamic mic for the outside kick and a Shure VP88 stereo condenser mic for an overall drum overhead. Vocals are all Shure 58's with a straight Shure 58 cap on Jimmy's radio microphone.

"It suited him very well," remarked Colin. "In 2011 we used a condenser SM98 head on his radio mic to try smooth his voice out a little bit but it really didn't work that well and the old fashioned 58 sounds better."

Monitors, looked after by Rod Matheson, were a combination of in ears and wedges.

Although the tour is well and truly over, Colin has found that he can't get the songs out of his head, a phenomena he has never had before.

"It's driving me nuts," he admitted. "The melodies are just so strong. Every morning, as soon as I wake up, I'm hearing one of their songs in my head. They have something no other band has got. Eric Robinson told me that they were the best band Australia has ever had and I have to agree with him. Midnight Oil and INXS were brilliant but there's something special about Cold Chisel."

Jeff Pavey designed the lighting rig and took time out from sailing Chameleon Touring System's boat The Lazy Lizard, to chat.

"It's based at the Head Office here on the Gold Coast," Jeff blatantly lied. "Actually Tony Davies is a massive Cold Chisel fan and turned up at every one of the last six



gigs, which also meant I was very well taken care of! It was actually the best tour I have done in a long time and it was an honour to do it."

The band wanted classic rock show lighting without any video elements in the show. Jeff delivered with a massive back wall of moving lights; four rectangular grids, each housing sixteen Martin MAC101 and four Clay Paky Sharpy. This wall of lights was not revealed until after eight songs when the cyc on the kabuki was dropped.

"It was a pretty old school type of show up until then with cyc lights and a bunch of Kinesys on seven small finger trusses," added Jeff. "Each of these trusses held three Sharpy Wash, two Studio Due CS-4 and two Molephay Duet. The first couple of songs were pretty much all white, it progressed with a bit of colour and then the kabuki dropped to expose the pods at the back. We didn't use the Kinesys much once the pods were revealed as it took away from the look."

Jeff has always been a big fan of the old Studio Due CS-4 and the 'gay-spray' they can produce. Being on the Kinesys trusses meant he could get different levels of looks from them. When the CS-4 were lowered to band level, the stage took on an old school pub feel.

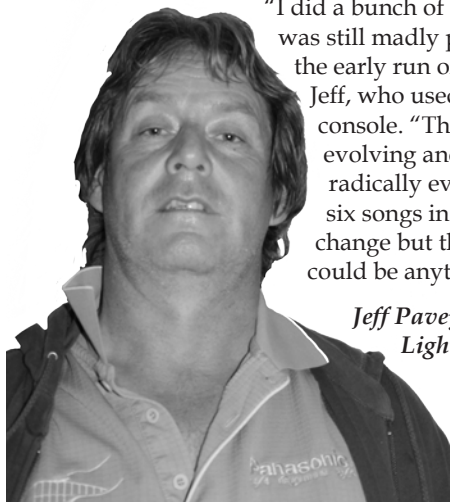
"I love the feel of the tungsten look, it gives a totally different look to all the moving lights," said Jeff. "It looks good with the Vari-lite rich reds and blues."

Two more pods, each housing eight MAC Auras and four Sharpy, were located downstage right and left to provide side wash and as a cyc wash for a couple of songs. Front light was provided by twenty-two Vari-lite VL3500 Wash.

The toughest element of the tour for Jeff was the fact that the band had forty-five songs to draw upon and there were no production rehearsals.

"I did a bunch of WYSIWYG stuff but was still madly programming during the early run of the tour," said Jeff, who used a High End Hog 4 console. "The set list was forever evolving and changed quite radically every day. There were six songs in the set that didn't change but the rest of the show could be anything."

*Jeff Pavey -
Lighting Designer*



CUBE, THE CONNOISSEURS CHOICE

roadcase
CUBE

**PENN ELCOM HARDWARE, COLOURS, BRANDING & MORE!
CUSTOM DESIGN SERVICE & ROUND THE CLOCK SUPPORT
COMPETITIVE PRICING WITH WARRANTY PROTECTION**

- * LATEST CASE FEATURES & RELEASES *
- ELECTRIC SCREEN LIFTING SOLUTIONS
- GPS TRACKABLE WITH SHOCK SENSOR CASE
- EXO SHOCK MOUNTING SOLUTIONS



1/364 Park Road, Regents Park, Sydney, 2143.
P: (02) 8733 5060 | M: 0447 028 889
www.cuberoadcases.com.au
www.transtage.com.au



Vapour Series fog machines have been reconceived and engineered from the ground up to meet the diverse needs of a wide range of applications including theatre, feature film & television, theme parks and photographic studios.

WWW.ROSCO.COM
42 Sawyer Lane Artarmon, NSW 2064
Phone: 02 9906 6262

After cancelling a whole bunch of shows earlier this year, when he suffered a haemorrhage on his vocal chords,

SAM SMITH'S

sell out tour of Australia was an overwhelming success.

The four-time Grammy winner is known for his electrifying vocals and note-perfect performances, so no big pressure on the sound department then.



FOH engineer
Simon Thomas





“When you have that amount of dynamic range you have to be able to control it without sounding like you’ve taken anything away from it,” commented FOH engineer Simon Thomas. “A performer with power and range like that comes with problems, albeit good problems, and you need to use certain technology to make it sit in the mix. We found from experience, that technology wasn’t totally in the digital domain hence why we have some old analogue equipment alongside the console.”

The analogue equipment included EL8X Distressors run in optical mode for Sam’s vocal and an old BSS 901 MkII dynamic EQ which really makes the whole vocal sit nicely.

“I find with digital boards that their compressors just don’t seem to work in the same way, although I have to say the SSL console that we are touring is quite a phenomenal leap forward in digital board technology,” remarked Simon. “It’s an amazing console and the user functionality is getting very good with all the updates. The bottom line is that it sounds good. Over the years, so many bands have recorded in studios using SSL and this is basically the same technology in a smaller footprint. You get that SSL quality of depth, warmth and detail.”

When mixing Sam Smith, Simon goes through a chain starting with his vocal microphone which is a Sennheiser 965 radio mic on 2000 sticks with MkII 3732 receivers rather than the usual 5000 sticks. As the 2000 has less frequencies to choose from, it was necessary to have two of them to swap between to get the correct frequency.

“The reason why we did that is because the 2000 stick simply sounds better,” added Simon. “We then run AES which comes to FOH where I’m using the BSS 901 MkII, which is literally straight after the pre amps, so that deals with the dynamics of Sam’s vocal. Then it goes into a little bit of console EQ and then the distressor to do the final overall compression of his vocal once we’ve treated it. That’s then sent into a subgroup which we then use for day to day system tuning of his vocal so we don’t have to touch anything. His signal chain doesn’t change but we can adjust the room EQ to suit what we have done. We know that in our headphones or in the studio monitors he sounds fine, and it has been so close every day it is unbelievable.”

Simon also used a tc electronics 6000 with various presets for different songs and different pre-delays and reverb times. Added to that was an old tc 2290 for the delays on

NW GROUP
COMPLETE EVENT SOLUTIONS

Norwest Cairellie Oceania spyglass Phase 1 Audio

Sydney, Melbourne, Brisbane, Auckland, Wellington, Perth nwgroup.co.nz nwgroup.com.au

Sam's vocals; spatial delays in certain songs that Simon discovered did not work so well in the digital domain.

"You would be surprised how loud his audience is and it really is quite difficult for him with wearing in-ears and the amount of noise you get down microphones," added Simon. "The key is to make people listen by just not turning it up. You stick to a sensible level to work with."

The tour utilized a Clair Bros i-5 system which particularly suits Sam's dynamic falsetto vocal and all the frequencies he delivers.

"You need to be able to deliver that energy into an arena and although there are a lot of fantastic systems around, certain modern line arrays seem to be missing some energy," noted Simon. "A Clair system really pushes energy at you. I had never worked with Clair before and was unfamiliar with the system, so they flew me out to Lititz and I met Howard Page. We got on straight away. I didn't want to listen to the system, I wanted to know how it worked and that was key. I know what's going on in there but I can't remember it all! With the Clair i5 system you really can make it sound how you want it to sound."

The PA comprises i-5 cabinets hung left and right with i-5b cabinets hung down the side. The side hangs are also i-5 with Clair's powered CP-218 subs on the floor.

"They are quite something, we can't even turn them up because they really throw out energy!" commented Simon. "We also have some Clair infills. It's all fairly straightforward but having the flown subs was key to doing this as I want to get the sound up in the air plus the subs also pull the image down. We're doing an arc with the subs so that the sound is very even across the arena. There are various delays starting from zero point in the centre which gives you the effect of an arc. It's by far the best bottom end sub coverage I've ever had in an arena."

"We have eight CP-218 subs in a virtual arc in the centre so each sub has its own delay time which is how we push the low end into a wider dispersion pattern," systems engineer Simon Bauer explained further. "We try to minimize the centre build up



Monitor engineer
Brian Evans

down the middle of the arena and then we use two more CP-218 just under the PA to push it out even further. It also fills in the near field corner of the low end because if you only have a centre sub stack, the people off axis of that dispersion pattern just don't have that same impact. Also, the extra spread from the center arc to the off stage sub gives us the distance from one cone to another to hit some of those really low notes.

"We carry 2½, 5 and ten degree boxes and all of our bottom 10 degrees have a wider dispersion on the horns for some of the lower trim heights to still get down to the centre. Our show is fairly wide and so the PA is a little further apart than we'd like to see it. That's why we added some 120 degree horns rather than the standard 90 degree horns just to cover the near field a little better."

Monitor engineer Brian Evans ran a Digico SD10 with Shure PSM1000 for the band, and no wedges on stage.

"I like the way the SD10 sounds, plus it's very flexible," he said. "I like the macro section and the snapshots are very easy to use. In fact I use a lot of snapshots as I find them fast to use. Sam is a really strong singer which makes it easier for Simon and me, if anything I have to make sure he has enough 'support'. So when he goes up into his falsetto, I just thicken it up for him and I ride his vocal in that area. That's really about it, he likes a full band mix and he's a strong singer so you're not fighting with everything."



Manage My Nightlife

Are your clients looking for more flexibility and control over their music and visuals? Manage My Nightlife is a mobile management app that puts the power of Nightlife Music in the hands of managers. Your clients are empowered to own their atmosphere and drive it using song search, visual management, music controls and more.

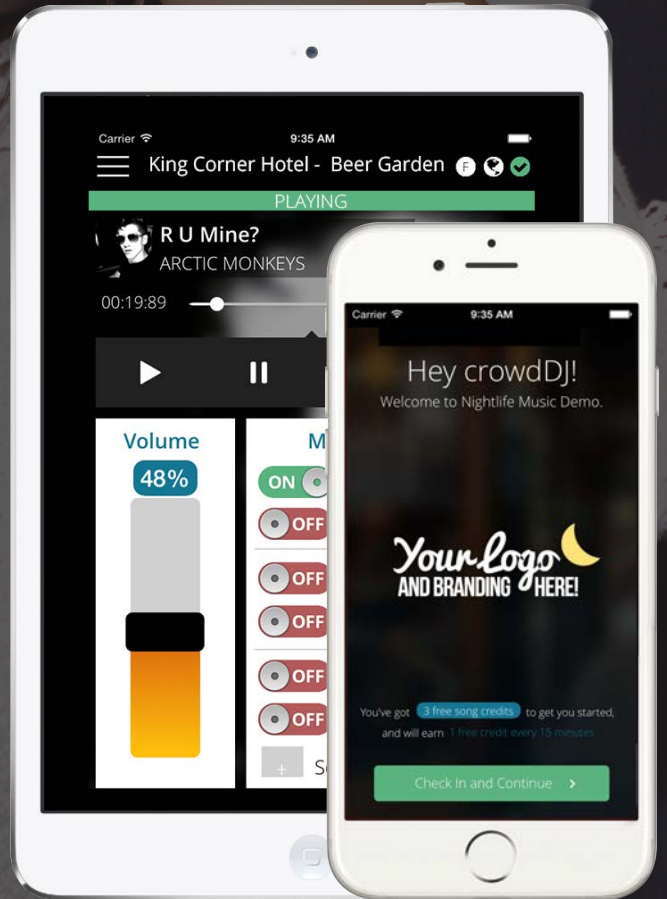
NEW TECHNOLOGY EMPOWERS YOUR CLIENTS AND THEIR CUSTOMERS



Available on the
App Store



ANDROID APP ON
Google play



crowdDJ

Do your venues want more interaction with their customers? Nightlife Music's new consumer app, crowdDJ, lets venue patrons have a say in what gets played – it's the new way to request songs and long term it will allow venues to capture likes and dislikes and better tailor their offering.

Nightlife Music is your partner in entertainment.

Are we working with your business?

Call us on 1800 679 748 to find out how we can work together.



www.nightlife.com.au

Bring your venue to life!

FLEETWOOD MAC

Paul Guthrie is a Lighting & Production Designer with Toss Film & Design Inc.

He grew up in Melbourne and started lighting bands in clubs on King Street before he was old enough to legally get in. He has won three Emmys for his TV work and has designed concert tours, televised music and sports events as well as local hip-hop club shows. He lives in Minneapolis with his wife and two kids.

Roadskills caught up with one of Paul's shows when Fleetwood Mac toured the country with their "On With the Show" production. The stage was dominated by a large upstage video wall, three flown ribbon video walls and twelve lighting pods. The rig included PRG Best Boys, Clay Paky A.leda B-EYE K20 and Sharpay Wash, GLP Impression X4 and Volkslichts, and Vari-lite 3500 Wash. The show was operated by Chris Lose running a grandMA2 console.



Chris Lose
FOH engineer



20 Questions with Paul Ario Guthrie

- 1 What are the three best things about your job?
Working with interesting people, traveling and being challenged.
- 2 And the three worst things?
The constant lack of time to get things done, stupid computers and being away from home and family for long periods of time.
- 3 What do you never leave home without when working?
Sunglasses and a toothbrush.
- 4 What was the worst nightmare you encountered on the road?
Only one chocolate on my pillow at the Ritz Carlton (the horror.....).
- 5 What has been the strangest request from an artist?
More smoke ... a request from Trent Reznor.
- 6 Who was hell to work with (probably best not to actually mention name but elude to it)?
Kanye West.
- 7 What is the most stupid request you've had from a member of the public, artist or promoter?
It annoys me when we are asked to set up in ridiculous places to mix/operate. It's also a treat when members of the audience want to vehemently criticize you at the end of (or during) a show, which they are entitled to do. I usually politely ask them where they work so I can drop in tomorrow and berate them about their performance in front of their comrades.



chameleon
TOURING SYSTEMS

LUMINAIRES
CONTROL SYSTEMS
MOVING LIGHTS
SEARCH LIGHTS

SYDNEY:
11 Percy Street
Auburn NSW 2144
Phone: 02 9643 4999

BRISBANE:
233 Lavarack Avenue
Eagle Farm QLD 4009
Phone: 07 3260 2663

www.chameleon-touring.com.au

NOW AVAILABLE FOR HIRE

RUSH
RUSH Strobes 1 & 2s

Pro Show
PIXPAD

THOMAS
PATT2013

Martin
MAC Viper™
Profile
Wash DX
Performance
AirFX
Quadray

MAC Aura™
MAC 101™
MAC101CT™

CLAY PARRY
SHARPY WASH 330

grandMA
grandMA 2
grandMA 2

M1™
M6™
M2Go™

grandMA - total control

Impression X4

8 In your opinion, what's the best show you've worked on and why?

Nine Inch Nails. It was amazing to be a part of something so intense with such a pedigree working alongside so many incredibly creative people. Very challenging.

9 What is the most bizarre sight you have ever seen at a gig?

Mariah Carey.

10 Who do you admire in the industry and why?

Leroy Bennett, amazing creative force and all round nice human. Paul Normandale (same reasons with a British twist).

11 Which venue is your favourite and why?

Madison Square Garden, The Budokan and the Hollywood Bowl are my three favorite. All can be reasonably painful places to do a show for a multitude of reasons but they are iconic and there is always a great energy surrounding the show (usually regarding your friends that you can't get on the guest list). It's fun to have one of your designs at any one of those venues and growing up I never thought for a second that I would be lucky enough to see a show at MSG let alone have a show at MSG.

14 What was the worst weather event you've encountered at an outdoors gig?

-30°C sideways blowing snow blizzard in St Paul at Red Bull Crashed Ice two years ago. We got snow inside 120 lights where it turned back to water and blew everything up. Quite the drag.

15 What would your ideal rig contain?

Lights that program themselves.

16 Which band would you most like to work for and why?

Led Zeppelin.

17 Do you have a favourite mantra to get you through the day?

"This is a shit way to make art". Or "That looks completely rocktastic".

18 What do you think of the Australian live music industry at the moment?

We hear so many Australian bands on our local Minnesota Public Radio station (the Current) so it seems like a lot of people are creating. I'm hoping that the industry shifts away from big festivals and back to a more varied venue touring trend, even though I might be nostalgically out of touch with reality and what the youth of Australia really wants.

12 Which recent piece of production gear do you view as a game-changer?

I think Ayrton are doing a great job of bringing interesting products to the market that are giving us tools to make new looking shows.

13 What is the most outrageous thing you have ever done on tour?

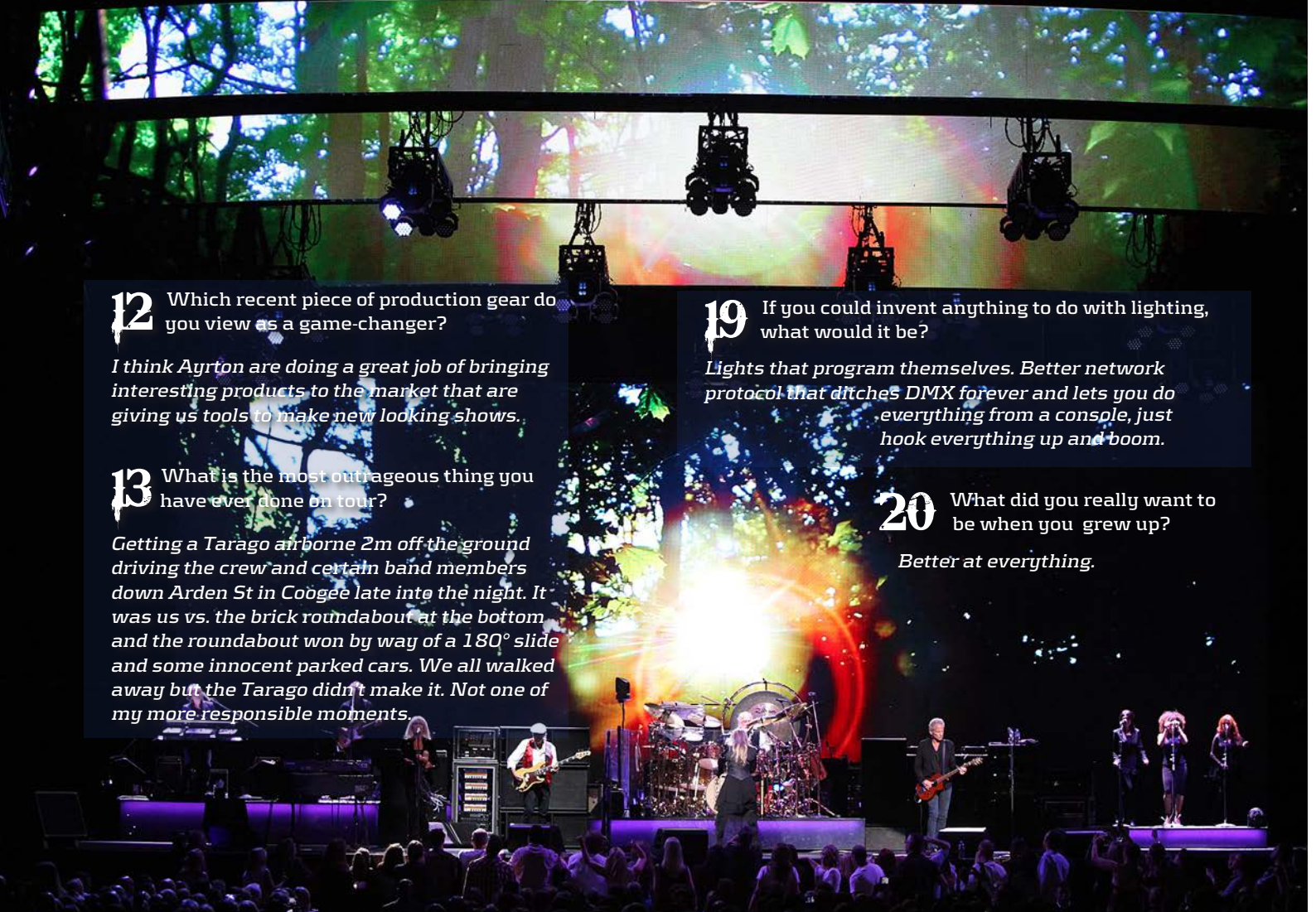
Getting a Tarago airborne 2m off the ground driving the crew and certain band members down Arden St in Coogee late into the night. It was us vs. the brick roundabout at the bottom and the roundabout won by way of a 180° slide and some innocent parked cars. We all walked away but the Tarago didn't make it. Not one of my more responsible moments.

19 If you could invent anything to do with lighting, what would it be?

Lights that program themselves. Better network protocol that ditches DMX forever and lets you do everything from a console, just hook everything up and boom.

20 What did you really want to be when you grew up?

Better at everything.





JIMMY'S WORLD



JASON'S RADAR



ONLINE
PRODUCTION
**WEEKLY
CX-TV**

THE HUMPH



MEG APPROVES



SOPHIE SAYS

EACH WEDNESDAY

EVERY WEEK

FEATURING

**A 10 MINUTE REEL ON INDUSTRY REVIEWS
& THE VERY LATEST FROM INSIDE YOUR
INDUSTRY NETWORK**

**YOUR FREE INVITATION IS HERE - JOIN US
GET ONLINE & BE INVOLVED**

WWW.CX-TV.COM

Audio Engineer Amanda Davis

GOOD MUSIC EQUALS Attitude & Communication



One huge highlight of any career sound person would be to work at Madison Square Gardens. It was definitely on the bucket list for Amanda Davis and one that she was able to cross off in September last year working as FOH engineer for Janelle Monáe.



Working with Janelle has made it possible for Amanda to become better known in the industry and has elevated her list of credits to include opportunities for her to mix Prince, Stevie Wonder, and Big Boi from Outkast, and being versatile she has also mixed monitors for R. Kelly.

Originally from Memphis, Tennessee, Amanda moved to Chicago to attend the Chicago College of Performing Arts where she graduated with a B.A. in vocal performance. After a couple of years she decided to move to Atlanta to attend SAE where she gained a diploma in audio technology and it was there that she developed an interest and love for sound and seriously started to consider it as a career. So she set about doing whatever she could to get her business going; there was no sitting around waiting for the phone to ring. Determined to make it happen she started interning at local studios, working at SAE, was FOH engineer for a church and local clubs and became very, very busy.

Working mainly with Janelle they don't carry their own PA so after she loads her scenes into the system she'll be using that night, she'll listen to the room so she knows what she's dealing with and works from there. Amanda enjoys the "on the fly" and creativity of mixing, so she doesn't use snapshots saying that perhaps it may be something that she'll implement in the future. Her workflow process is pretty simple. She uses a Yamaha CL5 and doesn't use any outboard gear, just all the on-board processing - she does however love the Waves CLA compressors for the drums. Once she loads her show files she feels comfortable and at a good starting point. Amanda learnt her craft on analogue boards and likes to keep her digital board looking pretty much the same.

A typical day on tour is about 12-15 hours starting with the load in, laying marley, building risers, putting backline up, pinning the stage then sound check. For festivals, it's a bit different as they have to build on the side of the stage and are only able to do a line check. Amanda will go into the show without a sound check and then has to worry about strict time and dB limits. A head-lining show is between 60-75 minutes and for festivals it's about 45-55 minutes. But Amanda says there are lots of things she loves about her job. The travel and the opportunity to experience different

BY TONI VENDITTI



cultures has been great but she says that mixing an artist like Janelle is inspiring. There hasn't been a show where Janelle has given less than 1000%, motivating Amanda to do better each time. There is not much she would like to change about her job saying 'it's not all peaches and cream and it's not a glamorous life', but right now she's happy.

Amanda hasn't had any really bad gigs but has endured the typical club gigs getting started but has had really bad days on the job. While they were in San Francisco opening for Outkast, Janelle's show just started and there was no output - she could see the meters working but had nothing out front. The sold out crowd started booing and Janelle stopped the show. This is one of those open the floor and let me in moments - it's all bad. Amanda was quickly able to pull Janelle's vocal up on the house console and then she figured out how to get the band going on her board and spent the entire show running between the two boards. It was such a bad gig; she convinced herself she was going to be fired, but she wasn't. It shows that every experience is a learning experience.

Amanda believes that to become a great audio engineer you should understand that it's not about you and it's not about your technical knowledge and/or how hard your kick hits, it's about your attitude and the music. Being on the road for months at a time, no one wants to be around a know-it-all with a bad attitude. Amanda says that to earn the respect of her peers and colleagues you have to give it first, and to be knowledgeable and show others that she can handle whatever comes her way. When she is working she tries not to let the fact that she is a female be more obvious than it already is. If someone gives her a hard time she won't immediately think the problems are gender related and will dig deeper to find the source of the issue. Communication is the key to working out any problems with an end goal of getting the job done, as a team. So far Amanda hasn't encountered too many problems and has found that generally people are really cool and excited to see a female audio engineer. Being a woman your attitude is very important because there will be many speed bumps on the road to success but she has found that in this industry, this saying rings very true: "Your attitude determines your altitude".

She feels grateful to Janelle for the opportunities that have come her way since she started with her. She was in the right place at the right time when Janelle was looking for a new FOH engineer and she was adamant about wanting a female. Her tour manager recommended Amanda for the job. Janelle will always be the first priority for Amanda but word of mouth is bringing plenty of gigs her way, and has just had the pleasure of mixing hip hop artist Wale in a sold out arena. When meeting with new clients she listens to their music first to gain an understanding of them and their sonic vision and talks with the music director about how they want their music to be revealed to the audience. They then work together to achieve the perfect sound for their particular show

When asked about looking after your future and taking care of your money Amanda says: "It's VERY easy to just spend while on tour but it is also just as easy to save. While on tour you have catering and dressing room riders supplied that fulfil certain needs/wants, your accommodation is taken care of etc, so one can save pretty well while on tour if you're not distracted. You just have to stay focused. Of course you can splurge a little here and there but you have to keep in mind that the tour does come to an end and you will need to take care of yourself when you get back home".

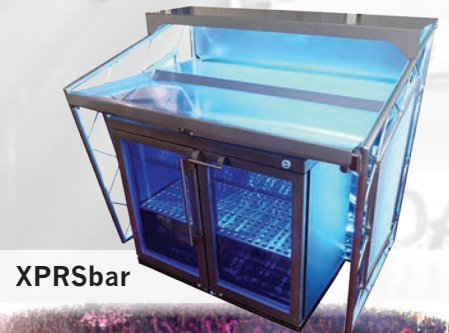


LITECONSOLE

Performance Mobile Platforms for DJs & Events



XPRSlite



XPRsbar



"Handy, Practical, Awesome!"
Armin Van Buuren, International DJ

- **Innovative with Sleek Design**
- **Unique and Versatile**
- **Lightweight & Ultra Compact**
- **Easy to assemble**
- **Branding possibilities**

EXCLUSIVE TO ULA



ulagroup.com

f /Total.Visual.Solutions

1300 ULA GROUP
1300 852 476

BIZ TALK

with Julius Grafton



Festival Promoter's Fail Crashing when you can't manage fundamentals

The abrupt implosion of summer music festivals in Australia and New Zealand was foreseen by the industry half a decade ago when compliance and site costs started to escalate as rising currency got the Los Angeles agents greedy.

Costs for traffic management, development applications (local government consents), safety compliance, emergency plans and security have quadrupled from a decade ago, while production costs have come under pressure.

Aside from having 70 paramedics and paying for 50 police on site, Stereosonic festival in Australia faces legislation in NSW to force additional police drug dog patrols the week prior to future events to catch drug dealers who stash or bury drugs on the site.

But it is the underlying management competency of the promoters that has come into focus with the collapse of Soundwave in Australia, Echo in NZ and a catastrophic fail on New Year's Eve in Sydney. At that event there were widespread complaints from punters who did not get anywhere near what they were promised by the Stereosonic promoter at their 'Sydney NYE Above the Harbour' event.

Despite NYE promoter Mothership Events having extensive experience with Soundwave and a previous company, Mothership Music (in liquidation), they managed to under cater and under deliver what was a fairly straightforward event - viewing the New Year's Eve fireworks. Punters queued for over an hour for a drink and complained of insufficient toilets, rubbish food and a 'crap' DJ.

"The company has been successfully involved with a wide variety of A-list events, festivals, and parades, including VIVID, Sydney Mardi Gras, Biennale of Sydney, Stereosonic, Sydney's Art & About Festival, Handa Opera on Sydney Harbour, Woollahra Festival, Fat as Butter Festival, EB Games Expo, East Village Gourmet Food Festival, Sydney's Chinese New Year Parade, Armin Van Burren Tour, Swedish House Mafia Tour, Twilight at Taronga Concerts, Sydney's RSPCA Million Paws Walk, Dash Berlin in Sydney, and Sydney's Garage Sale Trail", they said in a PR release.

Both the current Mothership and the liquidated version

share the same directors, Brent Lean and (now departed) Justin Nyker. The liquidated company ran into trouble when 'RAP Artist' Flo Rida, aka Tamar Dillard, failed to perform at an event in Newcastle for nebulous reasons.

Mothership Music lost a legal action against Flo Rida and his management, VIP Entertainment and Concepts, and was then liquidated at the request of the tax office as they had forgotten or failed to pay a pesky \$200,000 bill. The same directors went on to promote the Fat as Butter festival the following year, as a different legal entity before it also failed.

The Echo festival's promoter, Paxton Talbot blamed everyone but himself when his debut festival in Auckland and Tauranga tanked in December due to soft ticket sales. Talbot and his ticket agency Eventopia then fell upon each other as punters were advised they may not get all their money back.

Eventopia are a rogue ticket agency wholly owned by Ticketek, largest in Australia and New Zealand. While admitting they gave promoters ticket funds prior to the show, Eventopia made the almost unbelievable admission they 'thought' that promoters would leave the funds in a trust account.

Paxton clearly didn't have enough capital. Every business assumes risk, and the risk is you lose what you invest - instead of losing the box office, before you actually run the show.

Soundwave promoter AJ Maddah drew sharp criticism from his own hand picked liquidator after the 2015 Soundwave company collapsed. They signaled that management failures had led to incorrect treatment of costs that incurred tax liabilities of over a million dollars which they were attempting to reverse.

Maddah also drew ire from other promoters for simply agreeing to pay too much for acts - he booked Sound Garden for slightly more than \$2.5 million (they were owed \$2,132,000 as at late October, 2015); Slipknot at \$2 mill (owed \$1,645,000); and Smashing Pumpkins at \$1.5 mil (owed \$1,267,000).

As to how he actually got away without paying the balance due for many bands, he drew on his previous reasonably good behavior which was the only currency he had left. It is believed the bands were all paid out in late 2015, leaving the production industry and most other event suppliers unpaid.

CX concludes that most (not all) event promoters exist because of the competency and skills of the overworked and underpaid site and production managers who understand the complex logistics and legislation associated with an outdoor event. The promoters are inevitably (not always) big on ego, bluff, contacts and connections, and short on ethics, cash, morality and humility.

THE ADVICE GIVEN HERE IS GENERAL IN NATURE.
YOU ALWAYS NEED TO SEEK PROFESSIONAL ADVICE BEFORE MAKING COMMERCIAL DECISIONS.

PRINT & ONLINE EDITIONS



SUBSCRIBE 26 YEARS IN PUBLICATION TO CX MAGAZINE TODAY!

www.juliusmedia.com

PRINT & ONLINE [WEB READER VERSION] SUBSCRIPTION FORM

PRINT & ONLINE [WEB READER VERSION]

- 1 Year: \$49.00
- 2 Years: \$79.00
- 3 Years: \$99.00

JUST ONLINE [WEB READER VERSION]

- 1 Year: \$26.00
- 2 Years: \$39.00
- 3 Years: \$53.00

BE A CX GOLD CLASS SPONSOR!

Support our cause
\$94.00 buys you the E-Zine
FOREVER!



Name _____
 Company _____
 Address _____

 Suburb _____
 State _____ Postcode _____
 Email _____
 Phone _____

PAYMENT METHOD

Visa Mastercard
 Name on Card _____
 Card number _____
 CSV number _____
(3 digit security number on rear of card)
 Expiry Date _____ / _____ (month / year)

DIRECT DEBIT:

Deposit funds into our account including your name on the deposit:

Juliusmedia Group Pty Ltd
Westpac BSB: 032 088 A/C: 232784

CHEQUE: Make payable to Juliusmedia Group Pty Ltd

MAIL: Locked Bag 30, Epping NSW 1710

View CX Magazine on your chosen device today!
High resolution, dynamic layout,
full of interactive features & video links.
AU \$5.99 • Annual Subscription AU \$49.00
SEARCH: CXNETWORK.COM.AU



With the new year upon us, ACETA membership renewal falls due and new applications are received. Recently the question was asked, “Is it possible to financially quantify membership?”, a reasonable but challenging proposition to answer with any surety. ACETA is constantly acclaimed for the work it performs, but many non-participants don’t seem to understand the benefit reality now available to members. Therefore we will attempt to quantify membership by presenting ten current major programs and activity streams along with an arbitrary financial benefit assessment; the information provided is not a guarantee but offered as a guide only.

ACETA is your industry body, working to protect and further the interest of everyone who works in our profession.
 Web site: www.aceta.org.au
 Facebook: www.facebook.com/AusCETA
 or info@aceta.org.au



Frank Hinton
 President ACETA

ACETA MEMBERSHIP ENHANCES YOU & YOUR FINANCIAL WELL-BEING

Accreditation – comes with membership, enhancing your reputation, elevating commercial development opportunities, and may prove to be the most valuable benefit of all. Accreditation will assist goods and service acquirers to identify ethical traders, as it will suppliers seeking new agents and partners. There is no down side to accreditation, assessing worth is virtually impossible but value is clearly significant and will increase given the borderless and hostile nature of the contemporary trading landscape, human beings innately require security, it’s in our genes. What if we said accreditation could impact your turnover by at least 2.5%, do the maths; this could mean anything from \$10,000 for a one person operation to a substantial six figure sum for a larger organisation. Yes it’s hard to place worth on gaining a valuable new agency or winning a massive supply contract.

ACETA Forum – delivers knowledge from a broad platform, through various media and in seminars and workshops at industry events. A significant initiative is member webinars such as the recent 4 part series on understanding the RCM product compliance legislation. Specialist webinars benefit all members’ particularly smaller companies who would otherwise engage consultants in dealing with mandatory issues. We believe the aggregate financial benefit could be in excess of \$2,000.

Advertising – is delivered in various forms, most prominently in your permanent presence on the ACETA web site, where members depict their enterprise in 100 words, including a web site link. This is the one and only focussed industry wide presentation and could be valued in the order of \$2,500.

Insurance – is realised in collective advocacy for members, including lobbying government as was the case during the Digital Dividend process and now its maintenance, ongoing vigilance and negotiation with government when necessary. ACETA is now engaged with ACMA in representing the collective interests of its constituency in dealing with the new all-important RCM product compliance regime. Remember, governments listen to ‘industry peak bodies’, ACETA is your ‘peak body’, you never know what’s around the corner and when you need a voice, inestimably priceless.

Manufacturers Manifesto – is the platform to unify and resource the creative sector, facilitating increased export activity and employment. The priority steps are Unify, Share and Lobby, including negotiations to prioritise entertainment technology for an agreed period and share export promotion, exposure and funding. The measure of success will be realised in the level of industry involvement, currently inestimable and priceless.

Production of Resource Material – including publications such as the ‘ACETA Careers Guide’ will evolve relative to need. All materials are available to members and have value as a resource. These documents could be valued in the hundreds of dollars or more if and when put to good use.

BY FRANK HINTON

Product Compliance – has been addressed in the relationship and formal agreement with the leading Australian test laboratory, Comtest. ACETA members now have access to consultation, product compliance management services and testing on preferential terms and conditions. In consideration of the new product compliance regime this initiative is of significant benefit and its value for an ACETA member will be anywhere from \$2,000 and far beyond.

Safety and Well Being – along with ethical behaviour is robustly promoted by ACETA, a position manifest in its Constitution/Industry Guidelines and practised in the Accreditation program. ACETA identifies and discourages the import of knock-off, unsafe/non-compliant technology and IP theft. ACETA supports and discusses well-being issues, including hearing and mental health. The benefit for a member is associated with, and realised in accreditation.

Skills Shortage – is currently addressed in an Aptitude Test Program currently under development. Once implemented, ACETA members will have access to a data base containing information on individuals seeking employment, who have successfully completed the ACETA Entertainment Technology Aptitude Test. Based on employment agency fees, a saving from \$2,500 per new employee could be realised.

Trade Event Reform – resonates across the entertainment technology industry. Imperatives vary amongst stakeholders; however the expressed desire of industry participants for one all-encompassing annual event remains definitive and constant. ACETA is dealing with the available options; due to the challenging landscape, progress is slow but constant. In the not-to-distant-future you may see

the ACETA logo directly or indirectly associated with such an event and there will indeed be member benefits, including savings commencing around \$400 – thousands contingent on the level of event participation.

Benefits are not limited to the above described examples. Membership offers personal & organisational development opportunity, conserves financial outgoings and represents a form of insurance. We could estimate membership delivering the smallest organisation a benefit upwards of say, \$20,000 and the larger company's a six figure sum. Figures are speculative and contingent on the manner in which an organisation views membership, participation is the key. If you avail yourself of the numerous opportunities and even get directly involved, advantages will be abundant. Thanks for joining or are considering membership in this group of equals, we hope you enjoy and prosper.



All the best
Frank Hinton
President ACETA



For more information visit:
www.hola.jandspromo.com.au



Soundcraft® **Ui**

Remote-Controlled Digital Mixer

Any device. Anywhere.
The freedom to mix.

Ui packs a complete digital mixing system into a compact, road-rugged stagebox format, with built-in Wi-Fi that lets you mix remotely from any device direct from your browser, supercharging your live sound with processing from some of the biggest names in the business - dbx®, Lexicon® and Digitech®.

Distributed by



www.jands.com.au

Soundcraft®
by HARMAN



B.S. SOUND PA HIRE

Band PA Systems, Vocal PA Systems, Lights.
 Pick up and do it yourself, or Delivered, Set up and Operated by experienced Crew.
 Mark Barry; (03) 9889 1999 or 0419 993 966
www.bssound.com.au mark@bssound.com.au

You have tried the 'Light & Fluffy' Cloud Rental Management Software...

But Serious Business Deserves Serious Software!

I need a system to help manage thousands of rental assets, print hundreds of quotes and invoices a month, schedule cross hires, branch to branch transfers, technicians, trucks and purchase orders. I need to be able to schedule equipment using "First Come First Served". I need to analyse profitability before I quote. Up time is critical. The system I need must be intuitive and easy to use with backup service when and if we need it. It needs to be tried and proven by companies similar in size and structure to ours - I need RentalPoint Software!

RentalPoint
SOFTWARE

www.rentp.com | sales@rentp.com

THE HUMPH

JIMMY'S WORLD

JASON'S RADAR

MEG APPROVES

SOPHIE SAYS

EVERY WEEK

A 10 MINUTE REEL ON INDUSTRY REVIEWS & THE VERY LATEST FROM INSIDE YOUR INDUSTRY NETWORK

YOUR FREE INVITATION IS HERE - JOIN US GET ONLINE & BE INVOLVED

WWW.CX-TV.COM

CX ADVERTISER INDEX ISSUE 111 FEBRUARY 2016

• Amber Technology.....	IFC	• PAVT.....	13
• Bosch.....	51	• Philips Entertainment.....	23
• BS Sound.....	72	• Rentalpoint.....	72
• Chameleon Touring Systems.....	63	• RØDE.....	19
• CMG AV.....	45	• Roland.....	IBC
• CMI.....	FC,29	• Rosco.....	57
• ENTECH Roadshow.....	4,5	• Sennheiser.....	25
• Entertainment Assist.....	72	• Show Technology.....	17
• HME.....	41	• Subscriptions.....	69
• Jands.....	35,53,71	• TAG.....	3,9
• LSC Lighting.....	33	• The Hump.....	65
• Meyer Sound Australia.....	7	• The Look.....	31
• Mega Vision.....	49	• The PA People.....	47
• NAS.....	39	• Transtage.....	57
• Nightlife Music.....	61	• ULA.....	27,43,67,BC
• NW Group.....	59	• Yamaha.....	37

Are you concerned about your mate's mental health?

FACT: Most Australian tech crew and roadies have attempted or considered suicide¹!

Support those around you and register for free mental health training



www.entertainmentassist.org.au

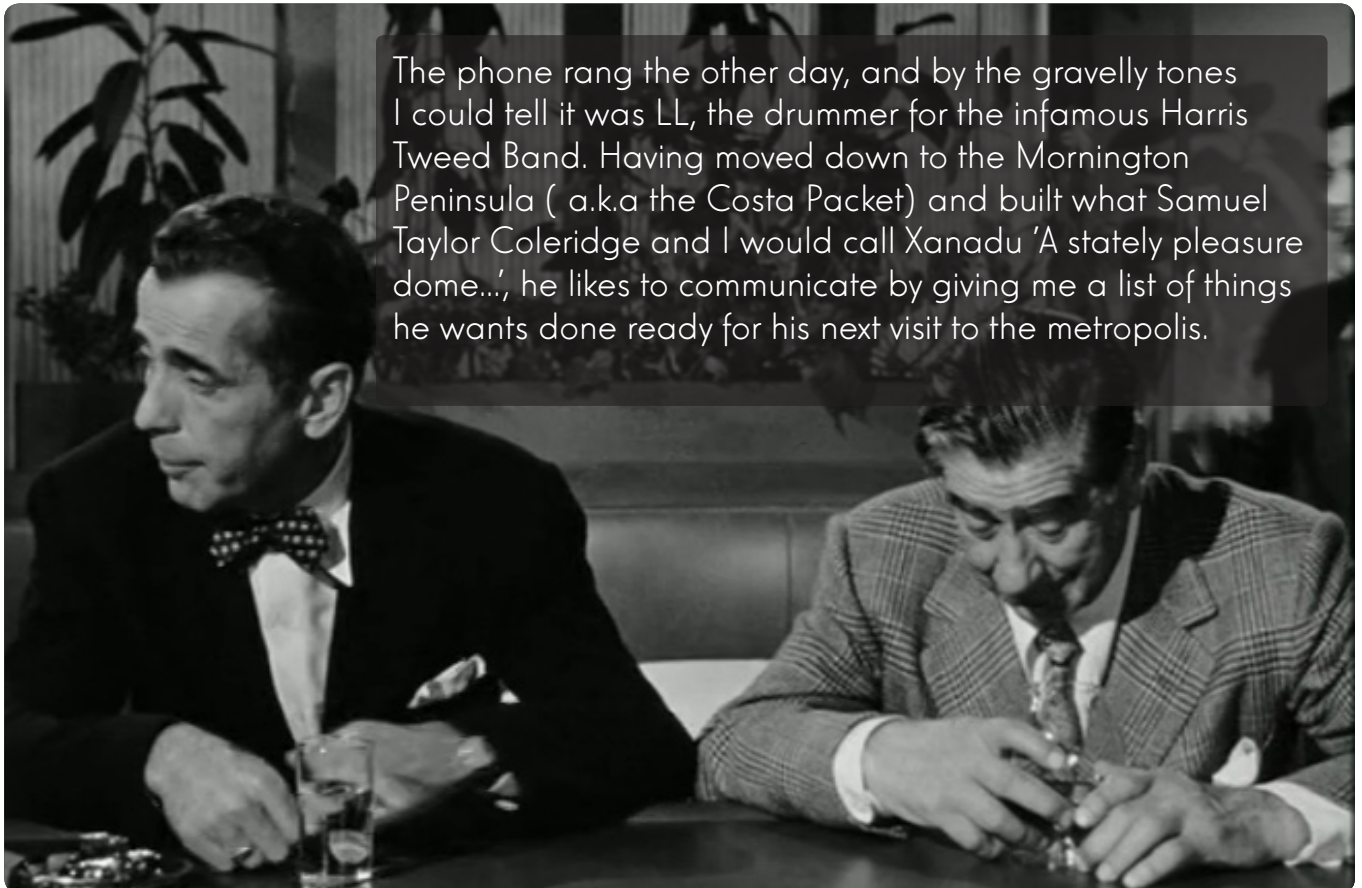
Supporting the mental health of Australian entertainment industry workers

¹Passion, Pride, Pitfalls Dec 2014



The Great Ham Steak Incident of '76

Breakfast on the run



The phone rang the other day, and by the gravelly tones I could tell it was LL, the drummer for the infamous Harris Tweed Band. Having moved down to the Mornington Peninsula (a.k.a the Costa Packet) and built what Samuel Taylor Coleridge and I would call Xanadu 'A stately pleasure dome...', he likes to communicate by giving me a list of things he wants done ready for his next visit to the metropolis.

"Dunk, mate," he rasped, "someone's asked if we can do a gig at Phillip Island? What do you think? Something for old times' sake?"

"How much does it pay?" I asked, always one for the practicalities of life.

"Mate, the money's great...and guess what - they've booked accommodation for us at a motel around the corner. You know what that means, don't you?"

I hazarded a guess. "Beds too short and noisy air conditioning?"

He cackled away to himself "No, you idiot! It means ... Breakfast! Ha ha; you and RH (the bass player) remember that from years ago, don't you? I'll give you the details when I'm up in town next week. Have the kettle on ready. See ya!" And with a final wheeze he was gone.

He was right; the word 'breakfast' did bring the memories flooding back, from a previous Sunday night gig in 1976 at Philip Island, a holiday island about 140k from Melbourne.

It was for some yacht club, I think, or some other kind of water based social group. All I do remember is that it was

pretty boring; a whole night having to put up with the antics of the children of the rich and fatuous.

When it all was over, a couple of the band went home, and LL headed off back to Melbourne with our payment cheque, to bank it before it bounced - always a wise move, no matter who was paying us. That left RH and myself to take advantage of the accommodation supplied at the clubrooms.

After the obligatory few (well, quite a few, to be honest) post-gig drinks to unwind, we collapsed into bunks and slept fitfully till the following day.

When we woke up we were both starving hungry, with mouths like the bottom of a budgie's cage that hasn't been cleaned for a couple of months. Unfortunately, in a major piece of monetary miscalculation, we discovered that neither of us had any money to buy some breakfast. This was well before the time of credit cards, debit cards, hole-in-the-wall banking, or any of the modern financial trappings of life. It was cash money or nothing.

And nothing was exactly what we had! Not even a dollar or so. Plus we were extremely hungry, that sort of ravenous burning hunger that only comes after a night on the slops.

We ransacked the car, shoving our hands down the back of the seats, under the carpets, emptying the ashtrays and eventually managed to come up with 80 cents between us. Not much in today's terms, but it was enough for us to be able to go down to the nearest cafe and get 2 cups of coffee. Impossible to do it for less than \$4.50 each today, I know, but such is the power of inflation!

Luckily it was a Monday morning. If it had been a Sunday morning after a typical Saturday night gig everywhere would have been closed, but we were in luck.

We shuffled our way round the streets looking for somewhere to invest our 80c and ended up at a place called the Koala Cafe (no kidding, I'm sure that was its name).

We sat down at a table nursing our two coffees, at the same time trying not to drool too much at the overpowering smell of fresh bacon and eggs and other tantalizing breakfast smells. Our stomachs were rumbling so much that I swear you could have heard them back in Melbourne. It felt like sitting through an earthquake movie!

At the table next to us sat a well dressed businessman, and he ordered a large country breakfast consisting of a thick slice of ham - a ham steak, in fact - plus toast, tomatoes and two eggs on top. Just the sort of breakfast that we would have been happily gobbling up if we had more than 80 cents between us!

Morosely we turned back to sipping our flat whites, while our neighbour settled back and read his paper until his breakfast arrived.

The waitress soon brought his meal, hot and sizzling on the plate with a delicious aroma that made our stomachs rumble even more. He thanked her, put down his paper, and picked up his knife and fork. Just as he was about to tuck into it, he stopped, put down his utensils, got up and disappeared into the bathroom, no doubt to have an early morning plumbing inspection!

Well, RH and I didn't think twice. The door had scarcely closed behind him than we looked at each other, nodded, and leapt over to his table, grabbed the knife and fork, cut the ham steak in half, with an egg on top of each half, and stuffed it into our mouths! It's truly amazing just how much food you can jam into your mouth in one go!

I grabbed a chunk of fried tomato in one hand and tried to push it into my mouth as well. It was red-hot.

"Aagh - hot!" I yelled and spat it out. I don't know on whose plate it landed but it must have come as a bit of a surprise, judging by the scream! Pausing only to grab the hot buttered toast to mop up the tomato juice and egg yolk running down our chins and shove that in our mouths as well, we dashed out of the door and launched ourselves into the car!

Flooring the accelerator RH and I zoomed down the street and out of town, slowing down only when we reached the Wonthaggi* roundabout at the Melbourne turn-off.

I've no idea what happened after our breakfast donor came back from the bathroom. I can imagine him sitting there staring at his empty plate, scratching his head and wondering if he had really eaten it or not. Either way I don't imagine he was too happy about it.

As we cruised along the highway back to Melbourne, happily burping away, I turned to RH.

"You know, I always enjoy starting the day with a good hot breakfast".

"Yes" he agreed, nodding his head, "especially if it's somebody else's!"

*Wonthaggi**
 - reputed to be a
 traditional expression
 translated as
 'Oh crap - I've missed
 the turn-off to Phillip
 Island!'

© 2015 DUNCAN FRY

JOIN THE CONVERSATION AT
CXMAGBLOG.COM RIGHT NOW!

RECENT BLOGS

- REVIEW: CLEARCOM FREESPEAK II
- THE SOLO - FUN TIMES ON THE ROAD
- ADAMSON S SERIES LAUNCH - A BIG DAY OUT IN BROOKLYN
- REVIEW: ELATION CUEPIX BLINDER WW4

ALSO ON OUR BLOG
[@ WWW.CXMAGBLOG.COM](http://WWW.CXMAGBLOG.COM)



BLOGBOX

COPYRIGHT AND LEGAL NOTICES COPYRIGHT

CX Magazine is Copyright CX Network Pty Ltd. All contents protected by international copyright law. All copyright breaches vigorously prosecuted in any jurisdiction. Images, concepts, writing and content cannot be reproduced or transmitted in any medium whatever without the express written consent of the publisher.

EXEMPTIONS:

Articles, news of features in CX may be photocopied and distributed for educational use at accredited educational institutions without further consent required, provided such use is expressly for class instruction on a related topic, and where such use clearly identifies CX Magazine as the source. This exemption does not apply to electronic reproduction.

Articles from the News section of CX may be referenced under 'Fair Use' provisions in other news media, provided CX Magazine is clearly referenced as the source and any quotes are clearly attributed.

Feature articles or Gearbox reviews generally may be reproduced by stakeholders referenced within the story at no cost, provided specific written consent is sought prior to use.

LEGAL DISCLAIMERS

All material in CX Magazine is carefully edited and vetted before publication. In the event anything herein may cause confusion or may contain inaccuracies, please contact the publisher immediately. Where an inaccuracy or confusion is found to exist, we undertake to remedy any such instance as soon as possible. Do not rely on material contained within CX Magazine or

broadcast on any CX media if making material decisions relating to safety. Always seek professional advice before implementing, or changing any safety system or procedure.

While all care is taken in production of CX media and material, the occasional mistake may arise. We apologize in advance should this happen.

SUBSCRIPTIONS

A subscriber may cancel a subscription at any time, and is entitled to a refund representing un-delivered future editions. Any such cancellation must be made in writing or email. Please allow 28 days for the refund.

The publisher will replace any missing or damaged copy at no cost, but is not responsible for editions more than three months after publication date.

Roland

XS SERIES

MULTI-FORMAT MATRIX SWITCHER Version 3.0

XS-84H  | XS-83H  | XS-82H 

MADE IN JAPAN



**Now shipping
version 3.0**

Versatile, powerful and seamless

The XS series is equally suited to multiscreen matrix displays and traditional video mixing applications.

- Scalers on every input and every output
- Seamless switching between HDCP sources
- Remote iPad and PC/Mac control software
- Enhanced HDBaseT control abilities
- Cross-dissolve, PVW/PGM and PnP modes
- Multi-format including HDMI, RGB, VGA and composite
- 16 channel audio mixer with powerful DSP



See it at the Entech Roadshow February 2016!

PH: (02) 9982 8266
<http://proav.roland.com/>

LEADING BY EXAMPLE

ARIANA GRANDE WORLD TOUR • LD CHRIS KURODA

BARRY MANILOW FAREWELL TOUR • LD SETH JACKSON

BMFL™

Spot

Blade

Wash

WashBeam

Wash XF

AC/DC STADIUM TOUR • LD PATRICK WOODROFFE

MAROON 5 WORLD TOUR • LD LEROY BENNETT

THE GRATEFUL DEAD FAREWELL TOUR • LD CANDACE BRIGHMAN

TEEN CHOICE AWARDS • LD TOM KENNY

DEMO ONE TODAY! CALL 1300 ULA GROUP



TOTAL VISUAL SOLUTIONS

EMAIL sales@ulagroup.com

CALL 1300 ULA GROUP | 1300 852 476

ulagroup.com

[f /Total.Visual.Solutions](https://www.facebook.com/Total.Visual.Solutions)

ROBE®

www.robe.cz

JULIUS GRAFTON PRESENTS

ENTTECH

ON TOUR

SHOWGUIDE 2016



Melbourne Park Monday 8th Feb

Sydney Australian Technology Park Wednesday 10th Feb

Brisbane BCEC Monday 15th Feb

Adelaide Convention Centre Thursday 18th Feb

Perth Exhibition & Convention Centre Monday 22nd Feb



1994 1996 1997 1998 2000 2002 2003 2004

Sydney Sydney Melbourne Sydney Olympic Park Sydney Sold to ETF Sydney

ENTECH TIMELINE

ENTECH came home when Juliusmedia bought the show back earlier in 2015. ENTECH ON TOUR is dedicated to the memory of co-founder Caroline Fitzmaurice Grafton, pictured. Caz died in July 2015 from a brain tumour. Caroline ran ENTECH from inception in 1994 until 2002. The show was then sold to ETF who ran the event until 2015. Pictured with daughter Jess, now aged 30.



 /CX MAGAZINE

 @CX_ ROADSHOW

ON TOUR

See you at ENTECH 2017 - Touring Australia next February

ENTECH has tracked the fortunes and technologies of the live production industry since inception in 1994. At its peak the show occupied 10,000 square metres of exhibition space and attracted 100 exhibitors. The show was boosted by international interest in the Sydney Olympics, and the explosion of digital lighting and audio.

While the industry has steadily grown in revenue each year, profitability has shrunk with increasingly short product cycles and rapid advancement in manufacturing technology.

Necessary consolidation has seen the number of distributors decrease, and the trade show industry has been transformed. CX sold ENTECH in 2003 after a decade because the experience didn't feel right any more. Some exhibitors were overspending in a kind of space-race. We plugged the money into our now dead training college.

Now ENTECH is right sized, providing a cost effective platform for exhibitors to reach out and visit trade in each state. ETF quit the show in February last year, and we bought the name and database and rolled in our successful CX Roadshow.

So here we are! The CX team really enjoy this format, which has grown year on year. Now we are in our fifth year of Roadshows, with an inaugural ENTECH Roadshow touring New Zealand in July.

Enjoy!

2006 2008 2010 2011 2012 2013 2014 2015

Sydney

Sydney

Cancelled

Sydney w/SMPTE

Melbourne Park

Sydney w/SMPTE

Melb Royal Ex

SOLD TO CX

welcome to **ENTECH 2016**

ENTECH On Tour is a ONE DAY touring pop-up tradeshow that is specifically targeted at industry professionals from the audio, video, lighting and staging markets in Australia.

ENTECH On Tour features a support program of seminars and educational events, along with demos and social components.

4 Venues

How to & what to see at ENTECH On Tour

6 Seminars

FREE in-show: Lighting , Audio Seminars & Demos
ARCA - Australian Road Crew Association

7 ENTECH 2017

Touring Australia in 2017 from 17th - 21st February

8 On Tour Guide

The latest technology in audio, video, lighting & staging

23 ENTECH New Zealand Roadshow

New Tour in July - boarding SOON!

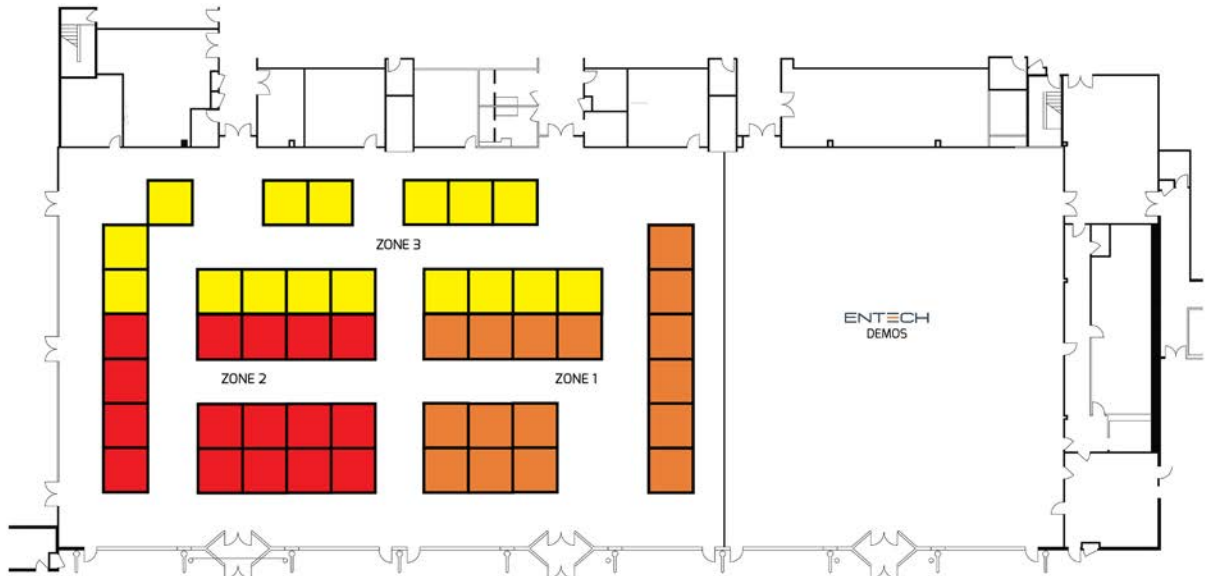
JULIUS GRAFTON PRESENTS

ENTECH
ON TOUR

JULIUS GRAFTON PRESENTS

ENTECH

ON TOUR



ENTECH MELBOURNE PARK FUNCTION CENTRE

ENTECH EXHIBITION

ENTECH DEMOS

ENTECH SEMINARS



Melbourne Park Monday 8th Feb
Batman Ave, Melbourne VIC 3000
www.melbournepark.com.au
(03) 9286 1600



Parking

If you registered before December 10, you received a confirmation email with free parking. Just bring this with you and redeem it at registration for your parking ticket. We will email you prior to the show with EXACT details on WHERE to park – some venues have several parking options and some of these may not be available. So please take care!

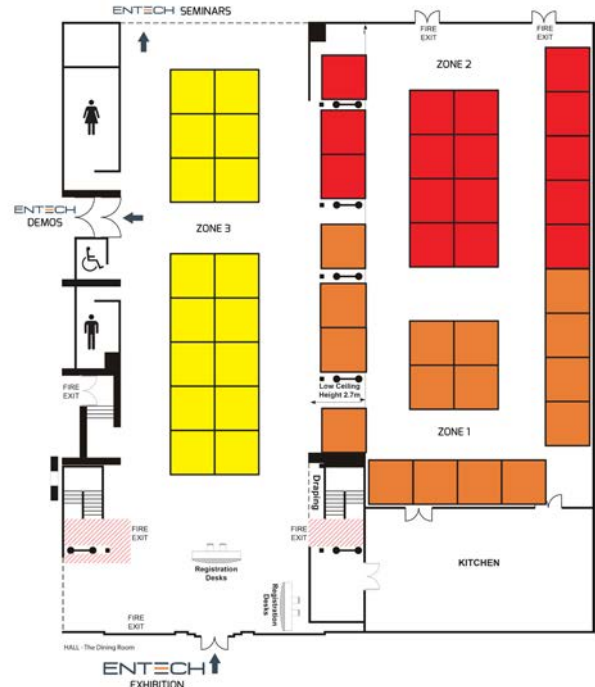
Melbourne Park Monday 8th Feb

Sydney Australian Technology Park Wednesday 10th Feb

Brisbane BCEC Monday 15th Feb

Adelaide Convention Centre Thursday 18th Feb

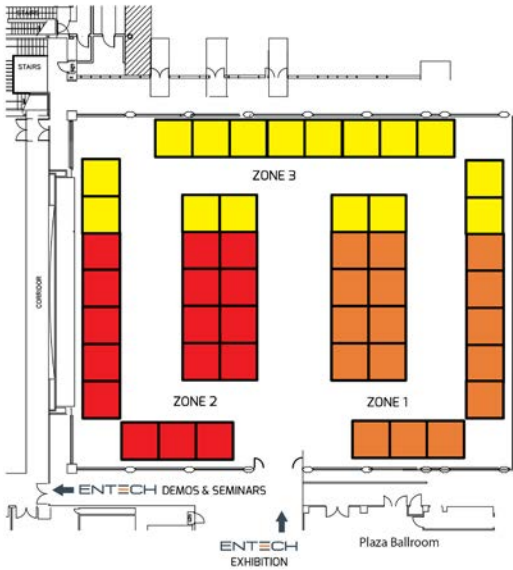
Perth Exhibition & Convention Centre Monday 22nd Feb



ENTECH AUSTRALIAN TECHNOLOGY PARK SYDNEY



Sydney Australian Technology Park
Wednesday 10th Feb
Locomotive St, Eveleigh NSW 2015
www.atp.com.au
(02) 9209 4220

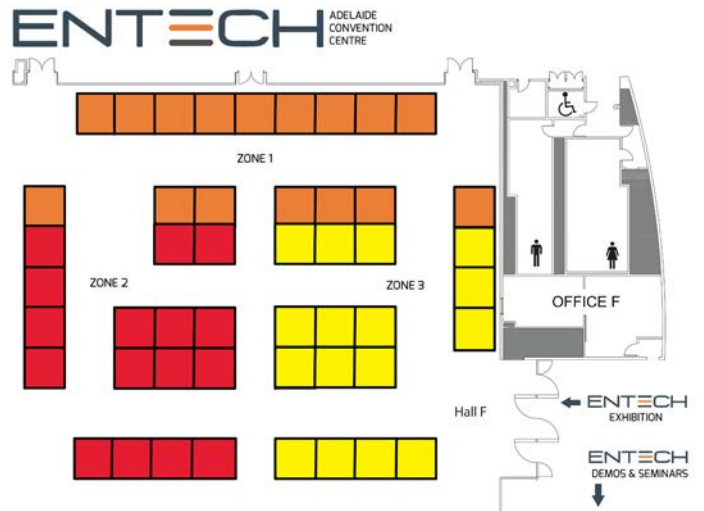


Brisbane Bcec Monday 15th Feb
 Merivale St & Glenelg Street, South
 Brisbane QLD 4101
www.bcec.com.au
 (07) 3308 3000



We've arranged the show in three Zones, to help you find the exhibitor you are looking for a little easier. It is not a large show, by design, and visitors tell us they prefer it this way!

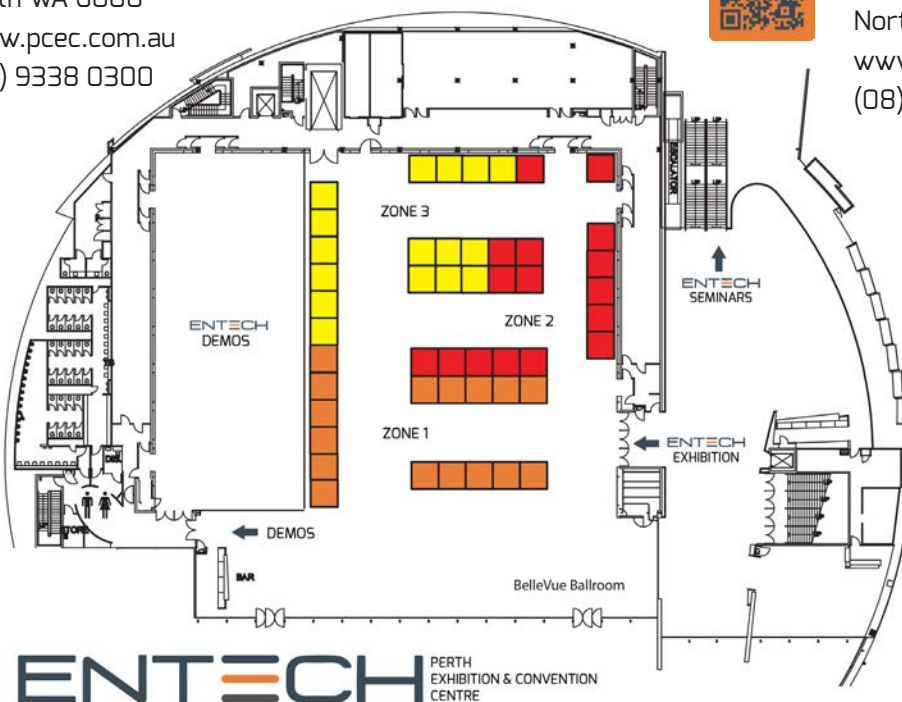
There are two sizes of exhibit at ENTECH – a regular 3 x 3 metre space, and a double 6 x 3 metre space. No one can buy larger than 6 x 3, which keeps things realistic!



Adelaide Convention Centre Thursday 18th Feb
 North Terrace, Adelaide SA 5000
www.adelaidecc.com.au
 (08) 8212 4099



Perth Exhibition & Convention Centre Monday 22nd Feb
 21 Mounts Bay Rd,
 Perth WA 6000
www.pcec.com.au
 (08) 9338 0300



SEMINARS

AUDIO STREAM *

12:00 pm Approaches To Line Array Optimisation And Control

Product specialists representing major line array manufacturers discuss their very different approaches to line array steering, control and optimisation. Gain insight into what runs under the hood of the big rigs, and what leading manufacturers think are the biggest challenges in deploying and controlling line array systems.

Moderated by Jason Allen

2:00 pm Dante Via – make every audio channel a Dante channel!

Audinate's revolutionary Dante Via software turns every audio channel connected to or running in your computer into a Dante channel. This means every input and output on any external audio interface, or any input or output from software such as iTunes or Skype, can now be distributed, connected, played back or recorded by any other device on your network. This has HUGE implications for education, worship, corporate and community applications.

Jason Allen delivers a hands-on class on the amazing possibilities.

3:30 pm Audio Demo, Big Systems Run Loud!
Venue: Demo Area

Moderated by Jimmy Den-Ouden

LIGHTING STREAM *

11:30 am Media Servers – Getting The Most From Media On Any Gig

Once the exclusive domain of spectacular events like VIVID, media servers are now used every day in corporate work, school musicals, dance recitals and presentations. This seminar looks at the proliferation of affordable devices, set-up and optimization with your existing projectors, and creative tips and techniques to bring any gig to life.

Moderated by Julius Grafton

1:30 pm Lighting Demo, Big Is Best For Moving Lights!

Venue: Demo area

Moderated by Jimmy Den-Ouden

2:00 pm Upgrade Pathway To LED

Are we there yet? There's life in conventional light sources still, but LED is everywhere. Join some industry experts for an update on what works, what doesn't, and the hidden traps if you convert your venue to LED.

Moderated by Julius Grafton

*ATTENDANCE TO ALL SEMINARS IS FREE

SUPPORTING

ARCA Australian Road Crew Association

The primary aim of ARCA is to facilitate and encourage social intercourse between members on a continual basis. This is achieved through social events and the ARCA web site.

The secondary aim of ARCA is to raise funds for its Benevolent Fund. The purpose of the Benevolent Fund is to act as a resource to members needing financial assistance in accessing health, education and welfare from the various relevant organisations.

ARCA has just come together with Support Act Limited to establish a specific fund to assist current and former road crew who are in need. Donations to the fund are tax deductible. Donate here: <http://supportact.org.au/donate/> and make sure you write 'Roadie' in the field provided.

ARCA hosts reunions of crew, next reunions are after Easter 2016 in Melbourne and Sydney. ENTECH hosts ARCA members at happy hour and will pass a bucket around to raise funds.

AUSTRALIAN ROAD CREW
ASSOCIATION PTY LTD
Contact: Piggy 0415 667221

For information on how to join
ARCA visit the web site at:
www.australianroadcrew.com.au



FEBRUARY
7th - 21st
AUSTRALIA

ENTECH On Tour is a ONE DAY touring pop-up tradeshow that is specifically targeted at industry professionals from the audio, video, lighting and staging markets in Australia. ENTECH On Tour features a support program of seminars and educational events, demos and social components.



SYDNEY
Tuesday 7th Feb

BRISBANE
Thursday 9th Feb

MELBOURNE
Tuesday 14th Feb

ADELAIDE
Thursday 18th Feb

PERTH
Tuesday 21st Feb



ENTECH

JOIN THE TOUR IN **2017**
INDUSTRY SHOWCASE | LIVE DEMOS

The right-sized touring industry technology trade show, bringing you & your industry clients together across Australia. Touring nationally in 2017. EARLY BOOKING DISCOUNTS APPLY. Contact - Steve@juliusmedia.com

WWW.ENTECHONTOUR.COM.AU
A JULIUSMEDIA GROUP PRODUCTION

NEXT YEAR!



ENTECH
ONTOUR



Solid State Logic Network I/O

Featuring MADi Dante Bridge and Remote Stage Boxes bringing Network Control to SSL's renowned Superanalogue™ Pre Amp design.



Vue AudioTechnik H15

With full Dante input capabilities as well as integrated DSP for network control and monitoring.

Also on tour:

- SSL - L500 PLUS
- DPA Microphones - Slim lapel mics
- Neutrik Multimedia Range of Data Connectors
- Radial - Headload Prodigy
- Radial - JDV MK5
- DPA D:Vote Touring kits
- Electrovoice EVID PC6.2, 6.5-inch (200W) 2-way Ceiling Mounted Speaker System
- Blue Microphones - Hummingbird Pencil Condenser

Special Guests Include:

- Paul Lindsay - SSL
- Alex Schloesser - Vue Audiotechnik

Amber Technology
 web: www.ambertech.com.au
 phone: +61 2 9998 7600
 address: Unit 1, 2 Daydream St
 WARRIEWOOD NSW Australia 2102





SurgeX

Rack Mounted Premium protection and conditioning for audiovisual and security equipment.



RTI

RTI specializes in control products for automating the operation of audio, video, and lighting systems.

Also on tour:

- RTI Network Control Components
- RTI IOS & Android Control Solution
- AVGear Scalers
- AVGear Flexible Video Matrix
- AVGear Table Pop-Ups.
- AMC Commercial Speakers
- AMC Installation Amplifiers
- AMC iLive Radio Mics
- AMC Mixing Amplifiers
- AMC DSP

Special Guests Include:

- Mark Hamilton -
Avation Director
- Neil Laycock -
Commercial Consultant



Avation
web: www.avation.com.au
phone: 07 5580 3300
address: 2/55 Newheath Drive
ARUNDEL QLD Australia 4214



Intimidator Spot 455Z IRC

Intimidator Spot 455Z IRC is an extremely bright, 180 W LED moving head spot designed for large events.



Intimidator Trio

The Intimidator Trio is an innovative, LED-powered moving head with beam, wash and effect features.

Also on tour:

- LD SYSTEMS - Maui5 Audio System
- LD SYSTEMS - Dave 5 Rodie
- CHAUVET - Intimidator Spot 355Z Irc Moving Head
- CHAUVET - Hurricane 1600 Smoke Machine
- CHAUVET - Slim Par Quad 12 Irc Led Par
- CHAUVET - 4 Bar Tri Usb Led Par Bar
- AVE - Stage Par Quad 18
- GRAVITY - Speaker Stands
- GRAVITY - Microphone Stand
- GRAVITY - Keyboard Stand

AVE Corp
web: www.avecorp.com.au
phone: 03 9706 5325
address: 318 Hammond Rd
DANDENONG SOUTH
VICTORIA Australia 3175



BOSCH**ZONE**

Electro-Voice X2 Advance Line Array with X12 Sub

Faster to set up, more compact, higher output and lower distortion compared to similar priced systems. Hear it at the shoot-out.



PAVIRO Public Address and EVAC System

New PA and EVAC system with DSP, professional sound, lowest energy consumption in its class and up to 492 zones.

Also on tour:

Electro-Voice ETX Loudspeakers [2000 W]
 Electro-Voice EKX Loudspeakers [1500 W]
 Electro-Voice and Bosch Compact Sound Systems
 EVID Premium Ceiling Speakers with Compression Drivers
 BOSCH DICENTIS Wireless Conference System
 Dynacord AXM-12A Monitor and PA Loudspeaker
 Dynacord PM502 Analog-Digital, 100 V and low ohm Mixer
 New line of Electro-Voice Vocal and Instrument Mics

Bosch Security Systems
[Bosch, Dynacord, RTS, Electro-Voice]
 web: www.boschcommunications.com.au
 phone: 1300 026 724
 address: Level 2, 21 Solent Circuit
BAULKHAM HILLS NSW
Australia 2153



BOSCH
 Invented for life

BOSE**ZONE**

Bose® F1 Model 812 Loudspeaker

The Bose® F1 Model 812 Flexible Array Loudspeaker is the first high-powered portable loudspeaker with unmatched vertical coverage control and unsurpassed audio quality.



Bose® F1 Subwoofer

With 1,000 watts of power, the Bose F1 Subwoofer packs all the performance of a larger bass box into a more compact design that's easier to carry and fits in a car.

Also on tour:

L1® Compact - portable line array system
 PowerMatch® configurable professional power amplifiers
 RoomMatch® Utility small-format foreground/fill loudspeakers
 ControlSpace® ESP engineered sound processors

BOSE®

Bose Professional Division
 web: <http://pro.bose.com>
 phone: 02 8737 9999
 address: Unit 2/3 Holker St
NEWINGTON NSW Australia 2127

www.boschcommunications.com.au

<http://pro.bose.com>

ZONE



Mac Viper

The 1000w Martin Mac Viper range outperforms similar 1200-watt fixtures when it comes to speed and efficiency.

ZONE



Samuelson Cases

Samuelson Cases, who dominate Broadcast, now by CaseComAu, raising the bar in ProAV with featherweight welded cases.



Clay Paky Scenius

It has 8' to 55' zoom and is perfect for large shows, TV studios and exhibitions.

Also on tour:

- Mac Viper (Range)
- Clay Paky Mythos
- Hercules
- GLP X4 Bars



GOPAK375

GOPAK375 cable packer, removable partitions, truck pack width.

Also on tour:

- New Mobile Workstations for mobile technicians
- New Tilt and Roll cases, multifit but extra slim/light
- GO Case products
- Blue Cat Case Company MIXER-WORKSTATION Cases
- New models of TREKA waterproof cases
- New heavy duty featherweight ALUM rack drawers, shelves
- Samuelsons welded cases



Chameleon Touring Systems Pty Ltd
 web: www.chameleon-touring.com.au
 phone: 02 9643 4999
 address: 11 Percy St
 AUBURN NSW Australia 2144



Cases Com Au.
 web: www.cases.com.au
 phone: 07 3889 7755
 address: 6 Unley Street,
 BRENDAL, BRISBANE QLD Australia 4500

ZONE



LDR Follow Spot 1200w MSD/MSR
 Incorporates a double condenser zoom optical system & a large side handle to control pan/tilt.

ZONE



HK Audio Linear 5 LTSA system – LTSA and 2 x SUB4000A
 LTS A has arrived, and it's the first speaker to deliver real long throw performance in an ultra-compact format



SWEFOG Ultimate 2000 Hazer
 Quiet output and hang time of 4+hours. Very economical fluid usage can facilitate significant yearly savings.

Also on tour:
 Apollo Right Arm
 GDS Arc System and Blues system
 Zero88 Jester Console



Mystery Mackie Reveal
 Fresh from the NAMM show! Be the first in the world to get a hands on demonstration of the latest professional offering from Mackie.

Also on tour:
 HK Audio Nano 608i - New Product
 Mackie DL32R - Demonstrating Master fader 4.0.
 Adamson Metrix System Line array - Line array shoot out.
 MC2 - E series
 XTA - DP series
 Tascam DR series

Special Guests Include:
 Jason Tan - Product Specialist from Mackie



Clearlight Shows Pty Ltd

Clearlight Shows Pty Ltd
 web: www.clearlight.com.au
 phone: 03 9553 1688
 address: 5 Horscroft Place,
 MOORABBIN VIC Australia 3189

CMI
 web: www.cmi.com.au
 phone: 03 9315 2244
 address: 36/30-38 Export Dr,
 BROOKLYN VIC Australia 3012





ZONE

GaffGun

Revolutionising the speed and ease of laying gaff tape saving time, money and your back!



ZONE

DTS EVO

A true Beam and Spot with a 440w lamp and a beam opening of 2 - 39 degrees CMY and FPR.



U-Drop

Modular stacking suspension frame system - Global Truss' BIGGEST selling new product!

Also on tour:

- ProLyft 250kg Chain Hoist
- ProLyft 1000kg Chain Hoist
- Sofa Case
- StageDex TopLine Decks
- Dirty Rigger Gloves & Accessories



Profilo 80

80 watt LED profile with RGBW and 18 - 36 degree zoom. No heat and flicker free.

Also on tour:

- New Pharus 1500 watt followspot
- Dive Underwater lighting range
- Rack mounted LED controllers

Special Guests Include:

Paolo Albani - DTS International Sales Manager

Design Quintessence
 web: www.dq.com.au
 phone: 02 9649 2266
 address: Unit 2, 15 Percy St
 AUBURN NSW Australia 2144



australia

The Lighting Company

DTS Australia
 web: www.dts-lighting.com
 phone: 02 9700 8001



PR Lighting XR 330 BWS

High-output moving head, with adopted PR patented technology. The XR330 BWS combines advanced 330 watts lamp technology with a superb optical system.



Soundcraft Vi7000

With optional 96kHz processing, upgraded channel counts and even more reliable hardware. The Vi7000 delivers the best Vi sound ever.

Also on tour:

- AMX SVSI
- Digital Audio Labs Livemix Personal Monitor System
- JBL SRX800 Series
- Soundcraft Si Impact
- ETC ColorSource Spot
- ETC ColorSource Relay
- PR Lighting XLED 3007



audio • lighting • staging

Jands Pty Ltd
 web: www.jands.com.au
 phone: 02 9998 7600
 address: 40 Kent Road
 MASCOT NSW Australia 2020



L-Acoustics X Series

A new line of coaxial speakers that harnesses L-Acoustics' recent engineering breakthroughs found in the K2.



AKG DMS800 wireless microphone system

Offers everything you'd expect from its exceptional predecessor plus additional features to deliver incredible versatility and value.

Also on tour:

- L-Acoustics new X15HiQ
- L-Acoustics new X12
- L-Acoustics new X8
- Roland M5000 digital mixing console
- Roland V-1HD - HD video switcher
- Beyerdynamic new TGD35D drum mic
- Beyerdynamic new RM30 vertical array Revolutio microphone.
- Australian Monitor new AMH range of high powered amplifiers

Special Guests Include:

- John Lancken - Roland Professional AV Division Manager
- Marc Allen - Roland Professional AV Product Manager

Hills
 web: www.hills.com.au
 phone: 1300 445571
 address: Unit 1, Building F 3-29
 Birnie Ave SYDNEY NSW 2141



HME

ZONE



Stagemaker SR series Chain Hoists

The only hoist with double brakes standard. SR1, SR2, SR5 and SR10 for loads 125 to 2000 kg.

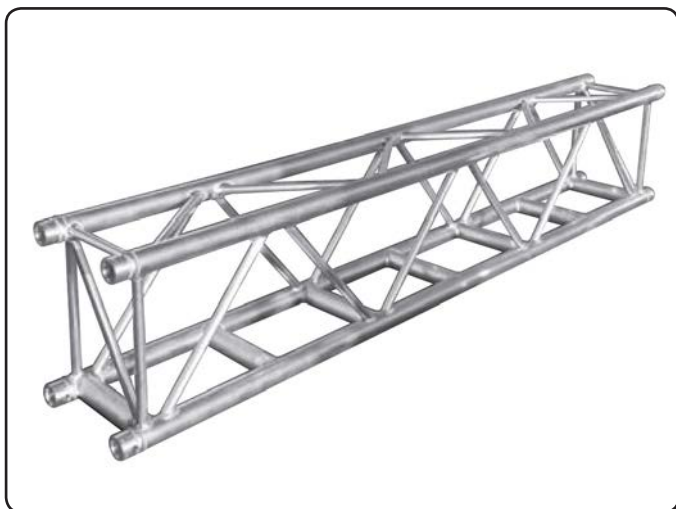
LEXAIR

ZONE



NEW High End Systems Solaspot Pro 2000

Raising the bar AGAIN! Latest super-bright LED moving lights allow designers complete creative freedom.



Prolyte H40R Truss

Compact Stacking, high strength, designed for moving lights. Part of the Prolyte Exchange Program

Also on tour:

- Doughty Professional Clamps
- Kinesys - Vector - Software
- Kinesys - Digihoist Fixed Speed Hoist Control
- Kinesys - Elevation Variable Speed Hoist Control
- Kinesys - Libre Load Cell
- RAT Stand - Alto Stand
- Artistic Licence - Moody Control
- HME - Curtains and Tracks
- HME - Lighting Bars
- HME - Professional Enclosures

HME Services
 web: www.hme-services.com.au
 phone: 1300 873 463
 address: 64 Harley Crescent,
CONDELL PARK NSW
 Australia 2200



NEW High End Systems Hoglet 4

The new Hoglet 4 USB Wing turns your PC into a fully-fledged Hog 4 console.

Also on tour:

- NEW High End Systems UNO LED Beam Moving Light
- NEW High End Systems SolaWash Pro 2000 LED Moving Light
- NEW High End Systems MiniWing 4
- High End Systems Hog 4 Range
- Green Hippo Hippotizer V4 Range
- AViary Video Tools with V2 Software
- High End Systems SHAPESHIFTER LED Moving Light
- High End Systems SolaSpot Pro 1500 LED Moving Light
- Solaris SoLED LED Strobe
- Solaris Mozart Creative LED Pixel



Lexair Entertainment
 web: www.lexair.com.au
 phone: 0418 691 509
 address: 11/14 Tuckwell Place,
MACQUARIE PARK NSW Australia 2113

ZONE



Mantra-Lite

The Mantra is simple - making control of LED fixtures easy and intuitive, while still allowing control of moving lights and conventionals.



GVW

Compact wallmount dimmer/relay rack with advanced feature set, including PTFD, RDM and CCT.

Also on tour:

Redpatch 1RU, LX600 console, APS, DNA, DeSisti LED Softlight, DeSisti LED Fresnel, Red3, Powerpoint & LDT.

Special Guests Include:

Richie Mickan - Mantra-Lite Console Product Manager
Trevor Sykes - Senior Technical Manager and Head of R&D



LSC Lighting Systems
web: www.lsclighting.com.au
phone: 03 9702 8000
address: LSC Lighting Systems
65-67 Discovery Road
DANDENONG SOUTH VIC 3175

ZONE



Mobile Air Wall

Fast and easy solution to unwanted sound spillover at music concerts, exhibitions, meeting spaces, theatres.



Company Branded Straps

Strong, durable straps for securing cables, leads and materials. Custom designed with your company logo!

Also on tour:

Carrymate - Self-adjusting panel grip



Mega Vision Sound & Lighting
web: www.megavision.com.au
phone: 08 9444 6556
address: 25 Gordon Road (West)
OSBORNE PARK WA Australia 6008



ZONE

Leopard

Reproduces the audio source with extraordinary accuracy, captivating audiences with both power and subtle musical detail.



ZONE

d&b audiotechnik V-Series Point Source Loudspeakers

A new breed of point source loudspeakers from d&b audiotechnik. Reliable. Lightweight. Compact.



900-LFC

A combination of consistency and headroom gives you total flexibility and control in low-end directivity system design.

Special Guests Include:

Chris Dbais -
National Sales Manager, Meyer Sound Australia
Miguel Lourtie -
Product Specialist, Meyer Sound HQ



Listen Technologies iDSP IR

Listen Technologies' next generation of intelligent infrared personal listening products.

Also on tour:

dB Technologies - ES Series PA Systems
Chiayo - DC Series Digital Tour Guide Systems
Midas - M32 Series
Cambridge Sound Management - Conference Room Edition
InterM - PMU-N Series Mixer Amplifiers
K-Array - KAN200 Anaconda Flexible Array
Triad Orbit - Advanced Orbital Stand Systems
Ashly - Ne24.24 Matrix Processors

Special Guests (from d&b audiotechnik) Include:

Mike Case - APAC Territory Manager
Gert Sanner - APAC Application and Education Manager
Brian Vayler - APAC Technical Sales Specialist



Meyer Sound Australia
web: www.meyersound.com.au
phone: 1800 463 937
address: Unit 7, 459 Tufnell Road,
BANYO QLD Australia 4014

National Audio Systems
web: www.nationalaudio.com.au
phone: 1800 463 937
address: 127 Merrindale Drive,
CROYDON, VIC Australia 3136





PT-RQ13KE

The compact and lightweight PT-RQ13K projector employs Quad Pixel Drive technology to deliver 10klm of extremely detailed, 4K image quality.



PT-DZ780

The dual-lamp PT-DZ780 outputs 7,000 lm at WUXGA resolution and introduces a host of premium features normally found in large-venue products.



Panasonic Australia Pty Ltd
 web: www.panasonic.com/au/
 phone: 1300 880 600
 address: 1 Innovation Rd,
 MACQUARIE PARK NSW Australia 2113



EAW Redline Speaker Series

Sets up fast, requires little or no tuning, sounds spectacular and looks as good as it sounds.



Luminex GigaCore Network Switches

Provides an excellent solution for expanding your network. Ideal for the entertainment industry, delivering exceptional performance, quality, and reliability.

Also on tour:

- Powersoft X Series Amplifiers
- Countryman H6 Headset mic
- Audix DP7 Drum mic pack
- Symetrix Radius Dante Processor and Router
- Atterotech Dante wall panels
- Cornered Audio speakers
- Klotz Fibre cable solutions
- RDL converters and wall panels
- Ecler speakers and amps
- Stewart Audio Dante Amplifiers



Production Audio Video Technology (PAVT)
 web: www.pavt.com.au
 phone: 03 9264 8000
 address: 4/621 Whitehorse Road,
 MITCHAM VIC Australia 3132

ZONE



Selecon PL- Mark 2 Range

The successful Selecon PL-LED Range (profile, Fresnel & cyc) have all been upgraded with new LED engine and software for control.

ZONE



GroundControl Follow Spot System

PRG are proud distributors of the GroundControl Follow Spot System. Come check out our amazing range of products at the Entech Roadshow.



Showline DMX Rec-Playback controller

Simple DMX show controller, single universe with 8 memories (scenes, chases & shows) for playback.

Also on tour:

- Philips Showline LED Drivers
- Philips Strand 150s LED Softlight
- Philips Selecon Studio Panel MKII LED Luminaire
- Philips Strand RDM Network Splitters

Special Guests Include:

- Peter McKenzie - Australian Market Manager
- Phil Sargent - Philips Entertainment Product Specialist



V-Command Automation Console

PRG are proud distributors of the V-Command Automation Console. Come check out our amazing range of products at the Entech Roadshow.

Also on tour:

- Bad Boy luminaires
- Mbox media servers
- SpeedStar Variable Speed Chain Hoist



Philips Entertainment
 web: www.seleconlight.com
 web: www.strandlighting.com
 web: www.philips.com/showline
 phone: 0419133342

PRG
 web: www.prg.com
 phone: 03 8710 2555
 address: 88 Nathan Road
 DANDENONG SOUTH
 VIC Australia 3175





MicroN

A high-density signal interface for productions of all sizes. Seamlessly teamed with MetroN.



MetroN

2RU large scale Core Router providing 640 GB real-time signal-routing capacity.

Also on tour:

MediorNet Compact Pro
MediorNet Modular
Artist 64 Matrix
Artist Smart Panel
Artist Virtual Panel
Acrobat Wireless belt pack
Performer C3 wired beltpack
Riedel headsets



RIEDEL Communications Australia Pty Ltd
web: www.riedel.net
phone: 02 9669 1199
address: Unit 2/38 Morley Ave,
ROSEBERY NSW Australia 2018



Clay Paky Scenius

Scenius is the new moving head spotlight at the top of the Clay Paky range.



Martin MH 6

Rush MH 6 Wash with zoom, the newest LED moving head in HARMAN's Rush by Martin series.

Also on tour:

Robert Juliat Dalis
GLP Impression Bar
Show Pro Quad Up and Hercules



Show Technology Australia
web: www.showtech.com.au
phone: 02 97481122
address: 102 Derby St,
SILVERWATER NSW Australia 2128

ZONE



LightSky Aquabeam 440 IP54

Featuring Osram 440w lamp, CMY Color Mixing and 2 Prisms.

ZONE



Allen & Heath dLive

Intuitively at your fingertips, all the processing power you need to handle the most demanding live scenarios.



TourPro Vortex XL

Featuring 7 x 60w RGBW LED, 3.5° - 50° Zoom, Pixel control and Vortex Beam effect.

Also on tour:

Avolites Sapphire Touch
 Avolites Quartz
 Ayrton - Magic Dot
 Ayrton Magic Blade
 TourPro Storm RGBW
 TourPro Titan UV
 TourPro Titan 400i
 TourPro Spark
 TourPro Halo
 Terbly 180C LED Profile



QSC Core110f

Exceeding customer and project expectations, Q-SYST™ has no equal as an integrated, scalable DSP platform.

Also on tour:

Allen & Heath ZED10iFX Mini Mixer
 Audio-Technica AT9934USB Microphone
 Audio-Technica ATH-M50xDG Headphones
 Audio-Technica ATH-R70x Studio Headphones
 Audio-Technica System10 Wireless Boundary Mic
 Audio-Technica ATND971 Dante Boundary Mic
 QSC TouchMix8
 QSC Q-SYS Tabletop Touchscreen Controller

Special Guests Include:

Alex Schloesser - Allen & Heath

SHS
 GLOBAL

SHS Global
 web: www.shsglobal.com
 phone: +61 418 454 837
 address: 2-23 Expansion Street,
 MOLENDINAR QLD Australia 4214

tag | Technical
 Audio
 Group

TECHNICAL AUDIO GROUP Sydney
 web: www.tag.com.au
 phone: +61 (02) 9519 0900
 address: 43-53 Bridge Road,
 STANMORE NSW Australia 2048



Broadway Wireless Load Cell Shackles

Feature high accuracy , precision engineered load pin and integrated electronics. Load monitoring without cabling headaches.



Limpet Height Safety System

Limpet combines simple design with intelligent systems to make the single best height safety system.

Also on tour:

- Super Ratchet Podger spanners
- Skylotec Height Safety
- Stageket Chain Hoists
- Doughty Engineering
- Gacflex Steelflex Slings
- Slingtech Slings
- Reutlinger Wire Sliders
- Pulleys
- Chain Blocks
- Beam Clamps



The Rigging Shop Pty Ltd
 web: www.theriggingshop.com.au
 phone: (02) 9086 8118
 address: 5 Bay Street,
 BOTANY NSW
 Australia 2019



Robe VIVA

Elegant and lightweight, packed with smart effects, Robe's VIVA features the 270W white LED light engine, which produces an extra punchy beam and an incredible 20,000 hours of operation.



VuePix X3.9 screen

The VuePix X series panels are highly flexible, ultra-thin and super light, designed to create seamless curve-shaped displays.

Also on tour:

- Robe BMFL Blade
- Robe PATT 2013
- Robe ColorStrobe
- Robin CycBar 15
- Robe MiniPointe
- ChamSys MagicQ MQ 80
- Acme Cyc 200 FC
- Acme LED Spot MS500A
- Acme LED Wash 350Z
- LiteConsole Performance Platform

ULA Group
 web: www.ulagroup.com
 phone: (02) 9086 8118
 address: 1/28 Expo Court
 ASHMORE, QLD Australia 4214



THE NEW ZEALAND LIGHT SOUND AUDIO VISUAL ENTERTAINMENT ROADSHOW

[JULY]
[2016]

NEW ZEALAND
TOUR

Auckland

Wellington

Christchurch



CX Network
[PRESENTS]

ENTTECH

NEW ZEALAND ROADSHOW

 /CX MAGAZINE  @CX_ROADSHOW

www.entech.nz

[A JULIUSMEDIA GROUP PRODUCTION]

SOON!

[OCTOBER
2016]
AUSTRALIAN
TOUR

ICTECH ROADSHOW

NEW in OCTOBER!



PERTH
ADELAIDE
MELBOURNE
BRISBANE
SYDNEY



Information & Communications Technology
National Touring Trade Show

[BOOK EARLY, VERY LIMITED!]

The Converged AV Industry's National, Accessible, Affordable, Educational Forum

www.itechroadshow.com.au

[A JULIUSMEDIA GROUP PTY LTD PRODUCTION]