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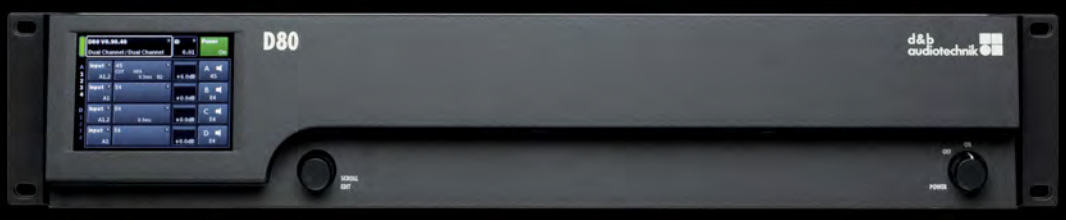
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Know what to look for

Roadskills
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- Philips SL BAR 620
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- Counterfeit JBL Ring
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- Wizard Projects Group, Checkvault
- Eighth Day Sound
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EDITORIAL BY JULIUS GRAFTON

PRESSURE MOUNTS ON INTEGRATORS

Our lead story last month on Audio Product Group being acquired by Hills ignited a flurry of commentary at the Blog (cxmagblog.com)

Typical was this: "APG were the only major opposition to Hills in the area of actively influencing and writing tenders for consultants."

It led me to wonder how much influence suppliers have on consultants. More-so when a leading integrator complained they were installing systems that needed a lot of configuring and commissioning – a burden that falls on the Integrator.

'Imagine 40 units spread over twenty floors and you have to go in there and do a firmware upgrade', he complained. 'That would take three days, and I pay for it'.

Insidiously he said that unready and under-developed products were being specified by suppliers - who in some cases draw up the schematics or the designs for a tender. Relying on the manufacturer they represent to get the product development right.

But it is the Integrator who shoulders the cost, and takes the risk, on the 'new' technology that has come to market just a bit soon, and is being developed past Version 1.0 using the raw experience of the latest contract.

FUNDED BY THE INTEGRATOR

All this would be passé if the Integrators were turning reasonable margins and actually getting paid. But it is said that almost every 'general purpose' electrical or I.T. installer now has access to the specialised goods handled by most of the distributors - because someone at some time got greedy and opened all the lines to all the accounts.

Works well for a while. Sales increase. Then the serious players look elsewhere for supply, and attempt to influence tenders away from the mass market devices.

But worst of all, the current state of play in the building trade has builder/developers pre selling, completing, then conveniently going broke to avoid warranty and tail end payments.

As our Biz Talk pages repeatedly report, lack of compliance and oversight of the corporations act in Australia is costing everyone.

BOOTH BABES

Our photo roundup of Infocomm avoided the occasional idiocy of The Booth Babe / Bimbo, despite the epidemic having been mostly exterminated.

Think about it. You spend far too much hiring concrete from your friendly trade show co. Then you spend 3 x more building and staffing it. Straight off, gays, women and Christians walk by, mentally noting your company name on their black list.

The minority of available customers then fall into three types. Type 1: I had to get info, the only person not talking was one of the promo girls, and of course she could not assist. Type 2: 15% of the guys that visited that stand were sleezebags, and the balance (type 3) were actual customers. Be generous, and customers would account for about 40% of the prospects. Because of the Booth Babes.

It is just dumb.

- Julius

PUBLISHERS PANEL

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Counterfeit JBL Ring

Melbourne firm under investigation

The Darebin Crime Investigation Unit are investigating a Preston based company accused of selling counterfeit JBL SRX and VRX products. JBL Manufacturer Harman International of Stamford Connecticut hired a trade mark investigator recently after Jands, the authorised JBL agent in Australia, detected fake products in the market.

Jands received complaints from users who had purchased the goods from various entities that seem to be one organised gang, led by a Kosta Sivov. The entities used include Hoblos Pty Ltd and Proline Productions. Hoblos is now under external administration, with a long list of goods under finance now subject to resale.



Kosta Sivov

Amongst the goods listed as belonging to Proline, which include various vehicles, are a number of 'JBL' VRX932LA , VRX918S, SRX725, and SRX712M. The serial numbers listed are not genuine JBL numbers. The lease company Pepper Australia Pty Ltd have not responded to CX by presstime, so it is not known where these goods are. Seized goods are usually sold off. A list of serial numbers is on the Knock Off Entertainment Gear Australia FaceBook Group.

Various other parties are named in association with the sold and shipped fake JBL, but it's not yet clear whether they were duped or are part of the gang.

Proline Productions directors were Vasco Jovanovski (aged 47) from Preston, and Elizabetha Nedanoska-Josifovska (aged 43) from Thomastown. It is not known whether they had knowledge of the company's activities, and CX does not suggest they have done anything illegal.

CX spoke to two victims who purchased fake JBL from Kosta Sivov or from companies related or tied to him.

Corey Boyd of the Hunter Valley region of NSW purchased a pair of SRX725 along with SRX728S subs.

"They cost $6000 delivered", Corey told CX. Alarm bells rang when he picked them up from the transport co.

"I thought, gee these are heavy for JBLs, and when I looked closer, I saw the handles were ordinary. I took the Speakon plate off and saw no name speakers with big heavy drivers not Neodymium. The subs were over 100kg each."



Genuine **JBL** VRX932LA & VRX918S sub

Corey wasn't stupid, he flew to meet Kosta Sivov at ProLine Productions, and went into the store to have a look at the speakers first. "I did ask if they were fakes, he said 'no way'. Alarm bells were ringing but I ignored them. There were fake Nexo PS10's in that store."

Justin Myers of Toowoomba QLD purchased 6 x SRX712M and as soon as they arrived he smelled a rat. He will not use them, like Corey he does not want to misrepresent JBL on his professional gigs.

"I took one of the pole mounts out and realized I'd been had. I'd wasted $5,000.

They're not real good, I haven't used them on a job. They're not even the same – it's like there's two different batches of knock offs, the wedge angles are slightly different".

Other known fakes include SRX728S and VRX932LA. Some counterfeit EON products have been seized, but these are not known to be connected to Kosta Sivov.

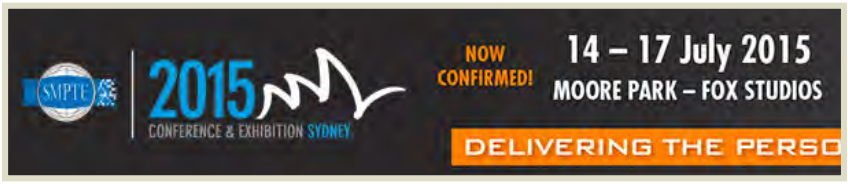
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SPOTTING THE FAKES: See page 62

Tradeshows Season Limps Along

Integrate visitors reject $25 fee

Get ready to pay $25 to get into Integrate, the AV trade-show being held for the first time at Sydney's Olympic Park. If you pre-register BEFORE the show opens on Tuesday 26th August then it is free, like all trade shows should be. The $25 entry fee will guarantee visitor dissatisfaction, indeed a CX survey shows 75% find this unreasonable, while 56% say the fee will deter them from attending.



No it isn't at Fox Studios

Of those surveyed, only 13% had not been to Integrate. The $25 fee is a new initiative of Diversified Communications Australia, who are rolling it out across their various trade shows – often without telling exhibitors who have paid in advance to exhibit. Despite utilizing a cheaper venue this year, Diversified have cranked up the cost to exhibit.

Meanwhile ENTECH-CONNECT showed in Melbourne's less than salubrious Royal Exhibition Building at the end of July with 43 diverse firms on the floor, and significant no-shows. Gone are the days of 100 exhibitors at ENTECH, but Integrate fare much better with 112 – albeit spread thin for audio and lighting.

Sydney's Darling Harbour is now a building site, necessitating secondary venues until the new centre is opened in 2017. SMPTE will next year be staged at Sydney's Moore Park in July, with a misleading 'Fox Studios' prominent on their web site. The show actually will be at Hall of Industries and the Hordern Pavilion – the original home of Integrate. Fox Studios is at the other end of the site, and was the original home of SMPTE, which is owned by commercial operator Expertise Events.

Specialist Integrator Fails

Hopes Wizard will continue

Paul Van der Ent's Wizard Projects Group is in administration, after running into problems with builders but it is hoped the firm may be salvaged. Paul put everything into the firm that was very successful for decades. VideoPro are completing current Wizard projects.

The business is still operating, with VideoPro completing some projects under license.

It is understood Wizard ran into problems with the six star energy rated Nishi building in Canberra last year and took a loss. A recent builder disappearance nailed things for Wizard, which owes creditors around one million dollars – not a lot considering the firms history.



Paul Van der Ent

Escrow – New Way to Pay

Checkvault guarantees payments

Production suppliers and contractors generally are exposed to payment risk, but a new online escrow service based in Sydney offers a streamlined solution. Using Checkvault, a promoter or hirer lodges payment for services in advance. Once completed, both parties authorise payment to the provider.

Checkvault works on the basis a supplier will provide an honest service, and a hirer intends to pay. On that basis the hirer deposits the fee for service, and it is released once the service is delivered. This removes the risk for both parties.

The firm have an online savings calculator that is quite comprehensive, showing your cost of risk once you input details like turnover, bad debt history, and cost of management.

Checkvault funds are held in Perpetual Limited, one of Australia's largest and oldest trust companies. Checkvault was established by Kieran Martin, a well-established Sydney accountant known to hold a conservative client base.

www.checkvault.com.au

* ***CX Network*** *use Watkins Coffee Martin, of which Kieran Martin is a partner.*

Eighth Day Sound open in Australia

Eighth Day Sound and Elite Sound & Lighting in Australia have formed a joint venture

It will provide Eighth Day Sound local Australian service and support and provide a valuable and experienced knowledge of the Australian audio landscape. A large inventory of d&b audiotechnik arrives this month at Elite in Canberra.

Eighth Day Sound's and Elite Sound and Lighting's current audio inventory, together, will supply customers with a great equipment resource. Elite's Lighting, Video, Rigging and Staging inventory, will provide customers with a full service solution.





CX Show Technology Celebrate Twenty Years

It's hard to believe but is has been twenty years since Show Technology was formed, a time when Roboscans and Goldenscans were the sought after technology and Emmanuel was fresh out of the DJ box.

As a company Show Technology set out to provide quality products supported by the best pre and post-sales support they could muster. They offer sales partners design and technical service support and are quite often involved in the intricate planning of major projects right from the early stages of a projects inception. This close working involvement with their partners aim to ensure the company's products are supported long after they have been sold and installed.

Leading the company over this period has been Emmanuel Ziino, a man who has earned respect from the industry, both at home and internationally.

"I am proud to be in charge of an industry leading company that has been around for this long," commented Emmanuel. "The last twenty years has seen much change in technology, markets and people, yet we have always adapted while not losing our core principles of customer service and support."

Of course behind every great man is a great woman and Emmanuel is quick to point out that his wife Gina was crucial to the company's success.

"Gina has been my support from way before Show Technology and was there from the early days setting up accounting and administration systems, some of which are still in use today," he said.

The 20th anniversary was celebrated by over a hundred industry professionals at, not surprisingly, a swish Italian restaurant complete with entertainment by a facsimile of the King himself – Elvis. Many of those present have been by Show Technology's side over the past twenty years.

"Part of our customer base today is still the same group we started with, yet we have many newer and "younger" customers," added Emmanuel. "This provides a healthy mix that keeps our company dynamic."

"We couldn't have got to where we are today without the support and dedication of key staff," remarked Emmanuel. ""I'd like to thank our current team for such a dedicated effort and together, I think we are well positioned for the next twenty years!"

At the anniversary event Vince Haddad, James Moore and Philip Ngay were recognized for their contribution to the company having been there the entire twenty years whilst Ed Santucci was also commended for his ten years with the company.

"This is a great industry with fantastic people that probably doesn't get the recognition it deserves outside our market circles," concluded Emmanuel. "There is a huge amount of talent out there producing shows, conferences, concerts and events daily, usually with limited time and budgets yet with spectacular results."

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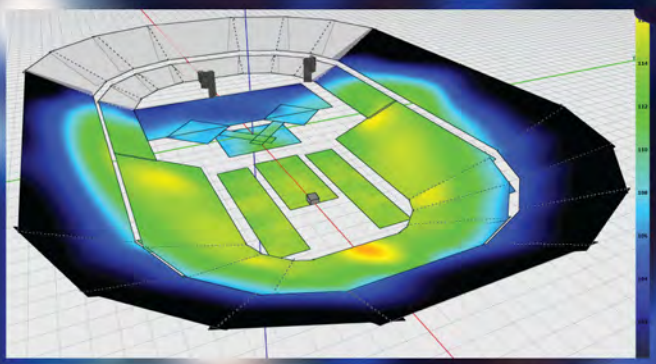


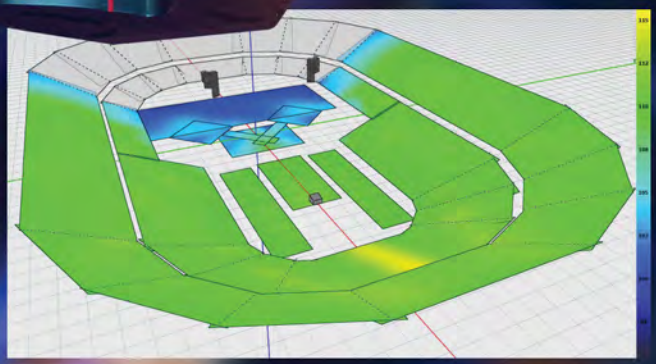
"The Anya system was very powerful, and punchy. It's a very musical PA system, in a very modern package. All of the acts were happy with the FOH mix, and I had a great time mixing the show on this system."

Ron Reaves
FOH Engineer, American Country Awards



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Qu-32 and AB168


AB168

The newest member of A&H's Qu digital mixer family is the 32 fader, 38 in / 28 out Qu-32. It shares the Qu series key features, such as total recall of settings (including faders and digitally controlled preamps), Qu-Drive integrated multi-track recorder, dSNAKE for remote I/O and personal monitoring, multi-channel USB streaming, Qu-Pad control app, and iLive FX Library. It comes with a larger, 7" touchscreen and 33 motorised faders.

Showcased alongside the Qu-32 was the new AB168 portable audio IO rack. Featuring 16 mic preamps with Phantom Power indicators and 8 XLR line outs, AB168 runs on Allen & Heath's proprietary dSNAKE protocol and is compatible with both the Qu and GLD mixer ranges, complementing Allen & Heath's existing 19 inch rack IO dSNAKE products, the AR2412 and AR84.


Qu-32

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QLX-D Wireless System



Shure's new QLX-D Digital Wireless System is a cost-effective solution that features networked control and compatibility with Shure's intelligent rechargeable battery technology. QLX-D Digital Wireless transmits accurate audio with extended, flat frequency response. The system's automatic channel scan and IR sync make finding and assigning an open frequency quick and easy. Ideal for live sound events and installations at corporate and government facilities, academic institutions, houses of worship, hotels, music venues, and more, QLX-D's solid RF performance enables users to confidently cover applications with diverse requirements.

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QSC
CXD-Q Network Amplifiers



Designed specifically for use with the Q-Sys Network Audio Platform, QSC released the CXD-Q Network Amplifier line. CXD-Q models combine the Flexible Amplifier Summing Technology (FAST) found in the CXD/PLD amplifier platform with the same Q-Sys network connectivity and processing to create the ultimate audio routing and power solution for installed sound applications.

Redundant rear-panel Ethernet jacks on the amplifiers makes Q-Sys integration as simple as connecting a standard off-the-shelf Ethernet cable. Like other Q-Sys peripherals, adding CXD-Q amplifiers to a new or existing Q-Sys design is easily done via the Q-Sys Designer Schematic Page. Moreover, the on-board Mic/Line inputs are audio on-ramps onto the Q-Sys network, providing routable inputs to anywhere in the facility.

Australian distributor: Technical Audio Group
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Elation Professional

Happily announcing their new distribution agreement with Show Technology, Elation Lighting released a raft of new product at InfoComm, including the EMAG 4 Pro 4.8mm pixel pitch LED video, the Platinum BX Pro, Platinum SBX and Platinum Profile LED fixtures and SixPar Series of indoor and outdoor PAR color changers featuring revolutionary 6-color LED multi-chip technology.

The **EMAG 4 Pro** is a durable, 4.8mm pixel pitch LED video panel built for taking outstanding high-definition image quality on-the-road. Built of rugged die cast aluminium, tool-less quick locks and a magnetic module design make the EMAG 4 Pro easy to assemble and disassemble. Colours display vivid and consistent and a brightness level of 1,200 nits means the EMAG 4 Pro performs well even in high ambient lighting conditions.

The **Platinum SBX** is a 3-in-1 luminaire which can be utilised as a beam, spot, or wash. This compact fixture combines new lamp technology from a Philips MSD Platinum 17RA 350W lamp with a new optical system for a flat field of light and kicks out 20,000 lumens of power. It also features a zoom, 13 dichroic colours, plus 9 rotating interchangeable gobos and 14 fixed gobos. A beam shaper, rotating 8-facet prism and frost filter are also included.

The new **Platinum BX** is a compact beam luminaire that kicks out over 15,000 lumens. The Platinum BX delivers output along a tight 2.5 degree beam at 4 times the level of previous beam models. It also features 11 dichroic colours including UV, CTO and CTB, along with 13 fixed indexing gobos. A rotating 8-facet prism and frost filter are also included.

The **Platinum Wash 16R Pro** is a moving head that functions as both a beam and wash luminaire. It features CMY colour mixing plus fixed colours, 6.5-48° motorized zoom, beam shaper, shutter/dimmer and has an EWDMX receiver built in.

The **Platinum Profile 35 Pro** is powered by the new Platinum 35 MSR lamp from Philips (800W) and features a rotating 4-blade framing system that allows for full control of the beam shape and delivers an output comparable to 1,200W moving head profile MSR fixtures. Features include a high-quality optical system, 8°-50° motorized zoom, CMY color mixing with variable CTO, color wheel, two gobo wheels plus 160° animation effect and more.

The **SixPar Series** of indoor and outdoor PAR colour changers features a revolutionary 6-color LED multi-chip that provides an expanded palette of colours. Useful for production applications or installations as a wash light, uplight, wall wash, truss warmer and more, the SixPar's high-power single lens RGBWA+UV LEDs provide a creative colour boost to the lighting designer toolbox. It is available in four versions – SixPar 100 (indoor), SixPar 100IP, SixPar 200IP and SixPar 300IP, with 7, 7, 12 and 18 x 12-watt LEDs respectively.

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Hitachi
CP-WU13K DLP Projector



The Hitachi CP-WU13K is a high-performance, 3G SDI-ready projector outputting 13,000 lumens. The CP-WU13K is 3D-ready, incorporates four digital inputs for added versatility and broadcast capability, plus a high-performance filter reducing dust sticking to critical components. For even greater image quality, the CP-WU13K features 3-chip DLP technology and is equipped with 3G SDI. A standard in the broadcast industry, 3G SDI can transfer 1080p signal via coaxial cable. It also includes DICOM (Digital Imaging and Communications in Medicine) Simulation Mode, which projects grayscale images to approximate DICOM Part 14 specifications. This mode is ideal for viewing grayscale medical images, such as X-rays, for training and educational purposes.

Australian distributor: Hitachi Australia • www.hitachi.com.au or (02) 9888 4100



Biamp
Tesira 2.1

Biamp Systems have released version 2.1 of the Tesira family of digital signal processing. For projects that require AEC, Tesira 2.1 includes two new hardware components – the EX-AEC Expander and the EEC-4 Modular Card for the EX-MOD device. These two devices bring Biamp Sona AEC technology directly to the endpoints for easy and efficient AEC and a greater variety in the way systems can be deployed.

Also in Tesira 2.1, Biamp has added multi-channel compression abilities to its comp/limiter compression and the option to use compressors in either advanced or simplified mode at system setup. A new independent limiter block provides more precise decision-making when choosing blocks needed for the installation.

Australian distributor: Audio Products Group
www.audioproducts.com.au/ or (02) 9669 3477

AMX
Enzo, Solecis and Netlinx NX

AMX updated its Enzo Content Sharing and Conferencing Platform with screen mirroring of laptop and mobile device content, simplified launching of Enzo sessions via macros, integration with the Sereno Video Conferencing Camera and previewed upcoming support for web conferencing. Enzo includes support for Skype, Microsoft Lync and Dropbox.

The new family of Solecis digital AV switchers offer an affordable AV switcher, distance transport transmitter and control inputs that enable switching without the need for an external controller. All models include dual outputs; both an HDMI output for a local display, and an AMX DXLink distance transport output for a remote display. When integrated with an Enova DVX All-In-One Presentation Switcher or Enova DGX Digital Media Switcher, participants can collaborate using their local HDMI display and also present to a classroom display over the DXLink output.

The three new models of Netlinx NX Controllers include IPv6 and 802.1x security support for connection to the enterprise network as well as dual NIC functionality to completely isolate IP-controlled AV devices from the network. The new models use half of the power of the previous generation and all models are designed to fit into a 1 RU equipment rack space for increased efficiency and implementation flexibility. The NX Series was designed for full backwards compatibility and adds diagnostic capabilities to ensure proper control cabling implementation and to simplify integration.







Australian distributor:
AMX Australia and New Zealand
www.amxaustralia.com.au
or (07) 5531 3103

Christie
Roadie 4K25 and 4K35

Christie released the ruggedised and designed for rental staging Roadie 4K25 and Roadie 4K35. These 3-chip DLP projectors deliver 4K (4096 x 2160) resolution at 60Hz – with optional 120Hz capability – and 25,000 and 35,000 lumens respectively. For rental and staging applications the Roadie 4K25 and Roadie 4K35 are equipped with Christie TruLife proprietary 1.2 Gigapixel per second processing and built-in image warping and blending to deliver high brightness, high-resolution videos and graphics.

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



VUE
Audiotechnik al-4-sb Flyable Isobaric Subwoofer



Designed specifically for seamless integration with the al-4 Subcompact Line Array System, the highly versatile al-4-sb features rigging options for suspension above or behind al-4 arrays in a variety of configurations. VUE even offers a flyable end fire grid that allows quick assembly of sophisticated al-4-sb end-fire arrays for improved directionality and reduced low frequency energy on stage.

The compact and durable birch enclosure features recessed handles and skids for easy transport and stacking. Integrated rigging allows easy assembly of ground-stacked arrays, while a 20 mm socket accommodates up to four al-4 acoustic elements on a pole with the optional U-bracket.

Australian distributor: Amber Technology
www.ambertech.com.au or 1800 251 367



Allen & Heath
AMX
Biamp
Christie
Creston
DPA
Elation
Focusrite
Hitachi
QSC
Shure
Vue

DPA
Microphones d:fine and d:screet



DPA d:fine 66 singleear BeigeX2



DPA d:fine 88 dualear BlackX3



DPA Microphones d:screet Necklace

DPA Microphones new d:fine 66 and d:fine 88 Miniature Headset Microphones are ideal for productions involving presenters and performers needing to move freely about a stage without obstructions from a handheld mic or mic stand. With a contemporary look and classic sound, the d:fine 66 and d:fine 88 combines the 4066 Omni and 4088 Cardioid microphone capsules with features of the modern d:fine headsets, such as an advanced mount and flexible ear hooks. The new DPA d:fine 66 Omnidirectional Headset Microphone and d:fine 88 Directional Headset Microphone, which are recognized by their rounded capsules, are intended for use by actors, musicians and singers who require optimal sound and grid cleaning/ changing options.

Especially useful for instances when mounting and consistent audio output are the primary requirements, the d:screet Necklace Mic is ideal for quick costume changes. Featuring DPA's legendary d:screet 4061 Omnidirectional Miniature Capsule in a soft rubber necklace, the d:screet Necklace Mic offers fast, repeatable, "do-it-yourself" mounting and is designed specifically for use by non-technicians. It is available in black, white and brown and in lengths of either 18.3 or 20.9 inches.

Australian distributor: Amber Technology
www.ambertech.com.au or 1800 251 367



Focusrite
RedNet D16 AES Interface

Focusrite launched the RedNet D16 AES interface, a 1U 19-inch rack-mount interface featuring 16 channels of AES/EBU connectivity to and from a Dante audio network, with Ethernet redundancy for maximum network reliability. Perfect for bridging between digital consoles, power amplifiers or any other AES3 equipped audio equipment and a Dante network, RedNet D16 AES has a Sample Rate Convertor (SRC) on each input pair, allowing instant operation with any AES3 source. Word Clock and Digital Audio Reference Signal (DARS) connections provide synchronization with a wide range of hardware, while S/PDIF I/O allows the integration of equipment such as CD or solid state recorders/ players.

Australian distributor: Electric Factory
www.elfa.com.au or (03) 9480 5988



Crestron
DigitalMedia 4K Product Line

Crestron debuted a full line up of DigitalMedia 4K products. The new range round out the AV industry's first and only end-to-end 4K certified distribution system. Crestron's new 4K input cards and blades, output blades, receivers, transmitters, and scalers deliver the highest available resolutions for both professional and residential applications. DM 4K products debuting at InfoComm 2014 included

- DM-RMC-4K-SCALER-C - 4K DM Receiver & Room Controller with Scaler
- DM-RMC-4K-100-C-1G - Single-Gang Wall Plate 4K DM Receiver & Room Controller
- DM-TX-4K-100-C-1G - Single-Gang Wall Plate 4K DM Transmitter
- DMC-4K-C - 4K DM Input Card
- DMC-4K-C-DSP - 4K DM Input Card with Downmixing
- HD-DA2-4K-E, HD-DA4-4K-E and HD-DA8-4K-E Distribution Amplifiers

Australian distributor: Crestron Australia
www.crestron.com or (02) 9737 8203

FROM THE STUDIO TO THE STAGE



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InfoComm 2014 Round-up

4K Network Cloud Collaboration In Las Vegas

(With Frozen Margaritas)



CX MAGAZINE AND 37,000 OTHER AV PROFESSIONALS DESCENDED ON THE LAS VEGAS CONVENTION CENTRE FROM JULY 18 TO 20 TO CATCH UP ON THE LATEST AND GREATEST IN INSTALLATION, ENTERPRISE AND COMMUNICATIONS TECHNOLOGY. INFOCOMM'S OWN GLOBAL AV MARKET DEFINITION AND STRATEGY SURVEY AT INFOCOMM 2014 PUTS THE SIZE OF THE CORPORATE AV MARKET AT 30% OF OUR INDUSTRY'S TOTAL REVENUE, MORE THAN DOUBLE THAT OF VENUES AND EVENTS AT 14%. JASON ALLEN AND STEVE JAMES GOT DOWN TO BUSINESS, WITH A BIT OF VEGAS EXCESS ON THE SIDE...

BY JASON ALLEN

InfoComm is not the largest AV integration tradeshow in the world by attendance – that distinction belongs to Integrated Systems Europe – but it's probably the most fun. Let's face it, installed corporate communications systems, the main focus of the show, can be pretty black-boxy and unexciting. But, as What Happens In Vegas Stays In Vegas, there's a great vibe on the show floor and everyone's eager to have a good time. Manufacturers throw parties at elaborate venues, helicopter rides over the Grand Canyon are taken hungover at 9 AM, limos are ridden in and a generally excessive time is had by all.

In between all of this essential 'networking', the biggest established AV brands and a host of plucky newcomers vie to attract your attention with their wares. It's a physically enormous show; any of Australia's main AV tradeshows would fit into a small corner of it. As such, it's a military operation to see everything on top of your priority list, and a challenge to exhibitors who know they aren't to get your precious attention for their pitch. So who and what stood out at InfoComm 2014?

4K – Resistance Is Useless

If you were thinking all the hype about 4K was a ploy to part you with your hard-earned for yet another round of displays and projectors, think again. Everything has gone 4K. You don't actually have a choice anymore. The designation '4K Ready' has now disappeared from everyone's marketing spiel. Everything now just is 4K. It's in every part of the signal chain – acquisition, processing, mixing, distribution and display. As Crestron pithily put it on their enormous stand 'Not 4K Ready – 4K Already'.

To the doubters who say it's a whistle-stop on the way to 8K, I don't think so. 8K looks to be an incremental



Michael O'Connor of PAVT with Steve Travia of Sight to Site



Jim Sides and Ken Berger of VUE Audiotecnik with their Beryllium baby



Graham Barrett of AMX Australia: "Yeah, but does your integrated controller have one of these?"



Above: Reclaimed Sydneysider Jonathan Bailey of Bosch's Communications Division



Above: John Iannantuoni, Joe Camilleri, Mark Scalise and Sam Warburton of Programmed Electrical Technologies



Left: David Di Muzio, Graeme Stevenson and Ben Clarke of Production Audio Visual Technology



improvement over 4K, much in the same way that 192kHz audio recording doesn't seem to be taking over from 96kHz. 4K's presence and quality is undeniable. The huge LED screens and immersive projections throughout the show floor are almost like 3D on a 2D surface, if that metaphor isn't too strained.

ARE THESE PROJECTIONS ACCURATE?

A large proportion of the North Hall was taken up with Chinese manufacturers offering every kind of display device from giant LED screens to digital signage fixtures at reasonable prices, all in 4K, so it's easy to see a lot of downward pressure on price coming into the market. Another great reason to take up 4K is for display with large physical areas – projections on buildings and massive screens. You need that many pixels just to cover them and look good. Considering there is digital signage in Las Vegas the size of a 16 story building, there's definitely a need for it.

Sony, Hitachi, Barco, Panasonic and Digital Projection were all touting 4K solutions and lampless projectors in the lower end. That's right, freakin' LASERS. These are now rolling out across all types of environments, from small corporate and education. Sony even had the 4K, laser, ultra-short throw VPL-GTZ1 and the 3LCD laser, 7K, WUXGA resolution VPL-FHZ700L. The higher output projectors (10K and up) are all still topping out at WUXGA in terms of resolution and staying in lamp-land for the time being, but models like Digital Projection's three-chip DLP solid-state HIGHlite LASER WUXGA 3D projector are leading the way forward.

LET'S WORK TOGETHER – BYOD

The big hitters of the AV integration space – AMX, Crestron and Christie – are all very interested in how people work together in corporate environments. We spoke to several Australian engineering consultants whose top priority at the show was to compare solutions for affordable, collaborative workflow tools over wireless networks on any device. The general feeling out there is that no-one's really nailed it yet, and the first company to do so will make a killing.

Christie Brio Team and AMX Enzo were the new entrants at the show, with Crestron's AirMedia and RL already established in the market. The interesting thing about Brio and Enzo was their attack on the low end of the market – small spaces used by up to five people, with the main display most likely a small-ish LCD screen with a local HDMI connection. All units have similar features – support for PC, iOS and Android, wireless connection, and the ability to edit, save, send and share documents. It's addressing the last four points that differs in execution between manufacturers, with a variety of open source document editors, third-party proprietary software and web clients like Dropbox all in the mix. What's right for your install depends on what your client already owns or is comfortable with. The biggest decider between products? Whether the 'all devices connect and sync automatically' claims of each unit actually work in real life.

CLOUDY, WITH A CHANCE OF CLOUD

The most overused word of the show had to be Cloud. Everything on the Cloud, through the Cloud, up the Cloud and Every Which Way You Can Cloud. Videoconferencing solution? Forget hardware, web client through Cloud, thanks. Software for monitoring



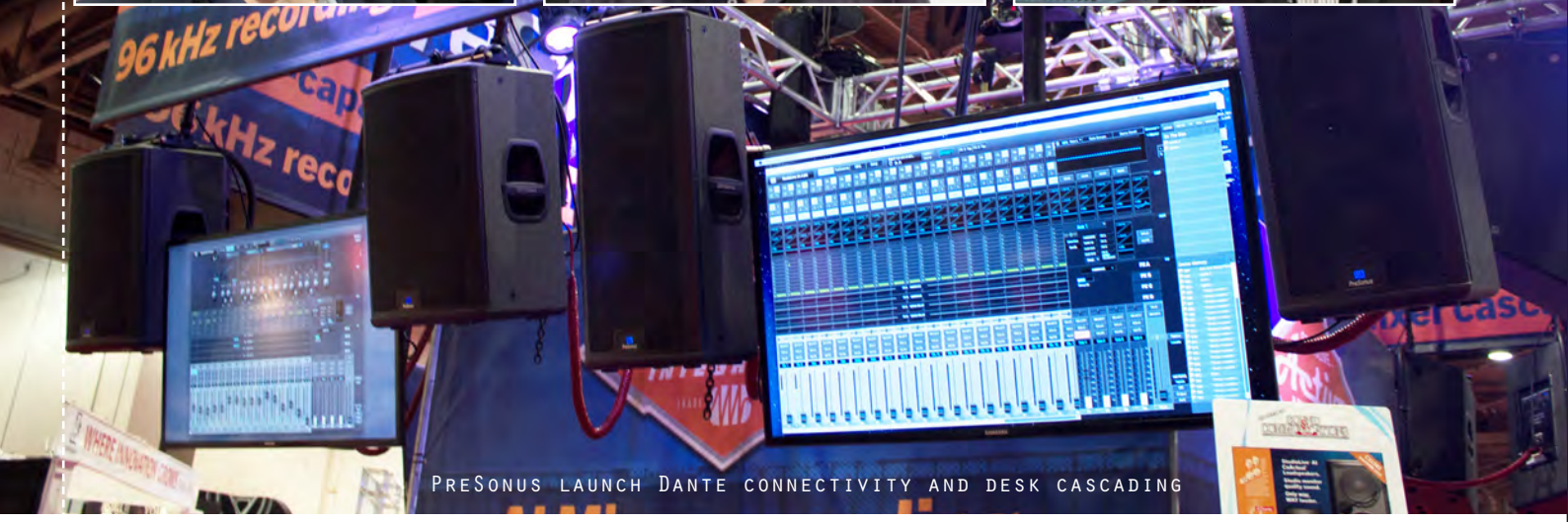
Aidan Williams, CTO, Audinate



David Fuller, transplanted Kiwi, now at QSC in California



Music Group Professional Division VP of Sales and misplaced Melbournian Graham Rowlands



PreSonus launch Dante connectivity and desk cascading

usage of your organisation's AV systems? Cloud. The whole idea of everything 'As a Service' has taken off hugely, with Microsoft and Adobe leading the charge. The concept is this; no-one will actually install things on computers anymore, we'll access all our tools online. And that way, we never pay a one-off-fee and keep working on that version until it isn't practical, we just keep paying a subscription and the service is constantly updated. Or so the theory goes.

The big problem with this approach is that Australia currently doesn't have the internet infrastructure to properly support it. Maybe if your offices were only in the CBDs of capital cities on the Eastern Seaboard, or lucky enough to be on the NBN, do these kinds of applications really work perfectly. So woe betide you if you suddenly have to videoconference with a site in regional WA. Market pressure will probably force ISPs to upgrade speeds, drop costs and increase bandwidth, and innovations in compression will also help. If the rumours are true, when Netflix opens in Australia in 2015, all ISPs are going to come under pressure to lift their game in the domestic environment. And that's what fuels product demand in the low-end of the corporate market. It's the 'I've got this quality at home, why can't I have it at work?' question.



Christie

TURN IT UP AND HIT THE LIGHTS

There's not a huge focus on audio and lighting at InfoComm. Lighting especially gets short shrift, with only Elation and Chauvet possessing a big presence of LED movers, various Fresnel fixtures and other 'production' luminaires. There was a fair range of IP-rated architectural LEDs, as befits the show, but nothing particularly attention-grabbing. Elation were showing off their EMAG 4 Pro 4.8mm pixel pitch LED video panel system, whose magnetic locking system and easy serviceability will be appreciated by those handling video on large-scale shows. It'll be interesting to see how tour-ready, well-thought-out systems like these fare in the face of the massive deluge of cheaper alternatives from China.

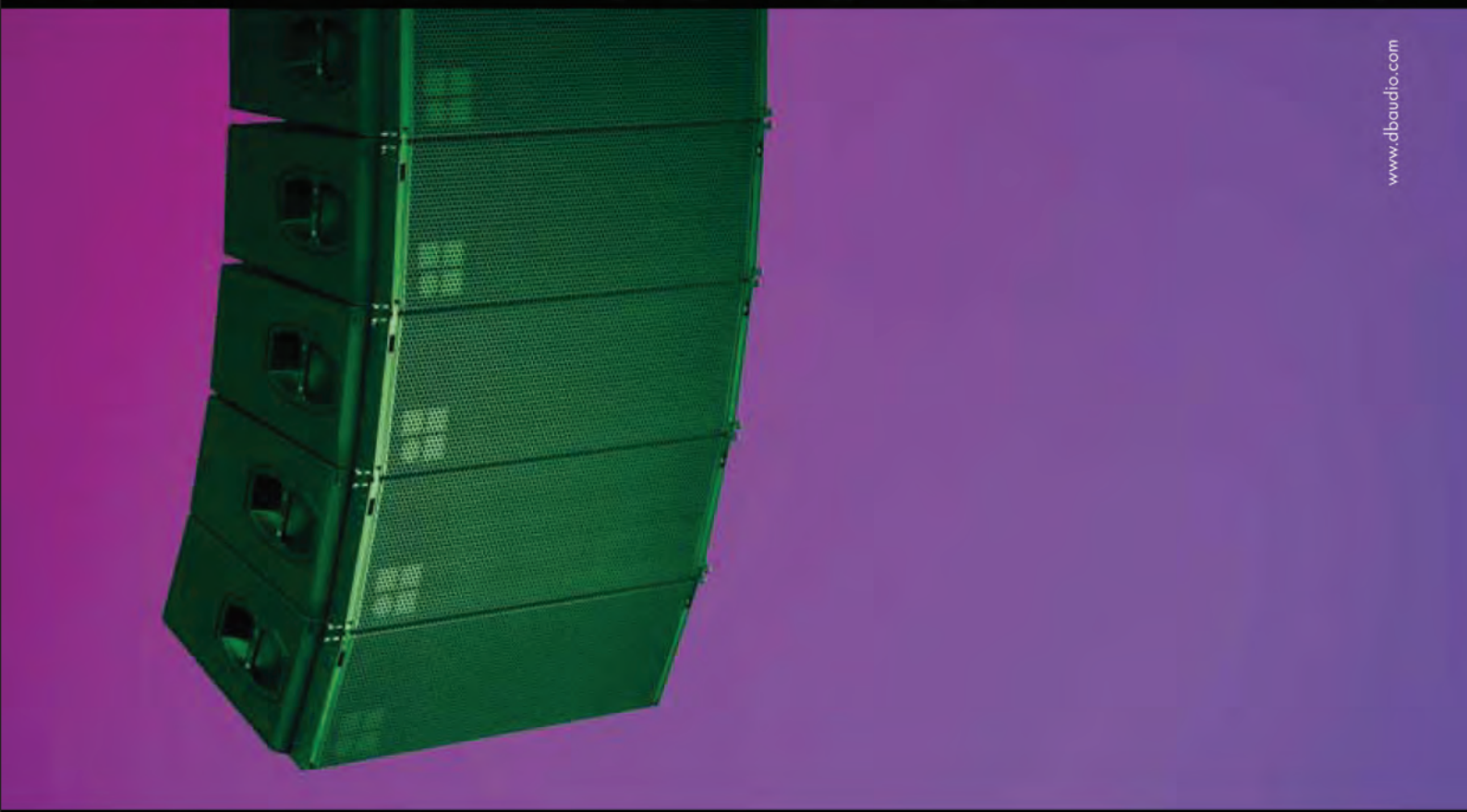
Audio has its own corner of the show, clearly marked in red on the map, possibly as a warning. The big story in audio was Dante, on everything, including things that don't even have Dante chips in them. Australia's Audinate announced Dante Via, new software that turns every audio in and out your computer is connected to



3D projection mapping at Christie

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Wacken Open Air Festival, Germany



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CHAUVET



AUDINATE'S CEO LEE ELLISON LAUNCHES DANTE VIA



ELATION

into a Dante channel. That means all USB, FireWire and Thunderbolt audio interfaces, plus every audio channel in applications like Skype. Audio-Technica announced a Dante-only (no analogue output) boundary mic for corporate installations, PreSonus announced Dante I/O on its PA loudspeakers and pretty much everyone else announced a Dante option for whatever it is they already made. Its biggest challenger, AVB, which it will eventually run on anyway, was championed by Meyer Sound, the AVnu Alliance, BiAmp and QSC.

THROUGH THE DESERT ON A HORSE WITH NO NAME

There were a number of other very worthy product releases that are detailed in the New Gear section of this very magazine. In particular, Allen & Heath's Qu-32 digital mixer and Shure's QLX-D wireless microphone systems are likely to go gangbusters in the Australian market. Our biggest regret covering the show is that there is just far too much to see to fit it all in. We spent three full days on the show floor interviewing product experts, consultants, integrators and lots of folks from Australia that had made the trip. We hit every booth that we thought was most relevant to our readership, and we still missed parts of the show.

The Audio demo rooms adjacent to the audio pavilion were running excellent listening sessions over the full span of the show. No less than 17 major manufacturers were showcasing their wares, including Meyer, d&b, JBL, Martin and VUE. We only made it to one, as they generally went for an hour and we couldn't dedicate that kind of time. But, hey, we rode to work on a monorail, interviewed two robot telepresences, went to parties at The Hard Rock Hotel and watched a hair-metal cover band play a free outdoor gig while sipping frozen margaritas in 35+ degree heat. Not bad for a bunch of AV nerds.



CRESTRON – ONE OF THE BIGGEST STANDS OF THE SHOW



3D PROJECTION MAPPING BY PANASONIC



WELCOME TO INFOCOMM 2014

FLAT PANEL LOUDSPEAKERS – 100% Pure Snake Oil! OR THE REAL DEAL?



Another tradeshow, another supposed technical breakthrough giving us thin, flat speakers with big power output, massive gain before feedback and little or no room interaction. Where K-Array and Magnetic Audio Devices have gone before, so steps up Tectonic Audio Labs out of Washington State. Their Distributed Mode Loudspeaker array, hung with three elements in the Audio Pavilion, caught our eye with its impossibly thin design and surprisingly bold claims. A loudspeaker this large and this thin (74 mm deep) couldn't possibly sound good, could it? We had to hear it. That plus their offer of a limo ride to the offsite demo room was too good to pass up.

The Tectonic system uses a combination of planar and ribbon drivers to reproduce down to 80Hz. The planar driver is essentially a rectangular, flat piece of metal with carefully attached magnets. The benefits of the technology are said to include reduced resonance therefore higher gain before feedback, excellent phase coherence and, most interestingly, minimal room interaction due to the diffusion.

It's this last claim I find hardest to accept. I am by no means an expert in electroacoustics, but it flies in the face of everything I understand about sound. If any reader out there can enlighten me, I'd be happy to hear from you. Tectonic's logic goes like this; the planar driver radiates all frequencies from all points on the driver surface, resulting in 165 degree by 165 degree diffusion. Their argument that the energy is so diffuse that when it meets a reflective surface that any reflection is equally diffuse, therefore echo and slapback does not occur. They make no mention of comb filtering, cancellation, phasing or any other problems, which I find suspicious.

The proof, as they say, is in the pudding, so we hopped in their limo and headed to a school, where they had set up shop in a performance space-come-gym. It was a terrible room – a square black box with concrete walls and limited drapes over two levels. There were under-hangs, over-hangs, a crappy metal grid and lots of things to reflect off. Two rigs of three panels per side were erected at one end of the room like a big stereo. A KV2 Audio subwoofer was employed for the bottom end, Lab.gruppen amps powered the system and Symetrix processing, which I verified wasn't doing anything fancy, was in-line. Then they fired it up.

One of the more extraordinary claims is that, despite all elements emitting energy 165 x 165 degrees, stereo imaging is preserved in almost every seat in the house. It was. I strongly suspect this was due to the fact the ribbon driver was handling everything above 3K. Testing the next claim about slapback and echo completely threw me. They put on something loud and rhythmic. The arrays were pointed straight at a solid slab of concrete about 7 meters away. I walked around every point I could and couldn't hear anything coming back or any major, obvious problems. Mystifying. The demonstrated gain before feedback also backed up their claims.

What I could hear, however, was that the claimed phase coherence was not there. They played a test track I know quite well, James Taylor's 'Line 'em Up'. A lot of the beautiful detail in that recording was lacking, and the system lacked clarity in reproducing the lower strings of the guitar, which are square in the frequency range of the planar driver that is supposedly so good . Now, the question is, was what I perceived as the lack of phase coherence actually room interaction, or was it the drivers themselves? I'd love to get an opinion from a more educated brain than mine who has actually been in a room with one of these beasts.

Ultimately though, the system was 'Good Enough'. With the efficiency of the drivers saving on amplification, the cost is comparable or slightly lower than other line arrays. Tectonic have been hawking these for a couple of years now – they won 'Best New Pro AV Speaker' at InfoComm 2012 – and are certainly handy with a marketing pitch. They've had some installation success in the House of Worship market, particularly in traditional apostolic churches, and some regional production companies have also joined the fold. They have a good story to tell, and maybe an enterprising Australian may take up their flat-panel pitch (pun definitely intended) and run with it.

LISTEN HERE

PROSPECTING IN CALIFORNIA

Human performances are what make compelling recordings, regardless of whether it's a singer with an acoustic guitar or a guy in a giant rabbit suit spinning discs. Does anyone really think a $15,000 microphone placed in front of a shocking guitar or vocalist will really make things great? Have advertisers of pro audio equipment really been that persuasive?

What makes a great recording?

Well, there's no accounting for taste of course. I watched a bit of Miley Cyrus in concert on TV the other day and couldn't have been less appalled by it than if the promoters had replaced her with Tina Arena and asked the gal from East Keilor to sing AC/DC covers – it was bloody atrocious.

Everyone has their own opinion about what makes a great piece of music, and to prove my point I'd wager someone out there has already found my portrayal of the two singers mentioned thus far insulting. One listener's pure gold is another's yellow snow after all, and in the long history of art this has always held true. Will it ever change? I doubt it.

To answer my own question – and this is always what's foremost in my mind when I'm working in the studio – great recordings are primarily about musicians, their songs and their instruments. I've never, for instance, been struck by how good a bad singer sounds through a U47 long-body (despite that microphone's well deserved reputation), or by how amazing a terrible drummer sounds mic'd up in the perfect room. It just doesn't work that way. But I'm constantly bowled over when a great musician brings these same inanimate ingredients magically to life.

Human emotion is what this recording caper is all about. Without it, the best microphone on earth placed in the perfect spot in a room might as well be a corncob on a stick, for all the good it will do.

But as we all know, it's often harder to find a great musician with a great song than it is to find an esoteric microphone. This is why so many engineers in particular tend to focus on their recording equipment – and it's their job after all – to the point where they occasionally mistake the microphone for the star of the show, and the singer its 'noise generator'. I've been guilty of this tendency myself in the past, but these days am more aware of it. When I spend too much time obsessing over gear it alters the way I interact with the people I work with.

If you suspect this in your own personality but can't quite tell whether or not it's affecting your work (i.e. boring your clients witless), try this simple test. The next time you get into a conversation with a band about microphone placement or phase coherence, check to see if people glaze over half way through your dissertation. If that's happening you can be sure you've spent too many hours on the forums. Time to recalibrate your thinking a little.

U.S. CORRESPONDENT

While I'm over here in the US (I'm currently in San Francisco on holiday with family) one of the things I like to do to improve things in my studio is buy instruments – guitars primarily. And the reason for this is pretty simple really: they're relatively light – unlike a piano or a Wurlitzer – they're used most weeks in the studio, and they're often crucial to productions I'm working on. They're also fun to be around. Even though, from the outside, it may seem like a form of insanity for an average guitar player such as myself to own so many great guitars, it makes more sense to me than buying more microphones.

It's a bankrupting hobby in the main, vintage guitar collecting. Scary price tags adorn the necks of seemingly clapped out, beaten up old instruments, but like fallen ANZACs, age mostly doesn't weary them. In fact, age is precisely what seems to make them great, and there appear to be more ancient six-stringed nuggets in these Californian goldfields than just about anywhere on earth.

In the last month I've found myself prospecting for guitars all over northern California, and after a few underwhelming visits to places like the Guitar Center in San Francisco and other notable mainstream shops, last week I hit pay dirt in sleepy Tiburon. At the far end of a gauntlet of overpriced, mundane clothing stores, where people say things to you like: "Oh actually this dress only came in from Paris this morning" – I kid you not… and no, I wasn't trying on dresses, my partner Sierra was – lies a hidden seam of wooden gold as rich as any I've struck before: Schoenberg Guitars. Inside this little shop there are more desirable acoustic guitars per square inch than I've ever laid eyes on before. It's a magical place.

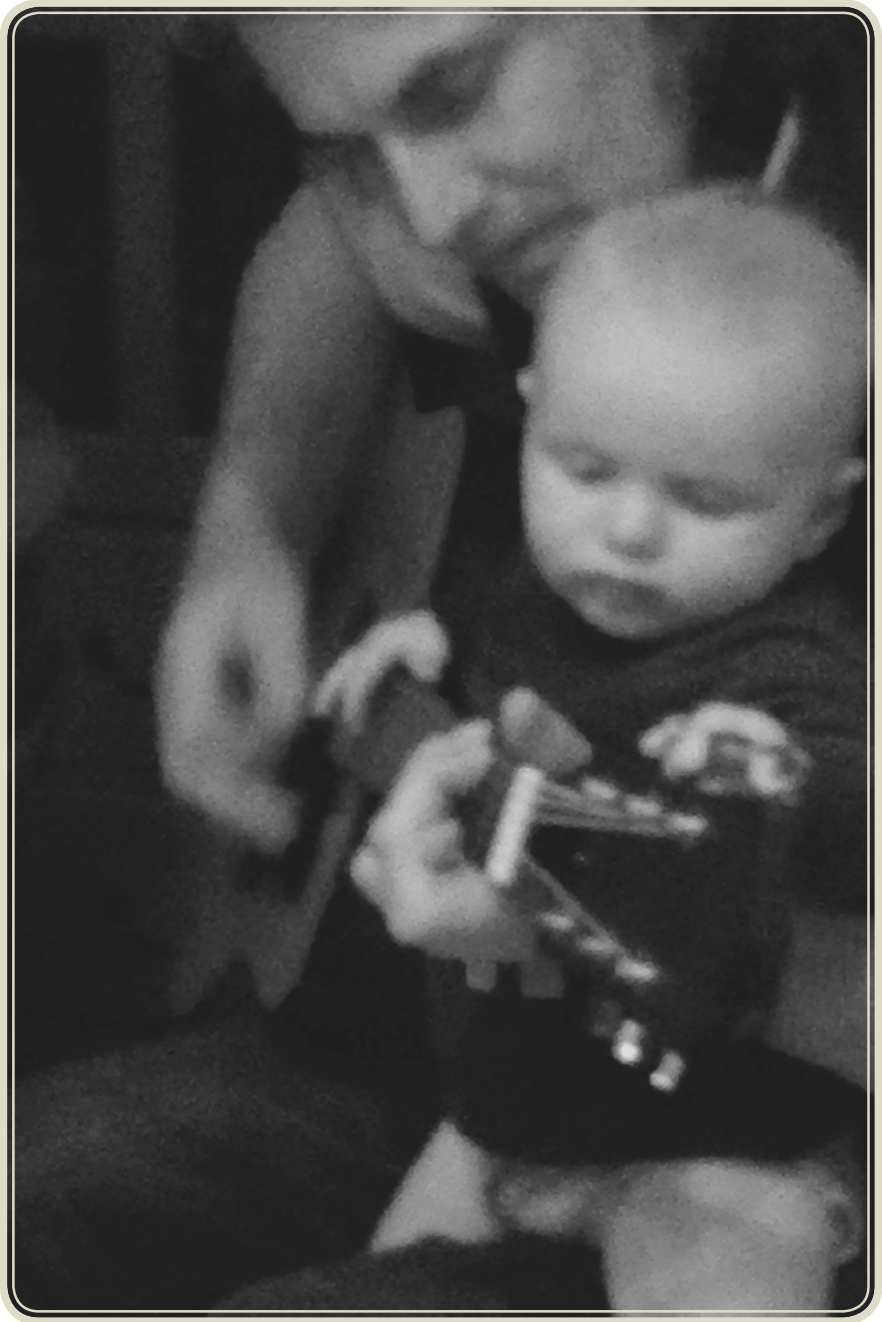
BY ANDY STEWART

So overwhelmed was I by the sheer magnitude of the Schoenberg strike that I hardly knew which guitar to take down off the wall first. There were literally dozens of Martins and Gibsons begging to be played, all of them old, some of them dating as far back as the late 19th and early 20th Century. I was in 7th Heaven.

I played a lot of truly inspiring instruments that day, but ultimately walked out of the shop empty handed – paralysed by choice and the (in some cases five-figure) price-tags.

I'm due to go back to Tiburon in the coming days and who knows what may transpire then, but what the visit to Schoenberg Guitars has clarified in my mind (or is it simply my guitar addiction talking?) is that a fantastic recording of an acoustic guitar – and this principle of course applies to any instrument – is all about the quality of that instrument and the person playing it; an obvious observation sure, but one that's often lost on people. Frankly, you could have stuck an SM57 in front of many of the acoustic guitars in this little shop and they'd still sound fabulous.

There was one guitar in particular I really loved that day – actually there were a dozen but who's counting? It was a Martin 000-18 from 1938, which sounded truly incredible; a well-worn beauty with a tone that made my modest strumming come alive like never before. The guitar had called my name the moment I walked through the door, but the reality was I just couldn't afford it. Damn economic reality, and for that matter, reality in general! Then Eric Schoenberg – the legendary



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owner/proprietor of the shop – nonchalantly let it slip that the guitar in my hand used to be owned by Gerry Garcia from the Grateful Dead! It was at that point that I started planning my first bank robbery… it will be a one-off you understand; I won't be making a habit of it.

Whether I go back to Tiburon to buy Gerry's old Martin I'm not too sure, but it seems like destiny has me in its grip once again… and who am I to resist fate?

GO TO THE SOURCE

The last time I was struck by the extraordinary sound of an instrument like this was when I worked with Paul Kelly on his recent *Spring and Fall* album. Coincidentally, Paul has an old Martin that dates from the same year – 1938 – that sounds astounding clear: dry, sensitive and almost unbelievably articulate. By a country mile, the sound of that album is the sound of that guitar, along with Paul's iconic voice. It has very little to do with the mics used to record it or the treatments we applied later during mixdown. Recording superb instruments makes you appreciate where truly great sounds come from – instruments and musicians… it's barely about the gear at all.

I actually spent a weekend with Paul's Martin D-18 back then, while he was off playing a gig interstate. Over those days I came to realise how utterly compelling this old guitar was. Nothing – certainly not mics, preamps, EQs or compressors – could hold a candle to the sound of this thing. And anyone who might suggest that an average guitar with a fancy recording chain tacked on the end of it can produce similar results is quite delusional.

Far away from my studio and with a Californian perspective, I'm struck anew by the realisation that old acoustic guitars are arguably more beneficial to my recording studio's arsenal than expensive mics or fancy compressors. It's a contentious theory I'll admit, especially amongst engineers, but in many respects it's true.

Now, where's my wallet? I have a date with destiny.

Andy Stewart owns and operates
The Mill in Victoria;
a world class production and mastering facility.
He's happy to respond to any pleas for recording,
mixing or mastering help...
contact him at:
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RIEDEL

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To make a long story short…

Thus, Riedel with its decentralized real-time network Mediornet has developed a solution with flexible topology and real-time routing function, which combines various transmission standards and can be perfectly used as an alternative to conventional video routers. The low installation depth makes the system ideal for use as a stagebox.

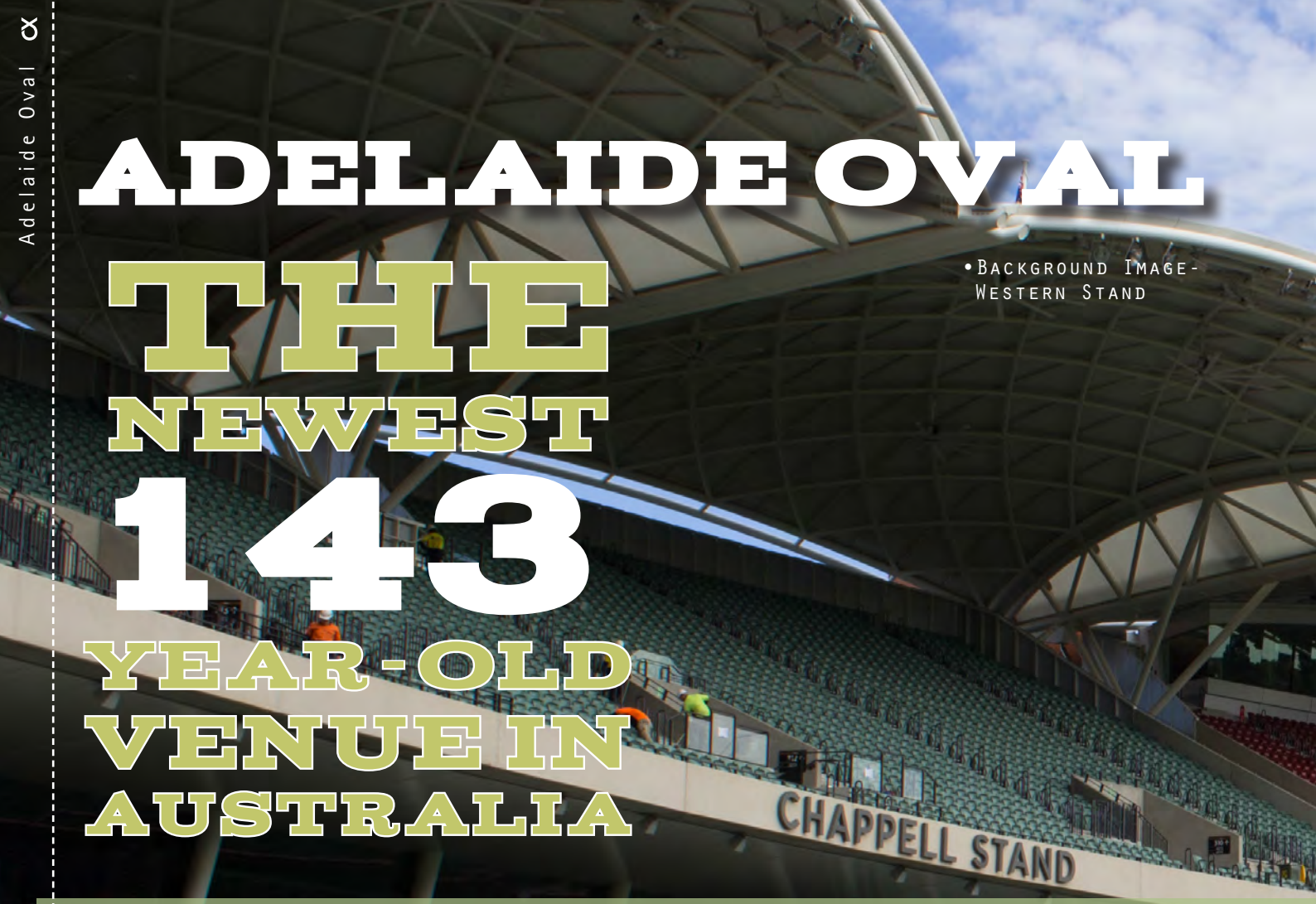
Thanks to the integrated WAN transmission technology, remote MediorNet Systems can be connected in an easy and intelligent way.

Due to the extremely high bandwidth, MediorNet has proven itself as an ideal backbone solution in many major projects.

MediorNet 2.0 is Riedel's next step of this technological evolution.

ADELAIDE OVAL

THE NEWEST 143 YEAR-OLD VENUE IN AUSTRALIA



• Background Image- Western Stand

Anyone familiar with Adelaide knows what a huge aesthetic change the recently completed redevelopment of Adelaide Oval has been to the heart of the city. CX's resident ex-Croweater Jason Allen dropped in on the old town to find out it's not just the outside that's been radically updated....

SA's beloved Adelaide Oval has been radically transformed from its quaint weatherboard-and-brick look into a modern stadium. It's a striking change to the view from King William Road, and extends to the new bridge being built over the Torrens as part of the project, linking the Oval to Adelaide train station. Over more than two years and $575 million, stands have been replaced and extended, new systems put in place and entirely new function centres built. In addition to its bold new look, the Oval now boasts a big new EAW/JBL P.A. in the bowl, digital signage, three massive LED screens and a complex converged network delivering all services on fibre.

Texas-based engineering consultants WJHW won the right to design the essentially new ground. All elements, including AV services, were specified out of Dallas, with site visits through the process to make sure everything was up to spec. The installation, commissioning and operation of the AV systems were separated into different contracts. Sydney's The P.A. People picked up the main bowl PA, Central AV won supply and operation of BOH and function spaces and multi-faceted production company Kojo integrate video services with ongoing operation of the AV in the bowl. The giant LED screens and digital signage were installed by Daktronics, and the Ethernet backbone installed and commissioned by Allied Engineering.

BY JASON ALLEN

The Big Day

On a typically beautiful Adelaide day, I met The P.A. People's Manager of Installed Systems, Brett Steele, to tour the new facility and get the low-down on how the system works. The consultants from WJHW were due later in the day for final signoff, and all was ship-shape. The Oval, despite having been used for The Ashes and some games in the earlier part of the year, was about to host the first game utilising all its systems, the Port/Crows local Derby on March 29. Needless to say in AFL territory, this was serious business. "The P.A. People's long-time collaborator, Brian Chilcott was part of our commissioning team and assisted with tuning" related Brett. "Brian is very much a part of our stadium tuning team."

Brett Steele had been involved with the project from its beginning to its handover, and talked me through what is a large and complex system in anyone's book. The P.A. People supplied and installed all FOH PA elements in the bowl, the main elements of which are 27 clusters of EAW QX500 loudspeakers. These are hung in the East, South and West stand roofs, projecting

down onto the seating. Cluster sizes vary between one and three elements, depending on location. The South stand is the most acoustically challenging, with a lot of seating far away from the roof, and a sizeable 'dome' type response to deal with.

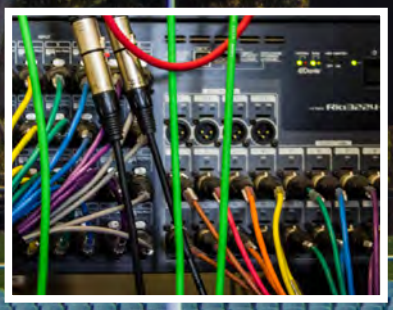
Fill Me In

Supplementing the EAW clusters are over 230 JBL AWC82 100v line loudspeakers, hung under eaves, balconies and ceilings as in-fill. WJHW's original specification called for another brand of speaker, running low impedance. As you might imagine, this was going to expensive. The P.A. People, having extensive experience in stadia around Australia, suggested another way, and negotiated with all parties to make the change. The result was a big cost and effort saving to the project, and another example of their 'fit-for-purpose', common-sense installation philosophy at work.

The P.A. People were also responsible for filling in the audio gaps in other nooks and crannies around the ground. JBL CBT Series column speakers are cleverly hidden in the exteriors of the South and East gates for paging and announcements. Four of EAW UB12 series loudspeakers do the same duty at the North gate. Happily, the heritage listed Morton Bay Fig trees and old wooden scoreboard have kept their place on the grassed Northern end of the ground. Filling the north end meant installing JBL AE Series loudspeakers on a light tower, under a camera deck, on the new LED screen and inside the heritage-listed scoreboard itself.



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•Patching in the control room



•EAW QX500 cluster under the Southern Stand



•Video control



•Audio operator- Katherine Connelly



•Yamaha CL5 in the driver's seat

The Social Network

In what's now mercifully becoming a common occurrence, all of the Oval's AV and network services are running on a converged network handled by Cisco enterprise level switches, linked by extensive fibre infrastructure. All video distribution to the LED screens and digital signage are carried by the network, along with Dante and Q-Sys audio traffic, in addition to normal venue IP load. VLANS were handed out by the IT contractor, and everything has played well. It's great to see the fear going out of this approach and to see it working in a major venue. Convergence offers major operational and cost savings for all involved, and anything that speeds its adoption is a good thing.

Taking advantage of all this fibre distribution is a Dante-native Yamaha CL5 digital mixer connected to a mixture of installed and hired-in Rio IO boxes. "There are six Rios around the venue" continued Brett, "including positions in the control room, in the basement for linking to the IPTV system, and in strategic places at ground level for pick-ups." The operator in the control room has a full overview of patching via Dante Controller running on a local PC, making sending signal to and from anywhere around the ground a matter of a mouse click.

Mix and Match

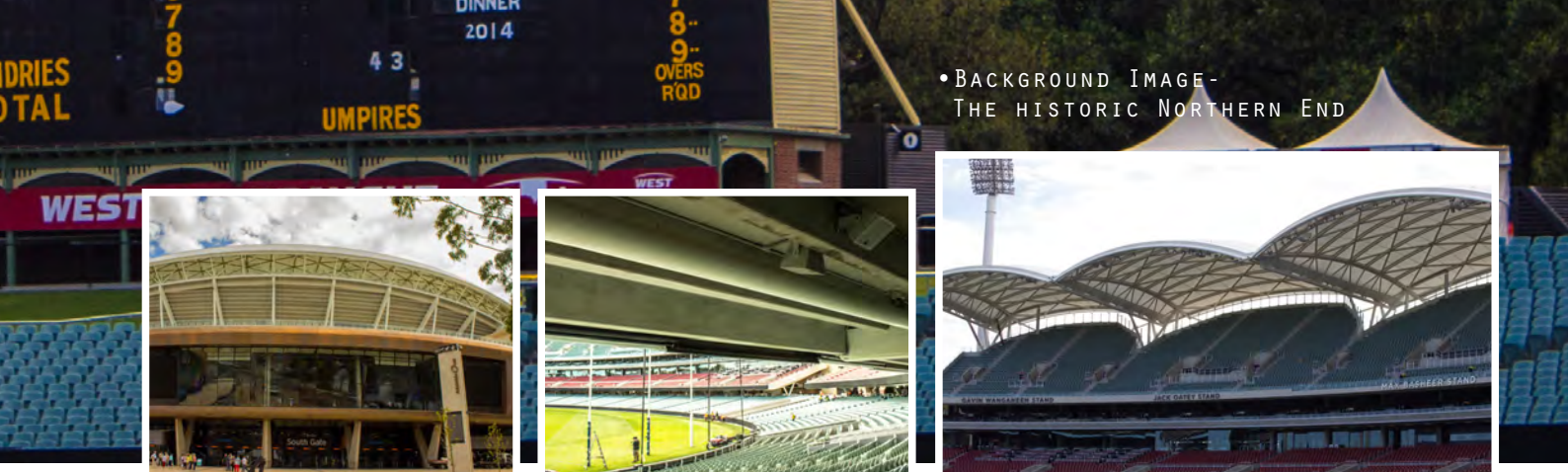
As I visited, audio operator Katherine Connelly was testing a wired and wireless mic pickup from the ground, plus sends to a wedge and some IEMs for the upcoming big game. Katherine is a freelancer who has been working for Kojo for three years, starting as an in-house post-production editor before moving to live sporting event operation. "I started working at AAMI stadium for the last two seasons of football" said Katherine. "I've now been brought over to The Adelaide Oval. I mixed some of The Ashes matches at the start of this year."

Having never mixed a sporting event myself, I asked Katherine what unique challenges mixing sport serves up "Making sure the right channels are going to the right feeds is the most important thing" she explained. "There are a lot of places we're sending audio – to the bowl mix, to the outer screens, the in-house bars, the boxes and anywhere else you hear audio around the ground. Once you've got your gain structure right, it's all about switching and making sure you get your mics opened and closed quickly. We're mixing on near-field monitors, so we rely on our technicians around the ground taking SPL readings, but as far as a balance goes, you've got to trust your instincts."

It's a Team Sport

For such a big venue, audio runs on a small staff. "There's me operating, and I have two assistants for the game coming up" Katherine elaborated. "They'll be running out a cabled mic and a couple of wedges for the National Anthem and Welcome to Country ceremonies. Normally, it's just myself and one assistant. They set up comms between the coach's boxes and benches, plus phones and headsets. Then it's just us two communicating with the technical director making sure everyone's got what they need."

How does Katherine's new gaff compare to her other AFL gig? "AAMI Stadium was very different to this; we had an old analogue Midas console" answered Katherine. "I've used Yamaha M7CLs and LS9s before, so now I'm learning the extra things the CL5 can do, which are pretty rad. Dante definitely gives you more opportunities to patch and route around the stadium. For example, our host commentator won't be in the same room as us, he'll be on a different floor, so it's much easier to get audio to and from him."



• Background Image-
The historic Northern End

• Entering the Oval via the South Gate

• JBL AWC82s under the Southern Stand



• Eastern Stand

Taking it To The People

Taking audio from the CL5 and distributing it to the vast amount of amp and speaker locations is a Q-Sys Core 4000 open architecture DSP unit. Dante audio comes in before being transported to QSC amps via the Q-Sys protocol. Seven amps room feed the stands and ancillary areas. "There are two amp rooms in each of the main stands, and one in the North" Brett Steele pointed out. "And this is all running on the converged network along with the digital signage, video and IT." Technical Audio Group's Ewan McDonald assisted The P.A. People with Q-Sys design and commissioning. "Ewan helped with programming from the start" Brett praised, "and he did it very well."

In the assorted function and event spaces back of house, in-house AV supplier AV Central take splits from the network via Q-Sys IO 22 breakout boxes "We send them an audio feed of the bowl" Brett expanded, "and a relay contact from the fire system that shuts their local PA systems down in case of emergency." Other items integrated into the system include a Listen Technologies 150MHz hearing assistance system, four channels of Shure ULX-D radio microphones and Shure IEMs.

Start Me Up

The Oval's official first outing was to be the SA leg of The Rolling Stone's Australian Tour, sadly cancelled after the untimely death of Mick Jagger's long-term girlfriend L'Wren Scott. The Stones are returning in October, and Saturday March 29 saw the Oval celebrate its redevelopment with Port Power walloping the Adelaide Crows by an impressive 54 points. It may have been a sad day for Crows and Stones fans, but the AV systems performed with flying colours, ushering in a new era of converged critical systems in venues around the land.



THE MILL REPORT

A WEEK IN THE LIFE...

Just before I left for a well-earned break in California last month, I kept a diary of my last week in the studio. With stuff flying every which way, the place was bedlam - not exactly how I'd planned the build-up to my escape. This is what transpired...

Day 1 (around 2am): With only nine days before I leave for the US, things are hotting up around here. It's a mad scramble to get umpteen things done at once: album masters (six), who knows how many mixes, more overdubbing on at least two albums than I can poke a drumstick at, this CX article and host of other things to organise for the house and the trip.

Something's got to give because my eyes are already falling out of my head, and when I look at what's still left to do the schedule seems tighter than a rusted-on nut.

Today was interesting: day one on a mix I really didn't have time for but couldn't resist. I've worked with the band before and they're due down the day after tomorrow. The mix already sounds great but there will be lots to do before we sign off on it.

The main problem with fitting this mix into my schedule is that I originally suspected the song was about 60-channel of audio… turns out it's 135. The main musician involved, whom I can't mention by name, also has a great ear but not much mixing experience. Consequently, there's usually lots of mix finessing going on (which is time consuming and s..l..o..w). But we work well together and the outcome is typically quite amazing. Gotta get some sleep now… tomorrow will be a big one.

Day 2 (1:30am): Mix is sounding great – a bit of a beast but there's no real sense of its file size or overdubbing complexity from an outsider's perspective. The song actually sounds pretty simple in fact.

With any mix this big, it's very important to stay organised. I colour-code everything before I start, and every time I add an aux or duplicate file, I'm vigilant about maintaining the colour scheme. Otherwise I'm just as likely to leave something lying fallow in the mix by accident.

Must sleep now – eyelids being held aloft with toothpicks.

Day 3 (1:45am): Today was pretty cruisy really. Long – about 16.5 hours – but effective, and relatively painless. The mix was well liked by the band when they got here – bummer they hadn't listened to the rough I uploaded though. It took a few hours of listening and chit-chat before we really got down to work on it today – didn't start mixing 'til about 1pm. There are now 150+ channels in the session file thanks to some new backing vocals that flew in late last night – I got them setup in the file this morning at around 8.30. There have also been tweaks to the main vocal. Hmm…

I'm actually a bit concerned that the singer isn't too keen on her main vocal; she seems preoccupied with its so-called 'flaws', so it's going to be interesting to see what goes down on that front. The vocal was only sung a few days ago on the demands of a tight schedule. My fear is that things are now starting to feel a little rushed.

A nine-thirty start tomorrow. I'm beginning to get the feeling that my California trip may involve nothing but sleep… but with a six-month old baby in tow that's pie well and truly in the sky.

I really thought we'd be finished with the mix today, although that too was just wishful thinking. Big mixes take time, even when things progress smoothly. There's so much to consider, so many decisions to make, each one having ramifications that affect a thousand others.

I'm pretty tired tonight… starting to get anxious about the trip (flying with a new baby), finishing off this mix and getting other things done that I promised other clients I'd have in the can before I left for the US.

Got a weird email from a client tonight too that was about 3000 words long. Barely had the strength to read it, in fact. In short, she was saying that there's been a falling out with her guitarist and that the album we're currently working on has been postponed 'til they can sort out what to do. She's had a meltdown basically and is talking about removing him from the album.

"We can do that right?" she asked in the email. Actually, no, not really. Most of it has been recorded with the two of them in the room together, so there's spill into mics that no amount of studio trickery could ever hope to eradicate.

The upside of all this is that I just gained a day! I was slated for an overdubbing session on this record later in the week, so (confidentially) I'm relieved. I'll worry about how to resuscitate things when I return.

Day 4 (11:45pm): Well, the band has gone home, the mix sounds amazing and everyone loves it. Thank God! I've spent a couple of hours finessing the vocal since they left (a key component that's still slightly contentious). I've tuned it a little and ditched a few of the more extreme delays. I've just uploaded what I reckon is probably the final mix, give or take a few tiny changes (he says to himself with an optimistic chuckle).

I'm a little concerned what happens from here with this mix. The band is notorious for picking apart our handy work in the days that follow these sessions, and because it's sounding so good to my ear, I'm going to find any changes they may suggest hard to tolerate or accept, particularly if they come from the band's opinionated Peanut Gallery that lurk in the background but never show their face at the sessions, despite my regular invites. Fingers crossed.

Tomorrow I have to switch brains and finish mastering a record I've had for a couple of weeks. This album has already been back to the client once, who was concerned the tracks had too much bass on the previous listen, which they most certainly did. I've been quietly suggesting that a few songs need to be revisited so that the drums and bass can be turned down about 6dB. Weirdly, I had already carved heaps of bottom-end

BY ANDY STEWART

out of it, and was worried he was going to think the master sounded thin. Turns out he'd "never really listened to the final mixes" and was only now realising how loud the drums and bass were. (The rhythm section was played by the mix engineer, which may have skewed his perception a tad.)

Day 5 (11:20pm): Today was all about the aforementioned master. I had a conversation with the client first thing, where it was confirmed that there was no way he'd be attempting any remixes. He didn't have the energy for it, which I can understand, or the money. These were the final files and that's all I really needed to know.

With a new clarity of purpose I went the hack and the thing sounds miles better today than previously, although I did have to pull out every trick in the book to get it to settle.

Today's master perfectly illustrates how difficult average mixing practise can make the art of mastering. It was a compromise in the end between the enormous bottom-end that was both too loud and wildly dynamic (the speakers in their mix room "hardly reproduced any bass!" apparently) and the vocal, which was also too loud but a little thin... a recipe for confusion.

In this situation it's vital to get inside the head of the client, to learn everything you can about the recording and mixing process. It helped to know that the client hadn't listened to the mixes properly; that we were on the same page about the abundance of bass; that the mix engineer had also been the bass player and drummer; that the mix room sounded thin and that there was no option to remix. With all this information in my head the mix problems had a logical explanation and I could go about resolving them.

Catatonic now...

Day 6 (11:40pm): Emails were flying every which way today. It was also the 'do drop in' at The Mill, with people lobbing into the studio unannounced to say bon voyage, and each one expecting a chat and a cup of tea! No time, no time!

I got two emails confirming that masters I'd previously sent to clients for a final check were all good to go, so this morning I printed about eight discs and listened to the finals (without incident).

Three masters thus hit the road tonight, which is great news. A couple of others will have to be finished when I get back because I'm out of time. Tomorrow I have another master to work on, and some in-progress mixes to tweak.

My eyes feel like they've had sand kicked into them and my computer screen is starting to resemble a kaleidoscope. If I don't get some sleep soon I may disassemble like a cheap watch.

Day 7 (11:00pm): I mastered another CD today – sounded good; good mixes make good masters is all I will say about it.

But I also got an email... well actually, about six. The band from earlier in the week have a few "issues" with the mix and wanted to come down *tomorrow* – two days before I leave for the US! – to make some "significant" tweaks, based on conversations they'd been having with their Peanut Gallery.

I knew this would happen! I've told them no.

With so little energy left I've found it very hard not to lose it on them today. We've already spent four days on the mix, the Peanut Gallery were invited to have an opinion during the sessions but declined, so now I feel like their opinion is unwelcome. My head won't be able to cope with this drama 24 hours before I take my family across the Pacific Ocean. No way.

Moral of this story is probably a little hard to fathom right now in my sleep deprived state, but one thing is certain: when a mix gets big and the personalities behind it are unsure of themselves, the Peanut Gallery can be a destructive force indeed.

Consider as many opinions as you can when you're mixing by all means, but guys, at some point decisions have to be made that can't be revisited. Life's too short!

Catch you all on the flipside!



InfoComm 2014 AMX AUNZ Reception at the Hard Rock® HOTEL



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TIM HALES OF CHW CONSULTING

AMX Australia & New Zealand were gracious enough to welcome us to Las Vegas at the AMX AUNZ Reception at Hard Rock Hotel on Wednesday 18 June. In a decked-out, Rock'n'Roll Spa Suite (no, no-one got naked. While we were there, anyway...) the nine-strong contingent from AMX Australia and New Zealand welcomed consultants, integrators and other AV bods from across the antipodes with tunes, booze, food and a great Vegas vibe...

BY JASON ALLEN



Simon Alder, James Murray and Simon Austin of Alder Consulting



Frank Ciampa, Rutledge AV and Dan Baldwin, Insight Systems, share a moment



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InfoComm 2014

I HAVE TO WEAR WHAT??



A STAFF MEMBER FROM CREATIVE AGENCY THREE MONKEYS EXPLAINS "NO, REALLY GUYS, THIS USED TO GET BROADCAST ON TELEVISION WHEN THERE WAS NOTHING ELSE ON..."

A big tradeshow means exhibitors will do just about anything to get your attention. These poor souls were subject to the will of their employers who decided that kitting them out in ,um... 'eye-catching' apparel was a great way of getting focus on their products...

BY JASON ALLEN



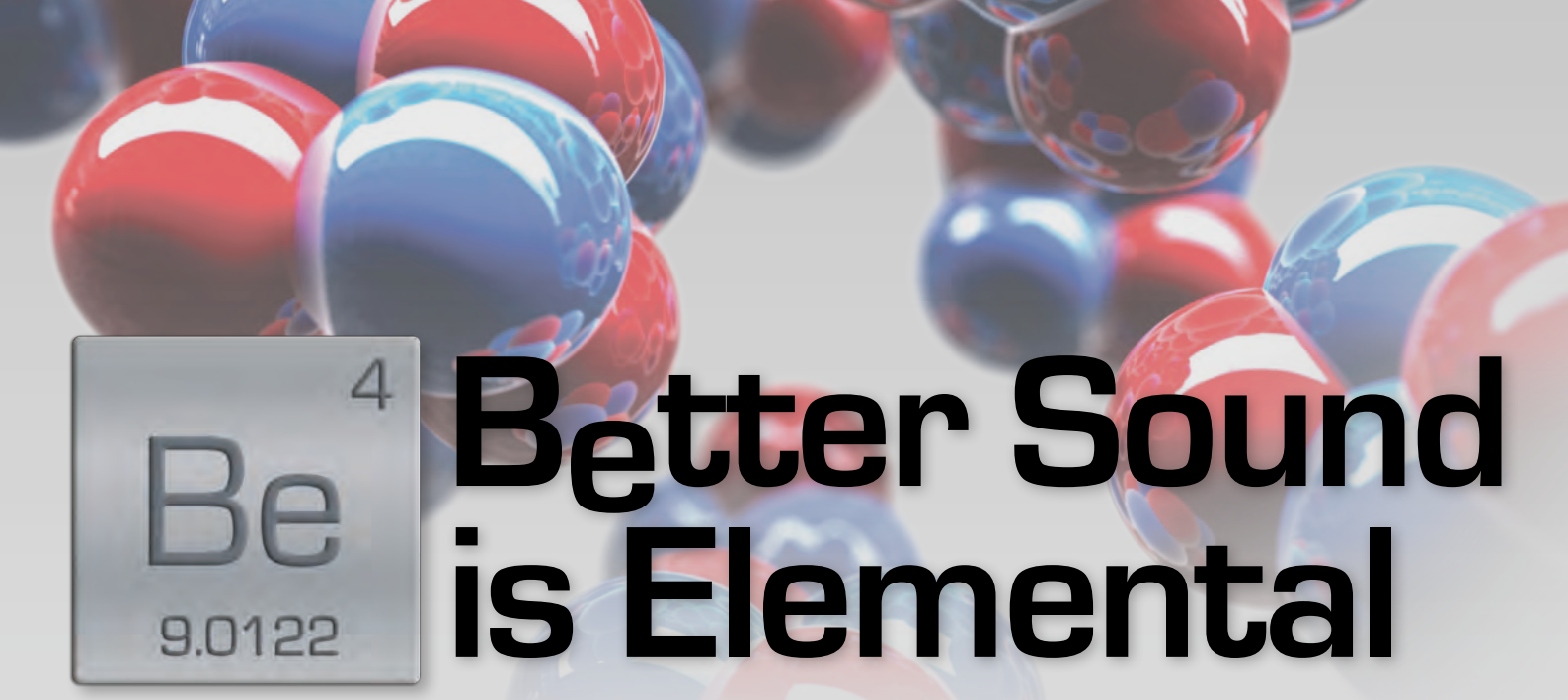
AND THE WINNER IS... THIS MEMBER OF THE MUSIC GROUP TEAM, BECAUSE NO-ONE ELSE ON THE STAND WAS DRESSED STRANGELY, AND THIS WAS OBVIOUSLY HIS CHOICE.



VIDEO AND CONTROL FIRM KEY DIGITAL LIKE THEIR COMPASS IOS CONTROL SYSTEM SO MUCH THEY MADE IT INTO A DRESS. AND A HAT.



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WHAT-IF?

What If we're lifting a load with more than 2 chain motors?

THE ISSUE OF WHETHER OR NOT WE NEED TO USE LOAD MEASUREMENT WITH CHAIN HOISTS HAS BEEN COMING UP QUITE A BIT RECENTLY, SO NOW SEEMS TO BE AS GOOD A TIME AS ANY TO OPEN UP THAT PARTICULAR CAN OF WORMS.

Seeing as the tone of the last few articles regarding chain hoists has been about D8 and D8+ machines, we'll keep this discussion heading in the same general direction and make a few basic assumptions, namely:

- The lifting process is in a controlled space and nobody will be under the load when it's moving.
- In choosing to use D8/D8+ hoists you have a copy of the VPLT.SR2.0 Code of Practice for Event Technology and you are using this as the basis for developing your own work methods.
- The lifting process is being carried out by experienced and qualified riggers.

The simplest lift is a single point lift (single chain hoist), and assuming that you know the weight of the load you are about to lift before lifting, then we can reasonably proceed without load measurement in the hoist.

Similarly, if you are lifting a rigid load (e.g. truss segment) with 2 hoists then the distribution of the load between the 2 hoists is unlikely to change during the lift, even if the load is not evenly shared. It would be reasonable in this case to use hoists without load measurement, although you'd be well advised to use a D8+ hoist or a D8 hoist with an (optional under the Code of Practice) overload device fitted if the total load exceeds the individual lifting capacity of either of the 2 hoists.

When we get to lifts involving more than 2 hoists (or with 2 hoists where the load is guided), we enter into that arcane and difficult territory known as "Statically Indeterminate Loads". To best understand this, we suggest you use your favourite search engine and download a copy of "igvw SQ P2" which is the German standard for electric chain hoists that forms part of the VPLT SR2.0 Code of Practice.

Table 4 on Page 18 of this document describes a number of Statically Indeterminate loading cases and makes for a compelling read if you're so inclined, or alternatively simply explains a complex concept in a couple of diagrams, if calculus isn't a recreational or leisure activity in your world.

Lifting a single line of truss with 3 or more motors is the first example used. Assuming that you are using fixed speed, conventional AC induction motor chain hoists, operating directly from the 3 phase supply, then your hoists will run at (very approximately) the same speed when evenly loaded, but will operate at significantly different speeds (anything up to 5% or more difference) when unevenly loaded.

As the lift progresses, a hoist that is running faster will start taking up more of the load, and a hoist running slower will start seeing less of the load, with a risk of a chain going slack or a hoist being overloaded.

If the load is simply a 3 point lift on a straight truss and the operators are experienced and observant, then this is unlikely to cause a serious problem, but in less than ideal circumstances it is not that difficult for this situation to get away from an operator.

The second example shown in this table is a rectangular truss grid with a centre span, picked up by 5 hoists, 1 in each corner and one on the centre of the centre span element. This type of lift using fixed speed, un-synchronised hoists, is going to be a challenge for an experienced rigger – not impossible and done on a regular basis, but certainly not a simple task to be undertaken lightly.

Our second assumption at the start of this piece was that we were using VPLT SR2.0 as the basis for our work methodology, and VPLT SR2.0, "Section 3.1.3 Overload shut-down/overload monitoring" relating to the operation of D8/D8+ hoists states that "For special load types where there is a risk of specific elements... being overloaded, a load measurement is required..."

This doesn't mean that we need a complex control system with a load measuring system deciding when a hoist should run or stop, but we do need to know what each hoist is lifting.

A good rule of thumb would be that if you can't reliably predict what load a hoist is carrying during a lifting process then you need to measure the load on each hoist.

This article forms general opinion only and must not be relied on without a detailed, professional risk assessment undertaken specific to your situation. Consult a professional staging company every time you consider anything that may involve risk with flown objects or people.

JANDS Staging

BY ANDREW MATHIESON

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NEW MARKET FOR NEUMANN

BY JIMMY DEN-OUDEN

NEUMANN TLM107



"DISCOVER THE FREEDOM OF SOUND" THEY SAID ON THE VIDEO. FAIR ENOUGH I THOUGHT, THAT SOUNDS LIKE A BIT OF FUN. I CALLED UP MY FRIENDS AT SENNHEISER AND ASKED FOR A TLM107 TO REVIEW. THEY SAID OKAY AND A DAY LATER THERE IT WAS IN MY STUDIO – NOT AN UNFITTING PLACE CONSIDERING THE REVERENCE ASSOCIATED WITH THE NEUMANN BRAND. THE COMPANY WAS FOUNDED IN BERLIN IN 1928 AND WHILE IT HAS BEEN INVOLVED IN A NUMBER OF TECHNOLOGIES OVER THE YEARS (FROM DISC CUTTING MACHINERY TO STUDIO MONITORS AND EVEN A "PISTONPHONE" FOR CALIBRATING MICROPHONES), THE NAME HAS ALWAYS BEEN SYNONYMOUS WITH MICROPHONES.

Let's start with some basics. The TLM107 is a condenser microphone good for 20Hz – 20kHz. It features five selectable polar patterns, two HPF filter settings (plus bypass), and three levels of pre-attenuation (0, -6db, -12dB). Maximum source SPL is 141dB, or 153dB with 12dB pre-attenuation applied. Self-noise is specified at 10dB, effectively low enough to ignore completely.

The mic and included SG 2 stand mount ship in a lovely polished wooden box with shiny hinges and catches, and this is the first tip-off that it's not exactly what you'd call a "cheap" mic. Given the TLM107 is plastered all over the Neumann website front page it's a safe assumption they're pretty excited about it too, and looking at the specs on the web it's not hard to see why. Switchable pattern microphones are nothing new for Neumann, but typically they've carried a price tag twice that of the TLM107.

Polar pattern selection, pre-attenuation and HPF setting is all done via a little joystick and adjacent LED indicators. Move the stick up or down to change pattern, left for attenuation and right for high-pass.
I like the sensible selection of filter points – 40Hz for rolling off below the 41Hz fundamental of a open E on a double bass, and 100Hz for vocals. The only thing about this mic that isn't absolutely 100% intuitive is knowing which face is the front. If you guessed the side with the Neumann badge on it, you'd be right.

CXTV
Watch on CX-TV.com

BRAND: NEUMANN
MODEL: TLM107
RRP: $1999 INC GST.
PRODUCT INFO:
WWW.TLM107.NEUMANN.COM
DISTRIBUTOR:
WWW.SENNHEISER.COM.AU



Armed with my new knowledge on how not to put the mic up facing backward, it was time to plug it in and have a listen. The TLM107 requires standard +48V phantom power to operate. Once you plug it in, various LEDs illuminate to show the current parameter settings. Adjusting these with the joystick is very easy, and because it's a logical change rather than a physical circuit interruption, there's no way the switch can ever introduce noise into the output because of a dirty contact. The LEDs turn off after 15 seconds, and to make changes you need to press the joystick directly inward to re-activate them.

A couple of features you might not pick just by using the mic are the acoustically optimized grille designed to reduce sensitivity to "pop" sounds, and the edge terminated transducer to reduce sensitivity to moisture and dust. The polar patterns include omni, cardioid and figure 8 with intermediate wide-cardioid and hyper-cardioid modes as well. All the polar modes seem to perform as the specs say they should.

Maybe it's the German penchant for precision in engineering, but Neumann certainly isn't shy with specs on the TLM107. Full polar plots and frequency response graphs are freely available on the website, and will tell you all you need to know. If you can't be bothered looking at these, just know that the response of the mic is virtually flat for a large part of the spectrum, with an expected roll-off at the very low end and a little kick up around the 8-10kHz region. Neumann states this is to add "presence and freshness to the voice". Probably a fair claim, but I don't think this mic is just limited to vocal use. It's great on vocals in a studio, but the dynamic range is wide enough to make it a very appealing choice for delicate acoustic instruments such as guitar and piano too.

Over the years I've put large diaphragm condenser mics on all sorts of instruments in all sorts of places – most of them stages. I think the predictable response of the TLM107 makes it a very viable option for live sound applications. I took it out to a show and parked it beside a very nice Steinway amidst an orchestra, and it sounded lovely and natural. Of course it's an arbitrary point if you're not prepared to risk leaving something so valuable on stage, but I reckon I'd chance it (and no, that's not an invitation to come to my gigs and steal my mics).

All up the TLM107 is a very versatile microphone at a very appealing price, and could well extend the Neumann option into a lot of hands for which it was previously out of reach. As to "discovering the freedom of sound"? The TLM107 tells it exactly like it is. How much freedom lies in that depends on your muso, so you'd hope their performance is as good as that of the TLM.



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L-ACOUSTICS ARCS WIDE

French manufacturer L-Acoustics is perhaps more widely known for their large scale systems such as K1 and Kudo than its smaller scale products such as ARCS. That's one good reason to take a closer look – another is lack of points to fly a large format line array system inside CX HQ. Not that I confined the testing solely to CX HQ...

CXTV Watch on CX-TV.com

SOLVING THE PUZZLE

by Jimmy Den-Ouden

ARCS is a composite cabinet with a 12" woofer and 3" compression driver, passively crossed over and loaded with one of two waveguides – either a 30 or 15 degree. 30 or 15 degree horizontal – nominal vertical coverage is 90 degrees. All of this applies with the box standing vertically – spin it 90 degrees and the coverage is then 90W x 15 or 30V. Sounds weird yes? It's not.

While you can use ARCS as a single box on a stick, that's not really its intended purpose in life. It's part of a modular system, which goes a long way to explaining the integrated rigging system. Multiple ARCS WIDE (30x90) and ARCS FOCUS (15x90) cabinets can be ganged together to form a constant curvature array. This can be flown in the same manner as traditional line arrays, or ground stacked on subs in the same manner. You can also array cabinets together side by side for variable width coverage with constant 90 degree vertical. The product literature shows a number of different configurations, and I can think of good applications for every one of them. In other words, it's versatile.

Because L-Acoustics makes entirely end-to-end systems, ARCS boxes need to be run from an LA4 or LA8 amplifier. You can't run third party amplification on any L-Acoustics box, but all their amps work with all their speakers. This means they can spend more time working and less time gathering dust. Two factory ARCS WIFO presets exist for ARCS – one for nearfield or fill applications, and another for arraying multiple cabinets together. When making up vertical arrays you can combine FOCUS and WIDE units, allowing for a combination of long and short throw in one array. It's pretty cool.

Enough specification babbling, time to plug it all in and have a listen. So I did. Initially I listened to an MP3 track played out of a phone, which was a big mistake. Surprisingly I could hear all the nasty compression artifacts in the high end, and I chalk this up to good HF extension. "Usable bandwidth" is claimed at 55Hz-20kHz (-10dB), and I reckon this would totally be substantiated with some measurements.



I dialed up some content with all its bits still intact and kept listening. I liked what I heard. It's hard to characterize the sound of ARCS – it's not aggressive but nor is it by any means dull. I think it sounds pretty neutral, but in the same breath I feel like it's set up to throw a decent distance.



RIGGING IS INTEGRATED INTO EACH CABINET, AND STORES ALONG THE CENTRE HANDLE

Since our studio is kind of small, I took my test boxes out and deployed them on a gig. The claimed 30 degree coverage totally holds up – basically as you start seeing along the side face of the box, you stop hearing it. Obviously this only works down to a certain frequency, but it does work and it does hold up over distance. In my application I was supplementing an in-house system and used the ARCS as front fill (disabling the installed lip-fill) for coverage over the first 3 or 4 rows of the house. I laid the cabinets on their sides and rotated them inward toward the stage, using the 90 degree plane horizontally. I also gave each cabinet a little downward tilt with a shotbag under the rear. A bonus I hadn't anticipated was that the ARCS boxes made minimal visual impact on the stage – a single box on its side sits at a very modest height indeed.

To be abundantly clear about it, my deployment of the ARCS WIDE was not a recommended application of the system. It's a modular system and generally the tight pattern means most situations would call for multiple cabinets. This makes the fact it worked so well all the more impressive. I achieved coverage where I needed it, and avoided reflections off the walls. I especially enjoyed the fact that I didn't feel the need to apply any FOH EQ to the ARCS boxes – I plugged them in, timed them to the rest of the system and immediately they sounded right. I had no feedback issues with open mics on stage, even with vocalists standing right next to the boxes.



So what's the wrap up? I rate this product highly. I like that I can lift them solo, and that they fit in my car, and given the flexibility and performance of the system I reckon I could even stomach the price.

BRAND: L-ACOUSTICS
MODEL: ARCS WIDE
RRP: ARCS WIDE/ARCS FOCUS-$5799 EACH INC GST.
LA4 AMPLIFIER-$9699 INC GST.
PRODUCT INFO:
WWW.L-ACOUSTICS.COM
DISTRIBUTOR:
WWW.HILLSSVL.COM.AU

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CX NETWORK

SON OF ULX-D?

BY JIMMY DEN-OUDEN

SHURE QLX-D

IT'S A FUNNY THING, BUT AS A LIVE SOUND GUY I TEND TO THINK OF RADIO MICS AS BELONGING ON STAGES. THE REALITY IS THAT THERE ARE PROBABLY MORE OF THEM IN PLACES LIKE BOARDROOMS AND UNIVERSITY LECTURE THEATRES. IN SUCH APPLICATIONS FEATURES LIKE CHANNEL DENSITY AND ENCRYPTION TEND TO BE MORE HIGHLY VALUED THAN EXTREME RANGE OR FREQUENCY RESPONSE.



BRAND:SHURE
MODEL:QLX-D
RRP:QLX-D RECEIVER AND HANDHELD TRANSMITTER WITH SM58 CAPSULE - $1820 INC GST.
BODYPACK TRANSMITTER AND ADDITIONAL HANDHELD CAPSULE CHOICES AVAILABLE.
PRODUCT INFO:
WWW.SHURE.COM
DISTRIBUTOR:
WWW.JANDS.COM.AU

CXTV
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With the Digital Dividend a mere 5 months away it seems the arrival of QLX-D is somewhat serendipitous. ULX-D has been around for some time now, and it's a great product but not necessarily justifiable in every application. Similarly, PGX-D and GLX-D are established but have lower simultaneous system use limits. QLX-D does away with some of the enhanced functionality of ULX-D and consequently sits at a more accessible price point.

To better understand the differences between the ranges, let's look at what's the same. Both systems transmit in 24bit digital audio and have >120dB of dynamic range. Both allow auto-scanning to find clear frequencies, as well as IR sync with the transmitters. Both are Ethernet enabled and can be connected to Wireless Work Bench. Both support AES-256 encryption as well as remote battery monitoring. Both can be controlled by external control systems such as AMX or Crestron, and the transmitters use the same batteries and chargers.

Visually, the transmitters are identical. Functionally they're very similar too, but whereas QLX-D can transmit at 1 or 10mW, ULX-D adds a 20mW option. ULX-D has a high density option allowing up to 67 systems to run in parallel, while QLX-D allows simultaneous use of up to 17 systems per 6MHz TV channel (or 22 per 8MHz channel). Transmitter lock is available and enacted via menu joystick inside the battery compartment, where you can also change channels if you don't want to do IR sync.

On the receiver front, the differences are more apparent. The QLX-D system has a simpler front panel, with power, menu, enter, up/down and sync buttons. Audio and RF metering is shown within the LCD display. Receivers are available in single channel only, and there's no antenna cascading option. Nor is there Dante, nor is there Ethernet access across subnets.

Great. What's all this actually mean then? Well, simply put it means users now have the option to pay only for the features they need. Consider a boardroom application – neither range nor channel density is likely to be highly valued features, but encryption might hold a lot of appeal where commercially sensitive information is involved. For small networking applications and basic control system implementation, the ability to jump subnets isn't necessary. If you're connecting the receiver to an analogue device then you probably don't care much about Dante either.

There's an almost elegant level of simplicity about using QLX-D. Plug it in, press menu to get to the scan function, press enter to scan then again to accept the new channel. Then press sync and hold up the transmitter's IR window, and you're done. There's very little to confuse end users, and in some environments that's pretty important. Similarly to charge the mic, just drop it into the charger cradle. An LED shows it's correctly seated and charging. Easy and reliable. I like very much that I could talk an end user through the above procedure over the phone.

Talking of phones, Shure has also released an iPhone/iPad app called ShurePlus Channels, which is really cool. Once you've connected your Ethernet enabled systems (QLX-D, ULX-D, Axient, PSM1000) to a wireless router, just run the app to have instant monitoring of the status of all these devices. For a fee (charged per product series), you can also have control over the connected units. It makes a lot of sense really – put a wireless router in the back of your RF rack and you can monitor the whole lot from FOH. For monitoring only the app costs nothing – you only pay for device control.

It's probably worth making some mention of how well QLX-D actually works (this being a review and all). It works really well. Range is still solid and audio is the same as you'd get from a ULX-D system. QLX-D is a nice intermediary addition to an already solid product line.







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DUAL AXIS LINEAR LUMINAIRE

BY JIMMY DEN-OUDEN

SHOWLINE IS A RANGE OF LED LUMINAIRES FROM PHILIPS, WITH EACH FIXTURE BEING DESIGNED AS A PART OF A FAMILY RATHER THAN ISOLATED PRODUCTS. ALL THE FIXTURES COMPRISE RGBW LED ENGINES, BUT THE SIMILARITIES DON'T JUST END AT THE ENGINE.

PHILIPS SLBAR620

The Showline range uses the "Harmonize" colour calibration system, which achieves two things. First up it ensures consistency in the colours from pixel to pixel within each fixture. Secondly, it matches colours from every fixture with every other fixture, so they can be seamlessly integrated.

The menu system is based around a reasonably large backlit LCD screen, which automatically inverts its display so as to remain upright regardless of fixture orientation. Surrounding this are 10 pushbuttons to access parameters within the menu. This is more buttons than typically employed for such purposes, and the extra keys allow quicker access to specific parameters or functions within the menu. An interesting aspect of the menu system is three levels of pin code security which can restrict access to things like preset editing. Likewise there are several choices available for fixture behavior on loss of DMX including options turn off, hold, or go to power-on state.

Power input and loop out on all fixtures is via PowerCon, with 5 pin XLR providing DMX512 capability complete with RDM support. Several colour mixing modes are offered including 8 and 16 bit RGBW, and HSIC. For applications where changes to the state are not required, a selection of preset colours and chases are pre-programmed into the fixture from the factory – the preset colours even line up with common gel choices. Need congo blue? No problem, it's preset 18.

Showline units have a selectable dimming curve, and there's even a curve which replicates dimming on a Philips PL series fixture. Tungsten emulation mode simulates the "afterglow" of a conventional fixture. Something you won't find on a tungsten equivalent is the dual strobe control parameter, which allows you to specify rate and duration for strobe effects. Construction is modular to enable quick field repairs if necessary.



Up to this point everything you've read in fact applies across the board to every fixture in the Showline range. Getting a little more specific, let's look at the SL BAR 620 in detail. The unit comprises two rows of six LED engines running in pairs, and they can be controlled as such. This certainly opens up some pixel mapping options. Construction feels nice and solid, and typical of what you'd expect from Philips.

Depending on the angle you require, you can choose a 30 or 60 degree model. We reviewed the latter, which has a specified Luminance of 6897 lumens, 410 lx at 4M and a CRI/CQS score of 90 (RGBW). 60 degrees is pretty wide so far as beam angles go, and while the SL BAR 620 wasn't really designed as a cyc light you could certainly use it as such, though you'd probably want a groundrow in the mix.

Indeed there are several applications in which the fixture would be a good fit. Stacked vertically they'd make for some great back drop eye candy, and because the "yoke lock" is internal on the bracket you can butt multiple units end to end to achieve consistent "pixel gaps". Personally I see it as a great choice for footlights, though Julius reckons it sits a bit too high. I guess it would come down to stage height and sightlines, but the beam angle is certainly right. You could even use multiple SL BAR 620 units as houselights, and extend your lighting looks beyond the confines of the stage.





I think at the end of the day this fixture doesn't seem designed with any specific purpose in mind, but ultimately this is what lends to its flexibility and general "deployability" in a greater number of situations. While the output of the SL BAR 620 is very respectable and tapers off nicely at the edges, I think the thing I found most impressive was the price, which is considerably lower than I expected.



BRAND: PHILIPS
MODEL: SL BAR 620
RRP: $2295 INC GST
FOR THE 60 DEGREE MODEL, OR
$2395 INC GST
FOR THE 30 DEGREE.
PRODUCT INFO:
WWW.LIGHTING.PHILIPS.COM
DISTRIBUTOR:
WWW.LIGHTING.PHILIPS.COM.AU

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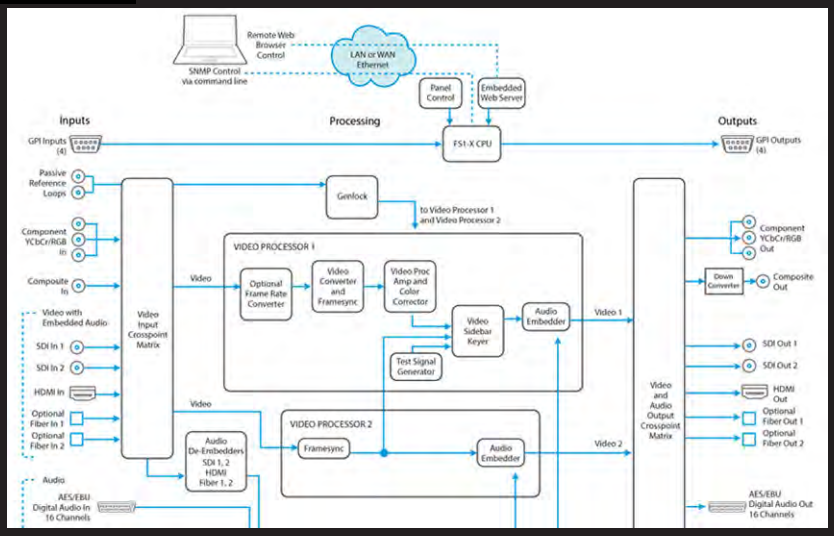
BY JIMMY DEN-OUDEN



AJA BUILD SOME PRETTY COOL KIT. WE LOOKED AT THEIR KIPRO RECORDER A FEW YEARS BACK, AND MORE RECENTLY THEIR KUMO ROUTERS. AMIDST THE MYRIAD OF DEVICES THEY MAKE LIES A RANGE OF VIDEO CONVERTERS CALLED THE FS SERIES. THE LATEST ADDITION TO THIS LINE IS THE FS1-X, A DEVICE DESIGNED TO MATCH UP DISPARATE VIDEO AND AUDIO FORMATS TO MAKE THEM EASIER TO DEAL WITH. WHILE IT'S EASY TO FIND COMPACT CONVERTERS THAT CAN CHANGE ONE TYPE OF SIGNAL TO ANOTHER, TYPICALLY THESE DEVICES ARE ONLY CAPABLE OF PERFORMING ONE SPECIFIC FUNCTION.

FS1-X is a bit more than just a simple converter. It's essentially capable of taking an analogue or digital video input, combining it with embedded or external digital or analogue audio, processing and converting the whole lot, then outputting the resultant signal in a specified format across a number of analogue and digital outputs. That sounds like a lot of processing, and it is. Check out the signal flow diagram to see a more precise explanation of what goes on.

Our test unit came equipped with the optional frame rate converter (FRC), which can be bypassed if required. Inputs and outputs are virtually a mirror of each other. Two 3G-SDI, Fiber SDI, HDMI, component and composite video connections are available for input, as well as reference with non-terminating loop through. Exactly the same connections are available as outputs. Audio hasn't been left behind, either, with D25 connectors for both analogue and AES, as well as MADI on both BNC and optical connectors. In addition to the dedicated audio inputs and outputs, full access to audio embedding and de-embedding is also available.



You'll notice several other connections on the back panel including RJ45 for Ethernet, D9 for GPI, and dual IEC sockets for power. The FS1-X has dual power supplies, and in the event one of these fails you'll see a front panel alarm LED notification. If you're not in the room at the time, the device can be monitored and controlled remotely via the embedded web server. Additional alarms are configurable for events such as input video failure too. How the device reacts in such circumstances is defined by the setup menu – drop to black or freeze last frame. If you're connecting to a transmitter or something that's pretty important, since some of them tend to shut down when they lose video input. The GPI interface allows preset configurations to be quickly recalled via contact closure.

The front panel interface is typical of AJA – there's a bright dot matrix screen and navigation through the parameters is controlled by two pressable rotary encoders and a number of "page" hot keys. Setting it up is about as easy as it can be, with most of the default options set to suit most users. If you know what the function does, making the right selection is simple. If you don't know what it does, leave it alone and it probably won't matter.

Deploying the FS1-X is fairly straightforward. Plug it in between the two things which don't natively speak each other's languages, tell it which inputs you want to use, what actions you need to perform on the signal, and what the required output format is. You can up/down/cross convert resolution, change aspect ratios, go from analogue to digital and vice versa, change audio level phase and delay (there's even negative delay!), and with the FRC option you can change the frame rate.

The verdict: The conversion is good, but coming from AJA that's no real surprise. The FS1-X is a solid and useful tool. It's priced pretty well, and the dual power supplies, integration capability, and range of formats supported really does position it as a serious broadcast device.

AJA FS1-X

BRAND: AJA
MODEL: FS1-X
RRP: $7381.00 INC GST WITH FRC, OR $5368 INC GST WITHOUT FRC.
PRODUCT INFO: WWW.AJA.COM
DISTRIBUTOR: WWW.ADIMEX.COM.AU

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The PIXIES

St Vincent

Pet Shop Boys

By Cat Strom

Coldplay: Photography - Troy Constable
The Pixes: Photography - Prudence Upton
St. Vincent : Photography - Prudence Upton
Pet Shop Boys: Photography - Troy Constable



Coldplay visited Sydney in mid-June to promote their album Ghost Stories and to play a small public concert that caused a media meltdown. Coldplay is one of the biggest-selling bands of the last 15 years, and when they toured here in 2012, they played to 40,000 fans at each venue. So tickets to the gig held at Sydney's Enmore Theatre, which has a capacity of just 1600, were like gold but fortunately CX was there.



You could say that Coldplay's FOH guru Daniel Green is the fifth member of the band seeing that he works for no one else and is heavily involved in all Coldplay projects. Daniel also co-produced the Ghost Stories album so he was in the unique position of having worked with the album from its recording, its mixing and then presenting it live.

COLDPLAY

@ Sydney's Enmore Theatre



Coldplay´s FOH guru Daniel Green

"A great deal of my work is really done in pre-production," said Daniel. "I set up much of the backing tracks with our playback guy, Mathew Miller. My role is often more akin to a musical director as I sort out everything to do with what comes off the stage. I work closely with Miller on the playback and drum samples, as well as Matt McGinn, Johnny's guitar tech, to sort out his effects and rig, and the same with each member of the band; that way I have an overview of everything."

Daniel admits that he has enjoyed working in small theatres for a change as Ghost Stories really doesn't suit a stadium sound.

"It's nice to see the band in a different environment," he said. "It's interesting to see the way that the new songs translate into a small venue and it's been good fun."

However, the Enmore gig was unusual in that Daniel handed over the FOH reins to his trusted FOH tech, system designer and crew chief Tony Smith, as he was mixing the broadcast audio outside!









Tony has also worked with Coldplay for years and his biggest challenge at the Enmore gig was fitting all of their gear onto the stage and the tech wings, the stage may look like there's not much gear but a lot is happening behind the scenes.

The Enmore's Nexo system was stripped out for Coldplay's preferred d&b audiotechnik J Series PA to be installed by JPJ Audio. There were twelve J-8 enclosures, eight J-12 enclosures for the main hang with eight J-Subs as well as a J-Sub arc along the front with Q7 enclosures for infill.

"It's a small room so you don't need much but we had to make sure we had enough to cover under the balcony," said Tony. "The d&b audiotechnik J Series has fidelity, great sound, is easy to rig and has all the control that you need within the control software. The d&b ArrayCalc simulation software is really good especially the new V7 where you can simulate rooms in the round among other features - which were invaluable for the film we did in LA and the up and coming Royal Albert Hall - it translates great into the real world. The whole process with d&b is well thought out and just sounds great."

"The d&b is a great system, you can put it in any venue and the continuity will be there between different places," agreed Daniel. "You know that your mix will always translate from the desk and you're not going to have to change too much."

Out front was a DiGiCo SD7 with some analogue pre-amps for the front end of drums, guitars, bass and vocals which Daniel says adds a warmer sound on the way into the desk. His Waves plugins included a



COLDPLAY IMAGES-TROY CONSTABLE

PuigChild 660 compressor which is modeled on a rare vintage Fairchild 670 and an H-EQ hybrid equalizer described by Daniel as very versatile with lots of EQ settings. Added to that were a few different compressors such as the SSL on the mix buss, two Bricasti reverbs, Eventide H3000 for different effects and a TC 2290 dynamic digital delay for Chris' vocal delays.

Monitors were run by Chris Wood, on a DiGiCo SD7 with Nick 'Mystic' Davis as stage and monitors tech, with the band all using Sennheiser in-ears keeping the on stage sound as clear as possible.

"It's good because we've also scaled down on the guitar amps with a lot of them off stage," commented Daniel. "Having the guitar amps pointing forward was a concern from the audio point of view as I had to make sure it was as clear as possible because there is a lot of detail in the new album. When you have guitar amps on stage pointing forward it always causes problems in small venues, as it masks some of the finer details of the songs. The stage was actually quite quiet which was a new experience for Coldplay!"

Chris Martin has recently started using a Telefunken M81 handheld vocal microphone after years of using a Shure SM58 microphone.

"It was quite a change for him," conceded Daniel. "They are relatively new and I'm sure they will get more popular as they're really good. We found that the Telefunken gave a little extra fidelity on Chris' voice and he felt comfortable singing into it, which is the main thing."



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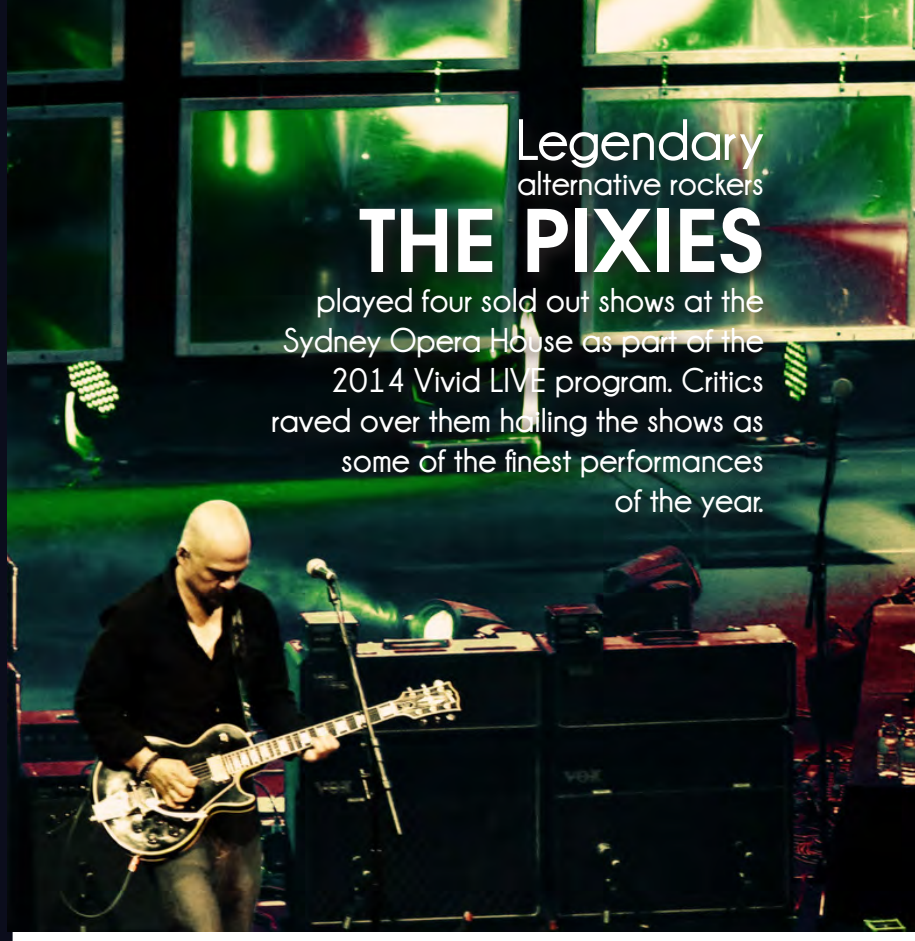
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SYDNEY VIVID™

LIGHT, MUSIC & IDEAS

Sydney's Vivid festival isn't just about lighting tall buildings, throwing gobos around, finding new ways to use LED tubes or mapping projections onto iconic sites. Vivid LIVE at Sydney Opera House is a celebration of ambitious popular music which cultivates artist-driven projects including unique collaborations, one-off projects and special events that take over all the venues and spaces of the House. This year also saw live performances at Carriageworks as part of the Modulations spin-off.

Vivid LIVE presents some great concerts during a time when Sydney can be starved of live shows and in a unique twist, these concerts often deliver some of the most outstanding light shows.



Legendary
alternative rockers
THE PIXIES
played four sold out shows at the Sydney Opera House as part of the 2014 Vivid LIVE program. Critics raved over them hailing the shows as some of the finest performances of the year.

Myles Mangino has been with the band for many years earning a reputation as an innovative and artistic lighting designer willing to go the extra mile. Vivid saw him adapt his show to fit in with the equipment that the Opera House owned and the fact that the stage at the Concert Hall is deeper and taller than most. However, Myles notes that to the average person it would look the same.

The set pieces of TV Lenses and Mirror Domes are crucial to the light show and travel in three cases. Five eight foot long sections of flat ladder truss are below the midstage truss and the thirty TV Lenses clip to these ladder trusses. The four Mirror Domes hang from safety cables, one above each band member.

Four Clay Paky Sharpy fixtures reside on the stage floor from where they can shoot into the Mirror Domes from where their beams reflect back onto each band member as key light.

"I have to say though that Martin is my favourite lighting brand and elsewhere I now tend to use the RUSH MH3 instead of the Sharpy," added Myles. "I have fifteen MAC Vipers on this show and they are currently my favorite fixture. The optics are wonderful and the speed of the zoom is unmatched."

At the Opera House Myles had the specified MAC Auras replaced by some GLP impressions which he didn't particularly like describing them as a bit old and tired. However he was given eight 'very nice' MAC101 CT's which he used for additional key lighting.

Myles says that he is always looking for ways to do a bigger, higher impact show with less fixtures.

"The band is very simple, it's four people that plug straight into an amp and play," he said. "It's all stripped down. To make it work I always try to do a show that is simple and stripped down but is also memorable and exciting. My initial idea was to use the big glass lenses they use in lighthouses, which were the original Fresnel lenses, but I discovered that they are very heavy and fragile. My research into Fresnel lenses led me to the Deep South of the US where



IMAGE - PRUDENCE UPTON

people in rural areas take the old Fresnel lenses out of television sets, hang them from trees and use them as solar cookers. I wondered what the quality of light would be from one of these so I bought one and it does really interesting effects when you shine light through it."

These TV lenses were designed so that RGB projectors in the TV sets could produce a 180-degree-wide image from a projector that was very close and consequently they have tiny vertical Fresnel cuts in them. When a sharp edged beam is shone through them, it outputs at the opposite angle it entered the lens and produces interesting beam-bending effects.

"If you hit them out toward the far left or right edges of the lens, the beam make a right angle on the output and it looks great," commented Myles. "Basically if the beam goes in at thirty degrees, it goes out at thirty degrees and at the same time it holds an image. Because you see the shape of the beam on the lens, and then the beam emanating from it, it also gives the appearance that the source of the light is moving around back behind the lens wall."

Behind the wall of TV lenses are only eleven MAC Vipers but because the lenses hold such a large image and at the same time produce beams, the fixture count appears to be much more.

The mirrored domes were originally discarded Christmas ornaments from New York's Rockefeller Centre that Myles came upon as he was loading out a show at 2am. However as they were not designed for touring, they soon ended up damaged and so Myles had the current versions manufactured.

It's very refreshing to come across a lighting designer who does more than just use what is offered by the standard lighting manufacturers.

"It seems like many lighting designers just rearrange fixtures into different positions," commented Myles. "Even if they don't have a set, you can watch an entire show and no one lights the backline, no one projects patterns onto the floor, no one lights the backdrop, no one silhouettes the band – all missed opportunities right in front of them. I try to imagine that I am doing theatre, ballet, television and concert all together. Anything downstage of the band is always lit with a tungsten or a CTO, so if it is to be filmed for television it already works. I always light the background as in theatre to give a nice depth which a lot of people don't do and a lot of concerts look really flat."

Myles admits that he goes to many live shows, observes how things are done and then intentionally tries not to do anything like it. The Pixies are famous for their live performances, notorious for not sticking to a standard set list as they fluctuate everything from tempo to song length.

"They jam, feel each other out and feel the crowd out," explained Myles. "Running chases or hitting go-buttons where everything is perfectly timed out looks very rigid and artificial to me, especially with a band like this. It may look cleaner and more intentional but The Pixies are chaos on stage and I wanted to match all that with how I perform on the console."

Consequently, for control Myles used a grandMA2 to operate in his own unique way with the entire show run off the temp faders.

"When a song comes up, I hit the executor page for the song and I push up the first fader which is a mark which loads all of the colours, gobos and positions," began Myles. "From there on any kind of motion is manual. For example, as the band get louder I have a fader that I can slowly push up so everything moves into open white, or maybe the zooms may get wider. Everything looks like it is growing or shrinking with the dynamics of the band. The Pixies invented the style of music called 'loud-quiet-loud' and so I try to match that with the lighting. For ten years I worked as a record producer and really my lighting design is done in a similar manner by layering and adding elements."



IMAGE - PRUDENCE UPTON

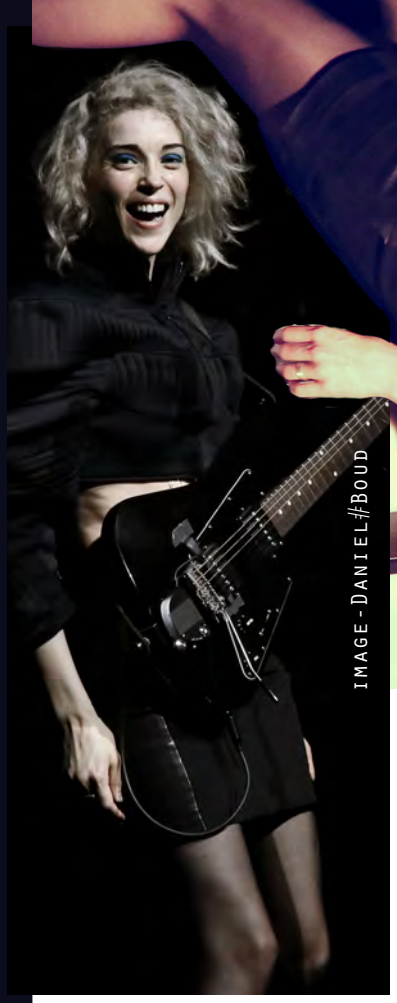


IMAGE - DANIEL#BOUD

St Vincent

New York based lighting and show designer Susanne Sasic has designed for R.E.M., The White Stripes, Nirvana, Arcade Fire, Beck and others.

Susanne had worked with St. Vincent before on the St. Vincent/David Byrne 2012-2013 Love This Giant tour and for the St. Vincent's 2014 Digital Witness world tour she was responsible for the show design, set design and lighting design.

"Because I had worked with Annie (aka St.Vincent) before I already had an understanding of what she was looking for lighting-wise and how much she loved strobes and dynamic moments of light and dark," explained Susanne. "Her brief was more specifically about the set and having some kind of structure on stage as a center piece. She sent many photos of painting, sculpture, film stills, etc to convey what she was thinking about."

For the set design Annie initially wanted to use the pink throne on the cover of her record as a stage set piece. Susanne drew a rendering of a pink 3-step riser instead, as something she could both stand on top of and sit on, something that could be used for climbing, dancing or other movement as choreography is a big part of this show.

"We were unable to bring our custom built pink riser with us to Australia due to shipping costs, it's a heavy piece that weighs about 500lbs," added Susanne. "For the Vivid show the Opera house built a more basic temporary version for us. It wasn't lit from within, and the original riser isn't lit from within either, it's built from MDF and painted pink."

Annie is particularly fond of strobes so they are an important element in Susanne's design and normally she would have eighteen Philips Showline SL Nitro 510 LED strobes, however they were unavailable for the Opera House show and were replaced by Martin Atomics.

"The Nitros are great for their low power consumption, pixel mapping, super cold colour temperature and their ability to be used as simply a light that turns off and on," commented Susanne. The rest of the rig is made up of thirteen Martin MAC Auras and eight Martin MAC 101s. The Mac Auras are great for their colour mixing and also their smooth, wide focus. I love good quality LED fixtures, the lack of heat means they hold up better on tour, and the lower power consumption is great for ease of touring as well. The MAC101s are small and light weight, which makes them perfect for mounting vertically on pipes. I also like their superfast movement."

For control, Susanne just moved from the MA1 to the MA2 at the start of the tour in January.

"The MA2 is great, I like the flexibility, the effects engine, the thinking behind the software," she said. "I like using more of the typewritten syntax for programming in lieu of button pushes; that seems like a good direction for console software to be moving towards. I feel like the operating system is totally solid and reliable, it's very stress-free."

St. Vincent only played the one Sydney Opera House show and Susanne was more than happy with the end result. It was her first time at the Opera House even though she has worked in Sydney many times.

"It was the first show I did this year with Atomics replacing the Nitros, which was a bit of a hurdle, but it all worked out and the show file from that show is the basis for many of the one-offs and festivals we have done this summer with the same setup of Atomics instead of Nitros," she concluded.

I am still on the road with the St.Vincent tour, as well as starting initial design work for some projects for next year.

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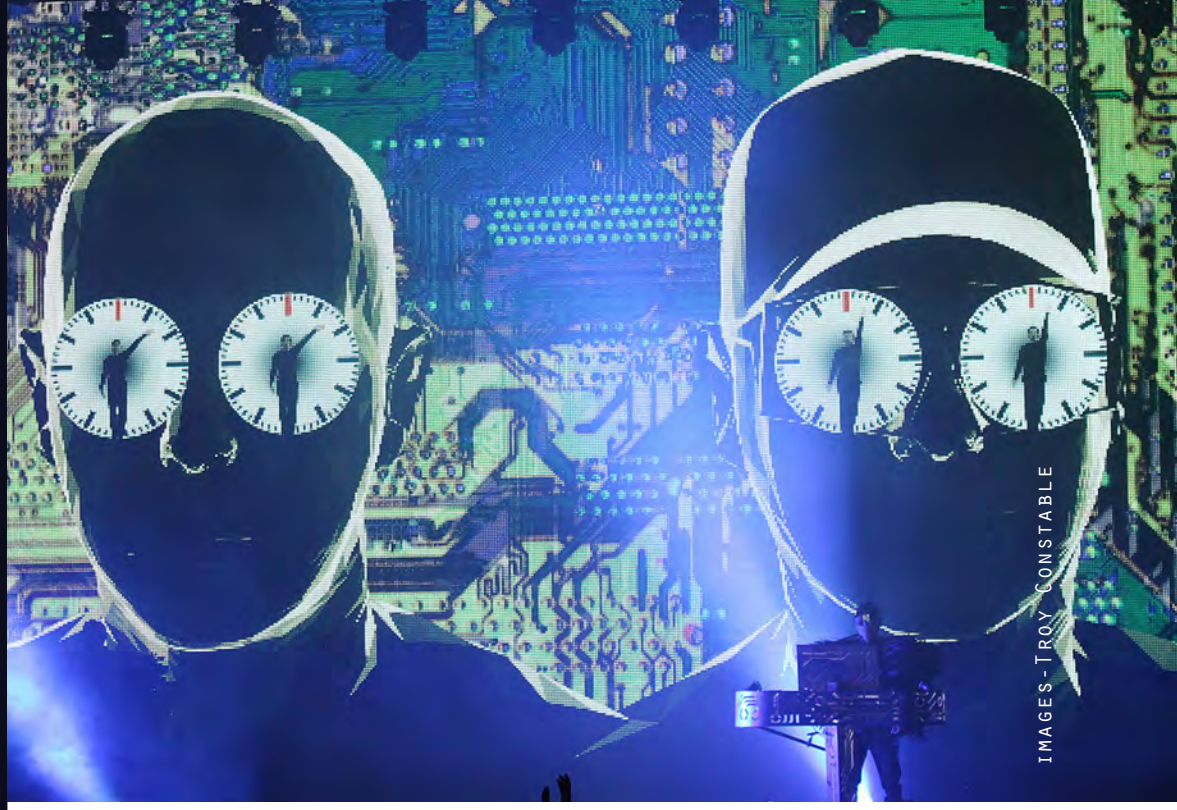
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SYDNEY VIVID LIGHT, MUSIC & IDEAS



THE PET SHOP BOYS

Vivid festival saw electronic pop duo The Pet Shop Boys play three shows, the only Australian performances of their 2013/14 Electric world tour. The duo performed as part of Modulations which basically saw the Carriageworks venue taken over by DJs, bands and a pop-up restaurant.

As The Pet Shop Boys show is not your average pop concert - being part musical, part theatre and part art installation – it's a fitting venue.

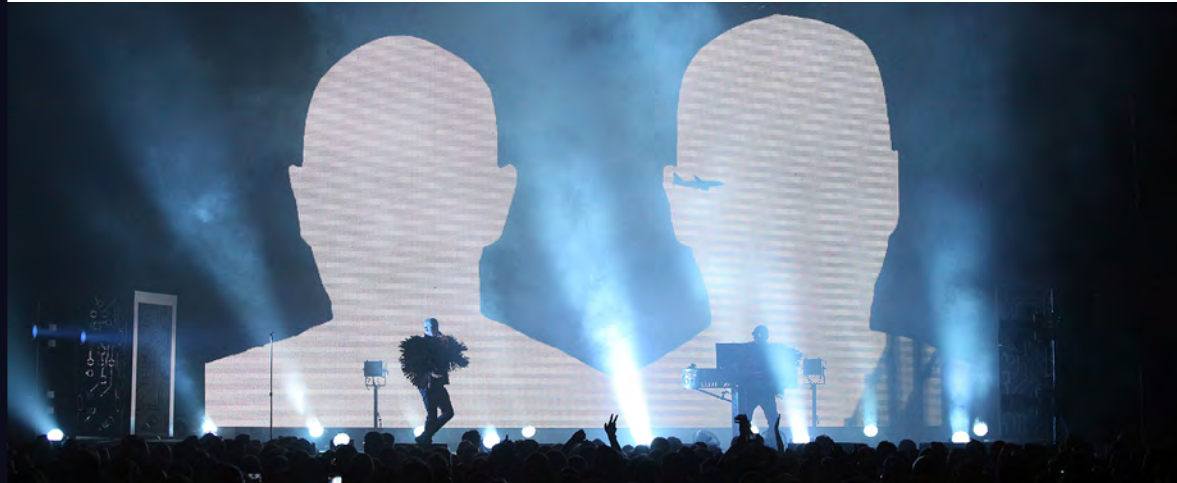
The Vivid shows were a rare opportunity to experience their full production including video, lasers, stunning costumes, and choreography - along with a catalogue of hits, in an intimate and immersive environment. Elsewhere in the world, the tour plays to large arenas and stadiums.

The visual treat was the result of a collaboration between creative director Es Devlin, lighting designer Rob Sinclair, costume designer Jeffrey Bryant and lasers from ER Productions. Lighting director on tour is the affable Jon Barker who inherited the Jands Vista lighting control set up from Rob Sinclair, an avid Vista fan. The show runs to timecode so nothing is left to chance as there are some rather tricky elements such as video coming in and out quickly in synch with lighting and the same with lasers.

"The show was all programmed so it was just a case of operating Rob's show," commented Jon. "I'm happy to use any control although the Vista is great to use; I have a Vista S1 for control and two Vista M1 playback wings connected to two networked Apple MacBooks (one master and one backup) running Byron Version 2.2. The best features of the Vista are the patching and the feature exchange – you can build a show on it and take it to different venues with different gear and Vista deals with it very well. I also like the flexibility to be able to assign the select buttons, intensity faders and flash buttons to be pretty much whatever you want."

The Vivid shows were almost exactly the same as seen elsewhere in the world with the exception of a 40ft wide x 20ft deep DMX controlled venetian blind. Normally there are three different projection surfaces: a front gauze on the very downstage edge used for the start of the show that veils the band in mystery, a mid-stage gauze which is also projected onto, and then the venetian blind which was replaced by a LED video wall in Sydney. The gauzes enable the band and their dancers to become absorbed into the video content.

As expected, colour throughout the lighting design was dictated by video in this vivacious and pop-inspired show. Crucial to the lighting design were the 23 x Martin MAC Auras for which there was to be no substitution on tour. These resided on the



floor along with 20 x Atomic Strobes and basically they were the main light show. The show had no front light relying on 12 x Clay Paky Sharpy Wash 330 fixtures on side booms to strongly light from the side.

"The first three quarters of the show is just the MAC Auras and Sharpy Washes," explained Jon. "Then when they play It's a Sin, everything explodes with the rest of the rig used. It's nice to be able to save so many fixtures for a big impact so far into the show."

The rest of the rig included 8 x Martin MAC2000 Wash XB for front wash although they are barely used, 16 x MAC Viper Profiles on the drop trusses behind the video wall that replaced the venetian blind, 17 x Clay Paky Sharpy on the mid and rear trusses, and 18 x 4 Lite Square Moles DWE.

"The MAC Auras are a compact and punchy unit," said Jon. "One of the main reasons that Rob specified them is that their colours are very good. The problem with a lot of LED fixtures, especially the older ones, is that trying to colour match amongst them can be very difficult. Unless they are all made at the exact same time, the colour difference in the LEDs is quite noticeable. The MAC Auras have a colour calibration mode so even if they have come from different batches, you get very true colours especially white."

The band were keen to have lasers on the tour and they were expertly worked into the visuals to make them an integral part of the show and not just an added effect. With four laser heads on the stage and a laser on the front truss plus heaps of smoke, the effect was mesmerising.



ABOVE- DANIEL BOND (VIDEO) & ANDREW TURNER (LASERS)

LEFT- JON BARKER



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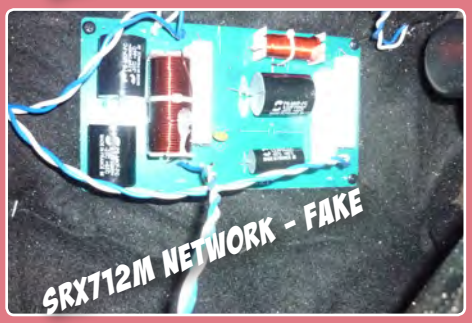
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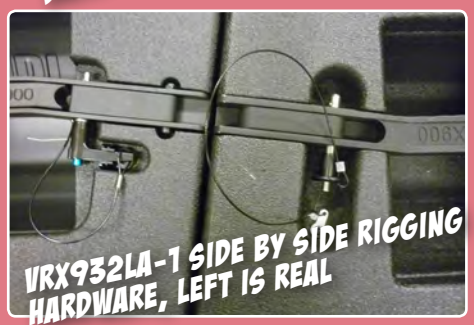

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INDUSTRY WOMEN ... 'IT DOES TAKE A CERTAIN TEMPERAMENT'



ANDREA O'SHEA HAS A LIFETIME CAREER IN TECHNICAL PRODUCTION WITH PLENTY OF JOYS AND DRAMAS ALONG THE WAY INCLUDING BEING WHISKED AWAY FROM GUNFIRE IN THE STREETS OF PORT MORESBY. RECENTLY, SHE CHATTED WITH ME OVER TEA AND CAKE.

JH: What led you into technical production?

AOS: I was roped in while sharing a house in Melbourne with some actors who said, 'We're opening tomorrow and need a lighting operator.' They took me to a theatre in Fitzroy with an ancient lighting board and a rack that made strange noises. I knew nothing and when you brought up channels 1, 3 and 5, channel 17 would start flashing. The top of it was unscrewed so that you could lift it up, go to channel 17 with a screwdriver and tweak it to stop the flashing. It was hilarious. But for me, because it had electricity going through it, it was terrifying!

JH: Were you a student at the time?

AOS: No. I was filming horses at the race track for the stewards, which was fun. I'd been a clerk in Adelaide before I moved to Melbourne and was teaching a community carpentry class at Tafe. My Dad built a boat when I was about fifteen and everyone in the family had to learn woodwork. Mum was the shining star, I have to say, but I learned basic tools use and was always a hands-on kind of person.

JH: Tell me more about your early career.

AOS: When I started working with friends in Melbourne, as lighting or sound or stage managing, I learned as I went along. Then I moved back to Adelaide and was asked by Sue McClements, who I knew from Melbourne, to production manage a show for Unley Youth Theatre (now Urban Myth). I didn't have much idea of what I was doing. When I look back, I must have been bananas! But luckily some parents of kids in the show (Kim Liotta and Sean Riley) offered to stage manage and pulled the cast of 100 together. Designer Gaelle Mellis ended up with both wrists bandaged and everyone thought she'd tried to commit suicide. But her wrists were just aching from stitching so many costumes! After that, I started to get theatre jobs interspersed with repairs and home maintenance.

JH: You continued with lights, sound, set building, stage and production management?

AOS: Yes, whenever needed. I'm mainly retired these days unless someone offers me something fabulously interesting. I don't want any more major headaches. I want to be lazy! I'm sixty-one and, although we're expected to work until seventy, I've been working in theatre since the 1980s and it's the right time for me to retire.

JH: Who have been important influences in your professional life?

AOS: Margie Fischer (founding director of Vitalstatistix Theatre Company) was fantastic. I met her in the early nineties when I interviewed for a job there which I didn't get. Afterwards, Margie said, 'You didn't get the job, Andrea, because you interviewed very badly and didn't make a very good impression.' Now Margie is very direct, no pussy-footing around, but it was the best thing that anyone could've said. I saw exactly what she meant and it was a turning point. Previously, I'd been working with friends and I was too relaxed and jocular in the interview. Later on, I eventually worked with Vitals as stage manager on Miracle with production manager Maxine Le Guier who was another huge influence. She gave me the confidence to follow her into production management. After my first PM gig, she asked me what I thought about the job, and I said, 'I really like it, Maxine. I like the control!' As if you've got any! Ha! Although when I first worked with Maxine, I knew she thought I was as ditsy as anything. I could almost hear her eyes rolling. But we got on very well and Maxine provided great support. I also admire Stephanie Fisher. She's a really well-organised stage manager.

JH: What's been your favourite work place?

AOS: I don't think I have one. Although the Vitalstatistix hall in Port Adelaide drove me mad — it was in a pretty poor state at the time — we did some shows that the Hall was magic for, like My Vicious Angel by Christine Evans. Rosalba Clemente directed and Geoff Cobham (another role model) did lights and Imogen Thomas had this set design of a six or seven metre high cage. The front had a curtain and every night when it opened

I was so excited. The script was fantastic and every performance moved me.

But, the venue I worked in New Guinea was most unusual. It hosted Restless Dance's High Voltage in 2012. We were invited over for Australia Week by the Australian High Commission. I'd worked with Restless before and did Debut 4 with them last year. That was great because I felt that it was my last show before retiring and with people who'd been colleagues on some of my earliest shows in Adelaide — people like designer Gaelle Mellis, lighting designer Sue Grey-Gardner and also Dave Gadsden, stage manager Stephanie Fisher and Matt Gorgula. It was just a lovely team.

But, back to New Guinea, I was there a couple of days before the company to do lighting rigging which turned out to be ridiculous. I'd been trying for weeks to get venue tech specs but all they could tell me was that it was a theatre and it had lights! When we arrived, we found this gorgeous but tiny space with ten rows of seating and a little pros arch stage with one lighting bar above and a piece of cable holding it up here and there — dodgy as anything — and out the front was one front of house bar and that was it. They had a terrible ladder. When I stood on it I wondered if the bolts would hold. I thought either this ladder will collapse or I'd be electrocuted. One way or another, I'd be dying in Port Moresby! We tried to focus the lights but there were open shutters all around the walls and no blackout whatsoever — broad daylight! It was hilarious. I'd planned the tour with a fall-back position but every time I resorted to the fall-back position, I had to fall back even further!! The show called for specific lighting but there were only four lights on each side and no separate control. It boiled down to one side together and the other side together — that basic. I should have packed two dolphin torches! At the last minute, someone from the High Commission brought in some LED strip lights which went on the floor and switched colours and it all looked quite fantastic. On bump in day, we planned to check the focus after dark, but at 5pm we heard 'bang, bang, bang, bang' from outside. Phillip, the director, said, 'That's not gunfire is it?' We went outside and more 'bang, bang, bang, bang'! We were next door to Parliament House and thought, 'This is it. It's the coup.' It was when that stuff with Somare, O'Neill and the Chief Justice was happening. Then tear gas started wafting across — unbelievable! Someone called for a car and armed escort to get us out. Finally, a car came but no armed escort. I thought we'd be flown out so was taking pictures on the way back to our hotel in case no-one believed we'd been there. But the darling technicians stayed at the theatre and plugged on to get everything ready. We went back the next morning, did a quick rehearsal before the matinee and it went fantastically. The locals said it was great because it gave them so many ideas about lighting for their shows. But all my fix-up brain could think to say was 'repair that ladder!'

JH: Have there been similar satisfying shows?

AOS: Yes. Another was with Leigh Warren Dancers in the Netherlands in 2009. That was the other end of the spectrum. From a little place in New Guinea with no blackout to a massive theatre with a projector the size of a piano. We did Shimmer and Impulse with Geoff Cobham's lighting designs. I was pleased because I was responsible for realising Geoff's lighting and thought I did that justice. It looked beautiful and the audience response was great. I'd already worked with Leigh the year before and loved it so the tour to Holland put my retirement plans aside. As a professional influence, Leigh renewed my vim and vigour for it all.

JH: OK. So let's talk about the gig from hell. What's been yours?

AOS: When I saw that question, I could hear the shower scene from Psycho in my head. Yes, I've had one that still gives me nightmares. Thank god from an audience perspective it went well but backstage it was torture. It was a big outdoor gig. There were negotiations between the Council and the Company, who will remain nameless, and I was production manager. For the set up, the Council stopped us from fencing off the site because the public needed access. But it was a construction site! It just felt out of control. I should have said, 'Get another schmuck', but I didn't and, for everyone working on it, it was really hard and, as the PM, I have to carry that.

JH: How did you manage life as a freelancer?

AOS: I loved it. I don't think I'd deal very well with full-time employment. I'm happy to work my guts out but I love a little break. I didn't have to hunt round for work. More invariably came through so I managed to make a living. Apart from five years full-time with Vitals and, earlier, a thirty hour per week job with Junction, it was all freelance and worked out well.

JH: So how would you get the next gig as a freelancer?

AOS: I didn't worry about it. I made sure I had enough to live on and another gig would turn up in time. I know some people production manage overlapping shows but I just can't bear it. I'm happy to have breaks. People would be appalled when I said I'd only a few weeks work lined up, but it does take a certain temperament.

JH: What would bring you out of retirement?

AOS: Well, Margie Fischer can talk me into her gigs. She persuaded me to go with her show to Sydney last year. If it was not going to cause me too much stress, I might do it, but otherwise, no.

JH: What advice would you give to somebody starting out?

AOS: I was thrown in and learned as I went along. But I'd recommend doing a really good tech course and then being strategic in looking at your work experience placements. Don't go to the company that knows you already. Choose something that will give you a wider market and is a company that you really want to work with. Be enthusiastic without being a pain in the neck, but be willing and interested and intelligent.

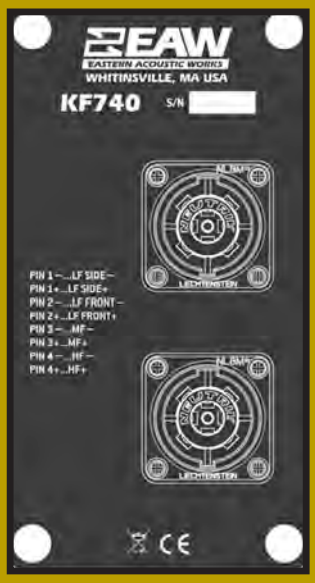
JH: Is there anything else you'd like to add.

AOS: Yes. If you're going into theatre work, buy a house and get yourself financially stable because often it doesn't pay very well. Don't spend all the money you earn. Housing is expensive but with low interest rates, servicing a mortgage is about the same as renting once you have a deposit. But you need to have some finance to fall back on — money in the bank — if you're going to freelance.

JH: Thanks for talking to me today, Andrea.

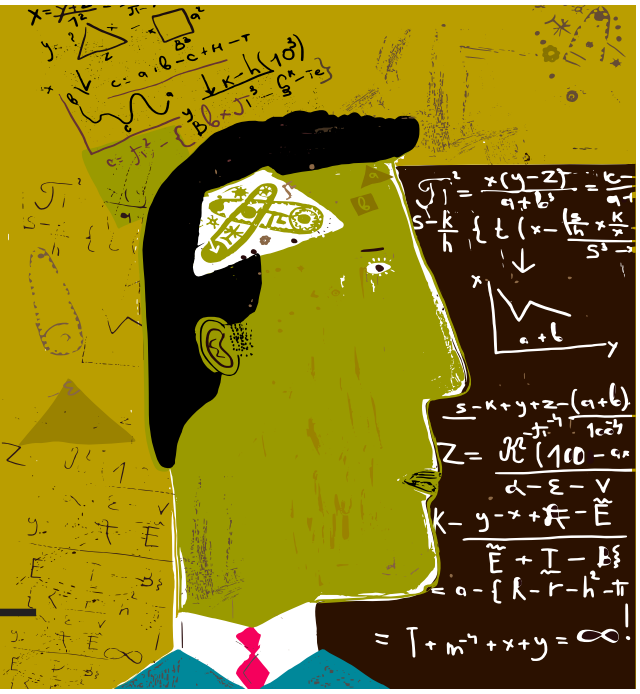
AOS: Thank you. It was great to be reminded of the things I've done.

STUFF FOR THE BRAINY TYPES



GETTING TO THE CORE OF THINGS

By Jimmy Den-Ouden



REMEMBER A TIME WHEN AMPLIFIERS ALL HAD BINDING POSTS OR XLR CONNECTORS FOR SPEAKER OUTPUTS? IF YOU DO, THEN YOU'RE PROBABLY AT LEAST AS OLD AS ME. PROBLEM WITH THESE WAS THAT BINDING POSTS WERE FIDDLY, AND TYPICALLY MALE XLR OUTPUTS OPENED UP THE POSSIBILITY OF GETTING ZAPPED OFF AN AMPLIFIER. EP4 AND DERIVATIVES HAD MORE PINS, BUT THEY WERE STILL EXPOSED. WHEN THE SPEAKON CONNECTOR APPEARED IT WAS A BIG WIN FOR EVERYONE. MULTIPLE PIN SETS, SAFE, LOCKING, AND THERE WAS (UNLESS YOU WERE EXTREMELY STUPID AND BRUTISHLY STRONG) ONLY ONE WAY TO PLUG IT IN.

We started to see NL4 Speakon replace XLR as the preferred output connector for professional amplifiers, but most manufacturers initially only used one set of pins per connector. Seemingly overnight everyone realised that wiring two outputs to one connector made amps easier to cable to two-way PA systems. Just use a four core cable, and wire the drivers internally to the appropriate set of pins on the input Speakon.

So for instance in a two-way box, you might find the mid driver wired to pins 1+ 1- and the HF driver wired to 2+ 2-. Cool, that all makes sense. Bigger cabinets with more drivers use NL8 connectors, allowing four discrete signals to be input on one connector. Check out the graphic of the input panel to an EAW KF740 and you can see exactly which signals need to be input on which pins. You still need to observe all the usual rules of actively crossed-over systems (eg: don't send sub into the HF drivers), but at least the linking up process is smoother. Some manufacturers even offer custom rack panels allowing you to homogenise outputs from multiple amplifiers into a single NL4 or NL8 output. Great!

But what about all the "plastic fantastic" boxes out there? These things represent a significant chunk of the PA market, and most of them use NL4 connectors as well as internal passive crossovers. Some of these pickup their signals on pins 1+ 1- and some of them on 2+ 2-. I've even seen pin pairs linked. Some manufacturers run pin pair 1 for subs and 2 for mid-high, others do the opposite. This is where the big problem starts to happen.

Imagine this scenario: You're using a two-channel amp to run a sub and a mid-high cabinet. You link from one NL4 output to the sub, then out to the top box. But both the sub and top box are wired to pin pair 1 on their NL4. Two bad things can happen from this – first up the amp is presented with a lower impedance load than it's expecting, and secondly you'll be running sub only (or mid-high only) to all the boxes. Either way, the system won't be working right.

Now imagine this one: Assume your amp is modern and outputs channel A on pins 1 and B on pins 2 of the same NL4. You plug a 4 core speakon cable into the amp, then the other end into a speaker with linked pins. You've just shorted the amp channels together (minus whatever minimal cable resistance is involved). Generally this is considered extremely bad, and most amps will have a pretty hard time protecting themselves against such actions. Different amps will react differently in such situations, but generally none of them will sustain output for very long.

SO WHAT ARE YOUR OPTIONS?

•First up, know your amps and speakers. If the box doesn't clearly say which pins it uses, pull out the Speakon connector and look. Then stick a label on the back indicating what's actually going on. Most reputable manufacturers do this for you.

•Re-wiring all your boxes to run the same convention as each other is another option, but can cause confusion if you're ever cross-hiring boxes in or out of your stock. Some people like to use a DPDT switch to make the box switchable (Dynacord make switchable mid-high boxes for their Cobra system). Again, label the switch clearly.

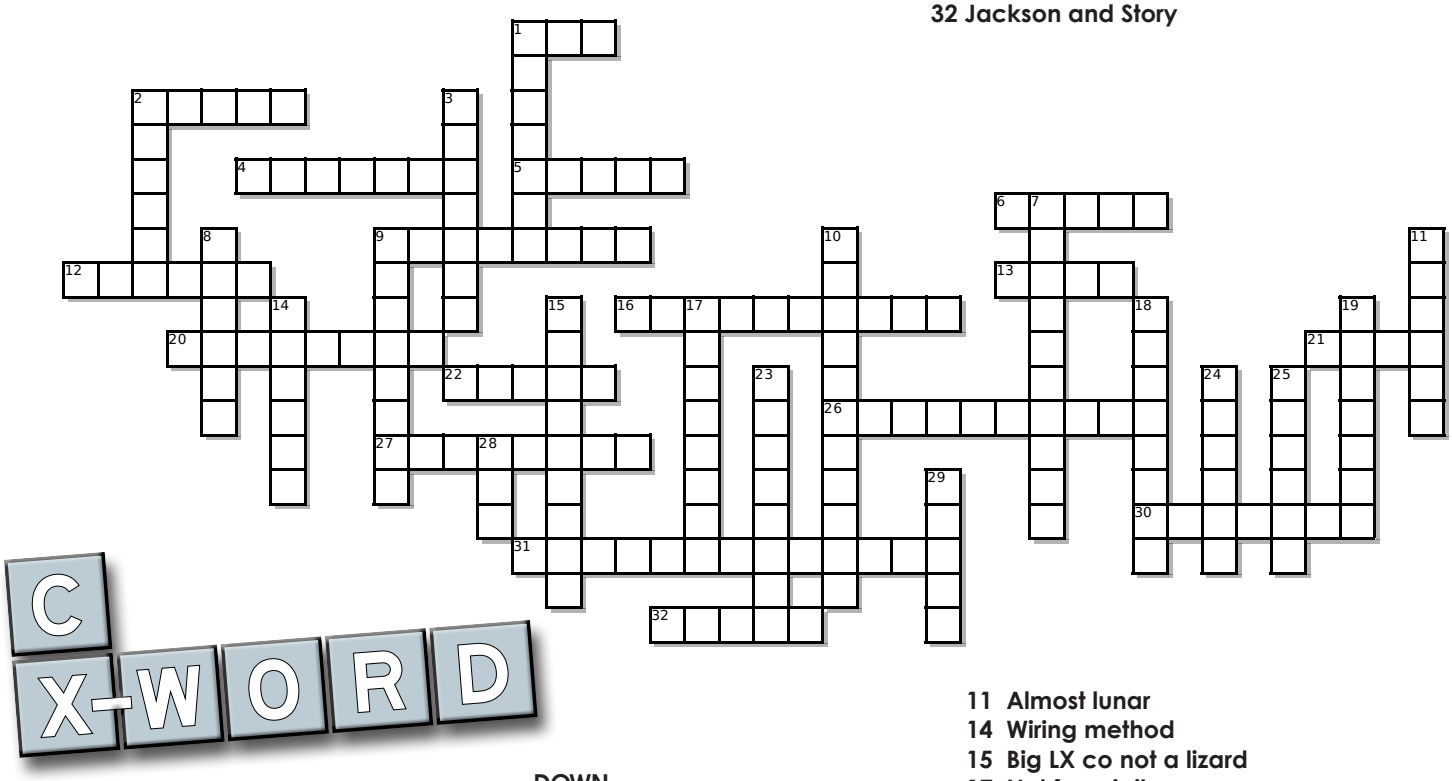
•Consider making up some short tails to split multi-output speakons into single channels. Wire pin pair 1 to one NL4 and pin pair 2 to a second NL4, then label them both clearly. It's a cheap way to protect your amps from being asked to do stupid things.

•If your business involves a lot of driveway hire, build dedicated amp racks, patch panels and speaker cables for systems you commonly send out as packages. Making sure the right way is the only one way to plug the system in will go a long way to protecting your gear.

The final word is one about quality. Amplifiers of today are more powerful and smarter than ever before. Using underspec cabling can limit the performance of your amps or even in some cases trigger fault detection. Always use cable of sufficient gauge and terminate it with genuine connectors to avoid problems!

ACROSS

1 Cathode ray what?
2 No broom required
4 Not between the tracks
5 No gain, no loss
6 Thin gauze
9 Manufacturer of DSP
12 Down the hatches
13 Diaphragm
16 Two conductors, no battens
20 1000 of them
21 Manufacturer of pro audio
22 Same axis
26 Scrambling of a signal
27 Adelaide company name
30 Big production co not a direction
31 Around we go
32 Jackson and Story



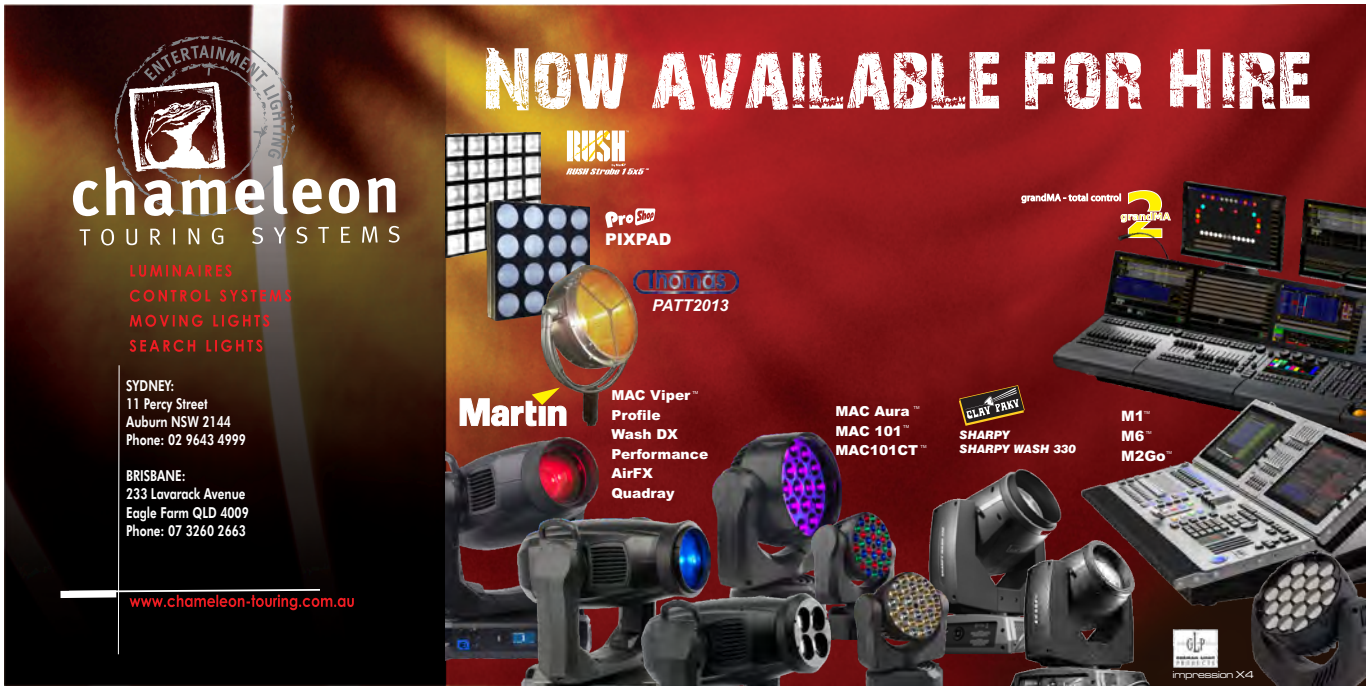
C X-WORD

Send feedback & input to
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Answers - page 72

DOWN

1 Not the garden path
2 Where the lamp goes
3 Sony made this
7 Not punishment
8 Peripheral
9 Not Dexion
10 Old form of intensity
11 Almost lunar
14 Wiring method
15 Big LX co not a lizard
17 Not from jail
18 Not associated with plumbing
19 A big Michael in video
23 Matter of the heart
24 Measured
25 Simple EQ
28 Strike the....
29 Not pain





BIZ TALK

with Julius Grafton



AVOID THE COMMONWEALTH BANK OF AUSTRALIA

You have choices, and anyone considering a bank would be well advised to avoid the Commonwealth Bank of Australia, or CBA as it is better known. This is harsh advice, but I will make the case now.

For example presently CBA are under pressure to pay well over a hundred million dollars (stop and consider the sum) in compensation after its investment advisors lied, cheated and defrauded thousands of clients. That's fact. Put simply, CBA leveraged its reputation as a major bank and ripped off ordinary investors. Still fact, which is why I publish it here.

But that isn't the core story today. The main reason to avoid CBA at all costs is what it did with Bank West. Specifically what it did to Bank West clients, mostly smaller businesses, some known to **CX**. Because once it got going on them, it became bold and moved its focus to its own client base and applied the same unconscionable pressure.

Our late lawyer Ross McGlynn worked on cases where Bank West attempted to seize viable businesses. This was an increasing topic of conversation around our meetings over the past eighteen months. (Ross was a scarce commodity in commercial law, and is deeply missed. He died of Prostate cancer early this year.)

Ross advised **CX** on financial matters generally. His counsel is sorely missed. We relied and respected a learned word.

In regards to Bank West he worked some of those cases for little or no return. He was truly appalled by how CBA treated its clients.

Here is a typical example. Imagine you borrowed from Bank West, for a commercial mortgage or had an overdraft. When the Global Financial Crisis (GFC) hit, Bank West's owner the Royal Bank of Scotland (RBS) fell over fast.

CBA saw a genuine opportunity and purchased Bank West for a knock down price, and as if that wasn't enough, inserted a poison pill into the agreement.

For every commercial loan that fell over, CBA would reduce the tail end payment to RBS. In other words, CBA had a golden window in which to cherry pick the loan book, and retain only the Bank West accounts it wanted. It could – and did – erase the rest.

CBA set about feverishly reviewing all Bank West loans. Desk top valuations were done by junior staff, working overtime, on properties. Given the GFC had ravaged the market, it was easy to write down the value of almost every property and change the loan ratios. Bank West (CBA) would then give the borrower a short period of time to refinance or fold.

More insidiously, the bank closed, reduced or cancelled overdrafts, usually with minimal notice. This cut off cash flow, wages could not be paid, and this action alone often bankrupted the businesses concerned.

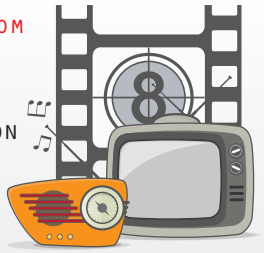
These were often profitable firms. CBA had absolutely no hesitation - it was operating voraciously, unconscionably, and in our view immorally. It was however lawful. Unlike the current scandal, where the investment advisory arm of CBA broke consumer laws, for which it is currently being slowly hauled to account for.

While every other bank has instances of bastardry, CBA towers high as a corporate vandal. The Commonwealth Bank of Australia should be carefully avoided until at least it acknowledges and compensates ALL its victims; and pledges to operate in an ethical manner.

Right now it cannot be trusted. The organisation is tainted.

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Australian Entertainment Technology Prepares to Escalate Export Activity

Australian Commercial & Entertainment Technologies Association

ACETA is navigating its fourth year of operation, better equipped, armed with an impressive array of Intellectual Property and with numerous programs in progress or due activation, there is a lot to be excited about. Many of the initiatives will impact positively on all participants and include; the institution of industry guidelines that also enables an ACETA member accreditation process, the introduction of associate membership, the establishment of an industry statistics program, addressing industry skills shortage in two streams (careers and education), consulting with government on legislation that impacts the industry (i.e the digital dividend) and reform of the trade event schedule. Many of these programs address the needs of manufacturer's representative (distributors). From the outset ACETA realised that the needs of the creative and/or manufacturing sector were often different and more complex. In due course a Manufacturers Manifesto was authored and recently distributed, its purpose is to unify and provide a blueprint to increase export activity and employment.

By the time you receive this edition of CX Magazine, ACETA will have almost concluded a nation wide forum of consultations with Australian organisations that create and/or manufacture entertainment technology. These face to face meetings will have taken place in Sydney, Melbourne, Adelaide and Brisbane. The purpose being to elicit feedback on the ACETA Manufacturers Manifesto, by interacting with a broad cross section of the sector to ascertain a consensus, enabling ACETA to establish priorities towards implementation of the vision contained within it. But first let's revisit some industry statistics that validate the potential of our entertainment technology creative sector.

The Australian music and entertainment technology industry is worth close to $7 billion in current commercial activity, which equates almost to an impressive 1% of Australia's gross domestic product (GDP), and employs over 110,000 individuals in a variety of vocations. The consummate enabler, entertainment technology, is also at the core of a number of other vital industries including communication, media, information and consumer electronics to name a few.

Turning to our specific industry, the current ACETA data base lists 82 organisations in Australia engaged in the creation and/or manufacture of entertainment technology. A few of these organisations have obtained significant worldwide market share and acceptance; however the overwhelming majority are highly skilled with much potential but are small, niche and under-resourced alone to mount, let alone sustain, an active international marketing presence. These organisations are located throughout the nation as follows:

Victoria	**35**
New South Wales	**27**
Queensland	**10**
Western Australia	**4**
South Australia	**3**
Tasmania	**1**
Northern Territory	**1**
ACT	**1**

Despite our best efforts there are bound to be more, and for privacy reasons we have chosen not to publish this list, however please contact sara@aceta.org.au. to ascertain if you are included, or wish to be included on this ACETA data base.

ACETA asserts that the creative and manufacturing sector of the Australian entertainment technology industry has the opportunity to position itself as a prominent source of supply to the international market. If we understand our potential and embrace the ACETA vision portrayed in its Manufacturers Manifesto, we can possibly increase export income by several hundred million dollars and create thousands of new employment opportunities. Whilst difficult to quantify there will be a positive flow-on affect in associated crafts, trades and industries.

OUR CHALLENGES

There are a number of challenges that confront Australian organisations involved in the creation and/or manufacture of entertainment technology; most revolve around our geography, population, high domestic cost structures and governance - let's identify some of the obvious:

1. Australian organisations create and produce in a very small home market place that offers limited commercial opportunity to sustain their endeavours, unlike their counterparts in say Europe or the USA. This is why Australian organisations have to be highly skilled and resilient to survive.

2. The reliance on a very small home market to sustain development presents a broad range of 'economy of scale' obstacles not experienced by our competitors based in larger home markets.

3. Australian based organisations operate in a high cost business environment relative to their international competitors.

4. Australian organisations, particularly the small and niche, find it difficult to navigate bureaucracy when applying for assistance and access to funding opportunities, many report giving up during the process.

5. Unlike our major international competitors, the cost of implementing and maintaining an export campaign is extremely high due our geographic location; this cost impost makes market access more difficult.

By Frank Hinton

OUR STRENGTH

Some of our historical challenges have become a potential strength. Historically Australian organisations had no unifying mechanism or access to collegial mentoring; they went it alone, some have survived, several have prospered, many have not. However this is no longer a reason or excuse, we now have a 'peak body' that can unify and fortify both the individual organisation and the broader industry We have an innate strength by virtue of who and what we are, let's preview a few:

1. Australian engineering is highly regarded and our industry is generally seen as highly skilled, niche and client friendly unlike many of the traditional supply sources in the northern hemisphere who are increasingly seen as highly corporatized and homogenous.

2. Judging by many reports it appears that Australia is seen as neutral, trustworthy and innovative. This view seems particularly evident in the developing markets of Asia, the Middle East and sub-continent.

3. Australian organisations have found it cost prohibitive to implement and maintain an export campaign in the traditional northern hemisphere markets of the UK/Europe and North America. However this is not the case when considering the developing markets of Asia, the Middle East and the sub-continent, where our proximity is far more favourable.

4. From many sources, including the international media, industry commentators and international distributors, we are led to believe the world is looking for genuine new innovation, new supply partners and more equitable and trustworthy relationships. If this is the case the Australian industry is ideally placed and should mobilise.

5. Most importantly, we now have our own industry 'peak body' ACETA that is driven by its members (by the industry for the industry), no one need be isolated and together we can confidently address any challenge, one of these being to escalate international activity.

WHERE TO FROM HERE

Once the aforementioned consultation process has concluded at the end of August 2014, the Manufacturers Manifesto will be reviewed and adjusted to reflect the consensus experienced through consultation. At that point an action plan will be established contingent on the degree of industry participation. Put simply if Australian creators and/or manufacturers of entertainment technology embrace the ACETA position by joining the association, we can mobilise to realise a vision, your vision, the alternative would be a wasted opportunity.

To the industry we invite your response, if you could contact: ian.harvey@aceta.org.au with your comment.

Frank Hinton
President ACETA



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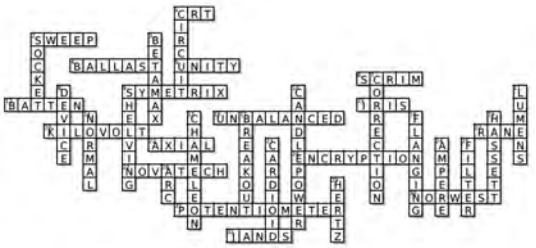


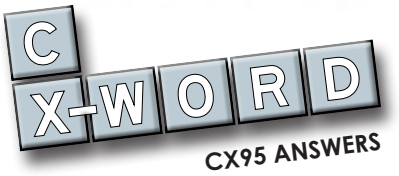
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JIGSAW Community Services Database
Online database of geographical community services
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W: www.counsellingonline.org.au

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W: www.sane.org

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Youth & Student Services T: 13 24 90
W: www.centrelink.gov.au

Centrelink ⓘ (8am-5pm)
Disability, Sickness & Carers T: 13 2717
Employment Services T: 13 2850
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Seniors T: 13 2300
W: www.centrelink.gov.au

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8am-8pm Mon-Fri, 10am-4pm Sat except Public Holidays
W: www.familyrelationships.gov.au

The walk-in mix

The kid calls in a favour

Daughter Fifi Trixiebelle Britney Lourdes is currently on holidays with one of her friends, no doubt wreaking havoc on the obligatory Grand Tour of Europe, leaving a trail of broken hearts and broken nightclubs in her wake.

But before she left I had a call from her asking if I could mix for her band on a farewell tour!

Since it would only be their third gig, perhaps calling it a 'farewell tour' was a little grandiose. Still you have to dream big.

They had been booked as the opening act for a multiple band night at an inner-city pub. The first of five bands, they were scheduled to go on at 8.30 Saturday night.

"Won't there be someone to mix already there?" I asked. I felt like Homer Simpson, whining 'Can't someone else do it?'

"Yeah, they said that the guy who runs the system could mix for us" she replied. "But the last time we did that it sounded terrible. Since this is our last gig till we get back, I want it to sound as good as possible, so we need someone who knows what they're doing…" she paused, "…or you!" Oh, very droll.

Hmmm – how could I resist a vote of confidence like that? Besides she's the one who'll be choosing my retirement home at some stage, so I felt I'd better be nice to her.



I dutifully drove into the city on Saturday night, found a parking spot about 3 streets away from the venue, and got to the gig around 7.30. She arrived about 5 minutes later.

"I'll come and help you get the drums," I said. "How far away have you parked?"

© 2014 Duncan Fry











CX DUNCAN FRY... CONTINUED

"Right out the front – someone pulled out just as I drove past. How lucky is that!"

Luckier than me three streets away, that's for sure.

In an amazing display of working together, the bands had all agreed to share equipment. One of them had already dropped off a guitar amp and a bass amp, so there wasn't much else to do apart from set up the drums and then wait for the system guy to arrive.

And wait.

And wait.

At 8 o'clock I went over to the bar.

"Where's the guy who looks after the system?"

The girl shrugged her shoulders. "Dunno – I'll get Steve the bar manager."

Steve shuffled over wearing that tired, harassed look that all bar managers seem to have.

"Jeez I don't know where he is, mate. He'd better get a move on because the first band should be starting soon."

"I know," I replied, "I'm supposed to be mixing them and the system's not even set up."

"Well," he said, scratching his head, "looks like you're it - better grab the mics and stuff and get started."

"Where are they?" I asked

"Round here," he replied, pointing towards a couple of cases and a mass of cables behind the bar.

"Sign here," he said, thrusting a book at me as I went to pick them up.

"I'm only here for the first band," I said. "I don't want to be responsible for all this after I'm gone."

"Hopefully the guy will be here by then and he can take over and sign for them."

I hate open-ended things like that, but what choice did I have?

The PA was quite nice, and just right for the size of the room. It consisted of 2 Mid/High boxes on stands with corresponding Subs either side of the stage, plus a couple of monitor wedges. I'd already had a look at the mixer while I was waiting, so I made a note on the back of my hand (my Palm Pilot backup!) of how the last band to use it had set it up.

It was pretty basic – working from left to right we had Kick, Snare, HiHat, Tom Left, Tom Right, Floor, Keys, Gtr Left and Gtr Right, Bass, Vox Left, Centre and Right.

I grabbed some leads then started plugging up the ones I needed in that order. We were only using about half of the channels available, but I wanted to make it easier for the next band, since it didn't look like time was going to be on anyone's side.

The mic kit was pretty good – a set of Shure drum mics, 4 SM58s, a couple of SM57s, and a bunch of passive DI boxes. I figured that I didn't need any of the latter, since the bass amp had an XLR direct output. That turned out to be my mistake, but I wasn't to know that until showtime!

The mixer was set up on a rack containing the EQs, and a couple of effects units, and the whole lot was on a ledge at about milk crate height. How they were setup I had no idea, since I couldn't bend down to see them because the mixer was pressed against the front of me and the back of me was pressed against the wall. There wasn't much wiggle room, you might say. Even if I could have crouched down, the little light that shone on the desk didn't reach that far so I couldn't see anything anyway. All I could do was hope that the previous mixing guy had a good ear and set it up well. Which, it turned out, he did!

I gave the band their vocal mics and leads, and told them which channels to plug into on the multicore. There was a bit of a problem with some of the mic stands, because some of them had normal fat screw tops with the fine thread, and some of them had the older style with the small coarse thread ones.

"What'll we do – the mic clips don't fit?" they chorused.

"Hey, no worries," I said, "that's why they invented gaffer tape!" And with a few twists of it, everything was under control.

I looked at my watch. Time was ticking away and the fairly sizeable crowd was starting to get restless.

I grabbed Fifi Trixiebelle.

"OK, you'd better get up there and start. Nothing too exciting, just ease into something to get warmed up and it'll all be cool. The vocal mics are on, so off you go."

And it was. After a rousing "Hello Melbourne!" the alt.shoegaze crowd applauded and the night got underway. Everything worked well, except for the bass. Nothing came out of the PA at all from there. I should have known never to trust the XLR line outs on a bass amp, because they never seem to work as expected, if at all. Probably wired Pin 3 hot and unbalanced, or switched off, or not enough gain, I don't know. Neither do most bass players, which is why it's always safer to use a DI box. I was jammed in by punters, so getting to the stage and changing to a DI box was not going to be easy. So I stayed where I was. Luckily for me he was playing quite loud and through a fuzz-box as well, so there was plenty of dirty bottom end coming off the stage.

The set finished, Fifi and the band were happy, and when the mixer for the next band arrived I took him by the elbow and steered him towards the bar. I think he thought I was going to buy him a drink, but no, I got him to sign for the mics and leads so the responsibility for losing anything was no longer mine. I found the band at the bar, basking in the warmth of the post gig glow and the adulation of their friends. Fifi Trixiebelle Britney Lourdes jumped up and gave me a hug, said "Thanks Dad," and I headed off home, happy in the knowledge that it had been a good evening.

But as I drove out of the city and turned the corner into St Kilda Road, the clutch cable in the good old '89 Turbo Capri snapped and the pedal fell to the floor!

To be continued!

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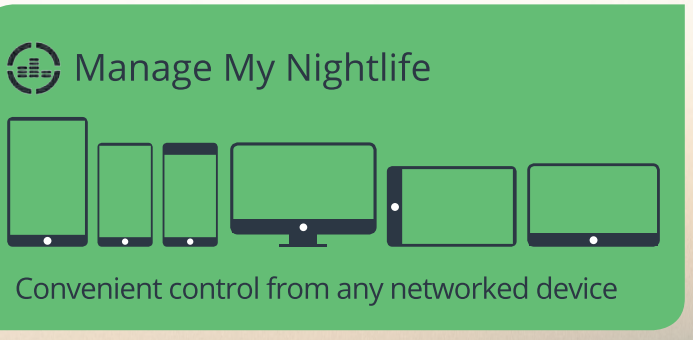
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