

CX

MONTHLY TECH NEWS

CX117 AUGUST 2016

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Gertrude Street Projection Festival

Aptovision:

Uncompromising
video over ip



Beautiful:

The Carole
King Musical



> REGULARS:

- Tech Talk: Vulture gorges on pizza
- The Mill Report: Where is the middle ground?
- Listen Here! Timing is everything
- Industry Women: Sarah Black

> ROADSKILLS:

- APIA Tour
- 20 Questions: James 'Oysters' Kilpatrick
- Steel Panther

> NEWS:

- NW Group adds Haycom
- ENTECH debuts in NZ
- Integrate opens August 23
- Australian Technology Park to shut down
- Vale Barry Wiseman

> GEARBOX:

- Symetrix Prism 4X4
- Robe Square
- Robert Juliat Dalis 860
- DBX DriveRack VENU360
- Toolbox: Punchlight



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~ Paul Boothroyd

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"The Radial J48 is one piece of kit that can be relied upon in my worldwide touring. It is not only reliable but delivers what it needs to do... and that is good audio."

~ Paul 'Pab' Boothroyd
(Paul McCartney, AC/DC, Paul Simon, Faith Hill, Pink)

"With the PZ-DI, we were able to integrate multiple piezoelectric devices seamlessly and with glorious results. Radial has once again proven they are a cut above the rest."

~ Brad Madix
(Rush, Marilyn Manson, Shakira, Def Leppard)

"Radial direct boxes make everything I put through them warm, punchy and clear. They are great DI's"

~ Chick Corea
(Elektrik Band, Miles Davis, Return to Forever)

"The JDX gave me all the character and distortion without the worries of bleed and feedback. I was so surprised how close it sounded to the SM57, I had to double check the patch."

~ Jim Warren
(Radiohead, Arcade Fire, Nine Inch Nails)

"We struggled for years on Zombie to get clean audio from the video servers...the JPC solved our battle. I finally get clean CD quality and do not cringe at the noise levels. The JPC is great!"

~ Joel Lonky
(Rob Zombie, Goo Goo Dolls, P.Diddy, Billy Idol)

"Radial DI's provide the flexibility I need to perfectly match any situation I come across. I specify Radial exclusively for every tour I mix."

~ Dave Natale
(Rolling Stones, Joe Cocker, Lionel Richie, Fleetwood Mac)

"The Radial JDX is almost too good to be true. The artists hear the sound they are playing and I'm not fighting mic coloration any more. I just plug it in & turn it up."

~ Jon Garber
(Rascal Flatts, Brad Paisley, The Band Perry, Chely Wright)

"On the Santana tour, we have Radial J48's on guitars and Radial JDI's on keyboards. Since January this year we have traveled all over and the Radial DI's have worked great!"

~ Rob Mailman
(FOH engineer - Santana)



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Freedom! (and FOM)

CX was one of the only fully paid circulation trade mags in the world until this month when we went digital free. It was a decision made some time ago and timed for the inflection point where advertising revenue fell below a trigger. This sounds illogical. Wouldn't we be chasing every dollar, especially readership money, to replace the missing money?

Here's the thing. Reader revenue was only ever a low percentage of turnover. Advertising keeps us here and has kept me in the style to which I've become accustomed. It paid for the kids to get an education. It paid for all the divorces. There was money left over to reinvest.

CX has sunk a lot into platforms since 2010 - online, TV and social media. We now have a lot of channels in our network. But the old format of putting a paywall around the magazine content meant our reach was more limited. So we started a project called Future of Media, or FOM.

This month marks phase one of the FOM plan, with Digital Free now open and doing sensational business out at cxnetwork.com.au

This is where you register your details and in exchange you open up the trove of current and back issues for free online reading and downloading.

Phase two will happen very soon, and then FOM will become a rolling

initiative. Media must change to survive, and change is constant.

Roadshows

At presstime we were just finished ENTECH NZ and it was a fabulous tour. A week before our first one day event in Auckland I knew we were on track for a success. We did some specific promotions around the final date in Christchurch and that paid off with the right number and spread of trade on August 1st.

In between Wellington was great, despite big hassles facilitating our free parking offer. Wilson Parking are just a bit too big and impersonal, so a communications issue saw us given 'Pay and Display' tickets for the day.

Anyone who comes to our Roadshows knows that the usual routine at most big city parking stations is to grab a ticket from the boom gate and pay on the way out. We bulk buy exit tickets and hand one to each pre registered punter. But in Wellington this was not possible.

Wilson took our \$3,000 and didn't explain they changed to Pay and Display. This would never work, since the punters would need to park, leave the car unticketed, and walk to us to get the pay and display, then walk back to car to put it on the dashboard. In the meantime, they may have had an expensive parking violation.

'What can we do'? we asked Wilsons. The answer was a variation of 'tough luck'.

When faced with unscheduled calamity

our procedure is to join the venue staff into the problem, to workshop a mutual solution. For Wellington it meant putting several loaders wearing orange hi-viz at the entry to each car park (there were three different Wilson locations). Armed with a list of registered punters, they dished out the 'pay and display' ticket.

It was expensive, and it was deadly boring and cold for them. We deeply appreciate Eugene Pope's Strong Back crew, and indeed have a very high estimation of all the Kiwi crew we used across the long lands.

Despite the Wilsons debacle we had a great turnout and a great time. The weather was typical July, as low as minus 4 for the Christchurch loadin. Our drivers from Oceania - Ford and Conrad - exceeded most Australian drivers by actually getting in the back and arranging the load.

Many punters thanked us for bringing ENTECH to NZ, and it was clear from the opening bell that we would be back in two years to do it all again. Next July is ETNZ's turn, they host a conference each other year in Wellington, and as a Corporate Gold supporter, CX Network NZ will be there to support them.

Julius Grafton
CX Magazine

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INTEGRATE OPENS AUGUST 23 LARGE TRADESHOW RETURNS TO HOMEBUSH BAY

NW Group adds Haycom One stop shop plugs gap

S

tarting as A1 Audio 25 years ago, Chris Kennedy's Norwest Productions has grown steadily ever since. After winning the contract for opening and closing ceremonies at Sydney

Olympics, the firm went on to become the leading supplier of audio for major ceremonies across the world. This month they are working on the Rio Olympics.

Now operating as NW Group, they have announced the acquisition via merger of Haycom, a long established supplier of corporate audio visual services across Eastern Australia. The acquisition is in the form of cash and shareholding, where NW Group issues additional shares and committed shareholders work within the group.

Haycom has three main shareholders, with founder Allan Hay to retire from the company. Mario Valenti and Stuart Gregg will remain to head the staff across the Adelaide, Melbourne, Sydney and Brisbane offices.

NW Group Managing Director Matt Jones told CX the objective is to offer full event technical services in each location.

With the Haycom deal factored in, group turnover approaches A\$1 million a week. NWG successfully leveraged its acquisition of Spyglass in NZ, which provides the NZ operations with diversification, and are set to repeat the strategy with Haycom.

Haycom are a major hirer of production equipment and services, so much of that business will also flow down to NW Group firms like Norwest and Cairellie. The obvious gap in their network now is lighting, which is under represented in Australia but well represented in NZ where Oceania were always a one stop shop.

NW Group is now the largest Australasian owned production provider after several recent sales saw other firms like JPJ Audio and Staging Connections move to USA ownership.

After successfully staging their three day event in Melbourne for the first time in 2015, Integrate returns to Sydney Olympic Park for three days in August. Held in association with Infocomm and CEDIA, Integrate allows major exhibitors space to stage large demonstrations and displays of audio visual and ICT equipment.

The Melbourne show attracted over 100 exhibitors, 4,000 trade, and occupied around 5,000 square metres.

Organisers Diversified Communications Australia require pre registration if you wish to avoid a \$25 entry charge. Keynote speakers and sessions range in price from \$50, with a three day pass costing \$288 to \$360.

Jump online to <http://integrate-expo.com>



Matt Jones



Allan Hay



Mario Valenti



Stuart Gregg



ENTECH Auckland

ENTECH debuts in NZ

Next Roadshow is ICTECH



ENTECH Auckland



ENTECH Wellington



ENTECH Christchurch Showtechnix Team

CX Roadshow rebranded as ENTECH after buying the name back last year. This helped establish ENTECH NZ Roadshow which had its first tour late July. Originally targeting 12 exhibitors the tour filled to capacity with 23 firms.

After one day shows in Auckland, Wellington and Christchurch, positive feedback guarantees a return in two years. Over 700 trade registered for the events, and exhibitors were uniformly positive, saying they achieved return on investment.

Next up is ICTECH which is a new Roadshow from Juliusmedia Group designed for AV people working

across the converged IT and ICT industry. ICTECH runs from Perth to the eastern states in October, with one day in each city and a strong program of free educational and training events. ICTECH is intentionally more compact and specialised than ENTECH.

Juliusmedia also operate a roadshow for the security technology industry called SECTECH which also expanded this year after first rolling out in 2015. Exhibitors and visitors responded similarly to ENTECH, saying that they appreciated the compact format and the value additions like free attendance and free parking.

<http://ictechroadshow.com.au>

Sneaky Closure – Exclusive

Australian Technology Park to shut down

The Sydney events industry has been served a blow after the NSW Government sold off Australian Technology Park in Eveleigh. The ATP Conference Centre, which has been running since 1998, is due to close on 30 June 2017.

The closure of the Conference Centre follows the sale of ATP to a Mirvac-led consortium in April earlier this year. “The sale was part of a strategic move by the NSW Government that will help catalyse innovation in the inner city, with proceeds helping to finance the upgrade of Redfern Station and the development of the new Sydney Metro Station at Waterloo, subject to government approval”, ATP announced.

Early 2017 the new International Convention Centre (ICC) opens at Darling Harbour, so the NSW Government will say they have expanded and improved Sydney’s event capacity. But only incrementally, and with ATP closing Sydney actually loses an important venue.

So what is the issue?

ATP is one of a dwindling number of ‘big box’ venues that can accommodate a trade show or a large function. If you take the previous, demolished Darling Harbour facility, along with ATP and then swap them for ICC you get about the same floor space. So Sydney has actually lost an alternative site, and event

organisers are forced to deal with one venue not two. Furthermore, there are few venues that do not have ‘in-house production partners’, which means bringing outside production in is almost impossible. ATP was open for all.

Visitors to ENTECH next year can say goodbye to a fabulous venue, and Mirvac shareholders can look forward to another profit season when the historical railway sheds are demolished and replaced with something ‘modern’.

Juliusmedia can’t believe this hasn’t generated any media discussion, let alone upset the events industry.

Below: ENTECH at Australian Technology Park



VALE BARRY WISEMAN (1971 – 2016)

FATHER, HUSBAND, RUTLEDGE TEAM MEMBER



The Rutledge AV team lost a long time employee, colleague and friend last month.

Barry was a long time employee on the Sydney team as a projects assistant.

Craig Glover summed him up.

“I remember we were required to do some cabling work on site at The Treasury (in Canberra)

and although Baz was a projects assistant he had no issues with helping us work on the weekend. I remember telling the staff about how serious the security guards were and not to say or do anything that will get them offside, it’s probably worth noting that while I said this to all the staff I was looking

directly at Barry!

“I remember being up on the 4th floor waiting for him and after a while thinking to myself ‘he must be lost, I’ll go look for him.’ I got to the ground floor only to find Barry sitting with the security guards at the front desk with his legs up on the reception counter eating pizza. In front of the guards he looks at me and says, (again in his deep Scottish voice) ‘I don’t know what you were talking about, these guys are great’”.

Andrew MacDonald says Barry was a guy who really left his mark on the Rutledge team.

“I don’t think anyone truly appreciated how much they had been touched by Barry until his passing, or how widespread within the company his relationships were. There are many stories coming out about conversations people had with Barry even recently about football, his family or one of his favourite topics - his motorcycle. Barry loved talking about his bike. I still keep expecting him to come in and see me with another story.”

- Barry is survived by wife Tracy Wiseman and daughter Aisha Amesbury

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ADDER TECHNOLOGY ADDERLINK XDIP AND XD150 FX

The AdderLink XDIP is an IP-based KVM extension technology which allows small IP matrices to be created on the fly without the need for a separate manager or control system. The device features feed-through ports, which are ideal for video distribution applications, as well as delivering user stations at each device. Each end point can be either a receiver or transmitter, allowing customers to fluidly reconfigure their installation without the need for additional devices. Each device features an on-board configuration interface for setup and to make live changes.

The AdderLink XD150 FX is a high performance fibre extender that can provide extension distances of between 150m and 4km. It is capable of visually lossless resolutions of up to 2560x1600 @ 60Hz with zero latency, and supports video, audio and USB all via a single fibre cable with real time control.

Australian Distributor: KVM Australia
www.kvm.com.au or 1800 222 898



01

AMX SVSI NMX-WP-N1512



02

AMX by HARMAN has released the SVSI NMX-WP-N1512 Windowing Processor. The N1512 is a 1RU rack-mount appliance that connects to an SVSI video over IP network and accepts up to four video streams as input. Each input can be cropped, scaled, and positioned according to stored presets (such as quad, window-in-window, 3+1, etc.) or in any user-defined configuration. Ideal for operations centres, sports bars, conference rooms, or other locations that can benefit from taking up to four streams and combining them into a single video, the N1512 functions as a 4x1 windowing processor and can be stacked to give 7x1, 10x1, 13x1, 16x1, or higher capability. Network connectivity provides access to all available video streams for window selection and for output of the combined stream.

Australian Distributors: avt and Jands
www.avt.tech or (07) 5531 3103
www.jands.com.au or (02) 9582 0909

BARCO R-SERIES

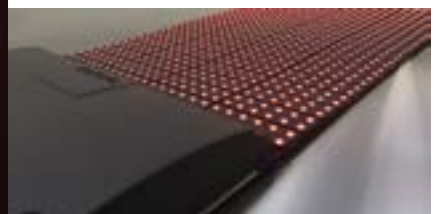
03

Barco's R-series digital media canvas is a flexible, lightweight, ultra-thin LED technology that expands creative possibilities beyond traditional applications. As there's no need for supporting structures the R-series can be glued onto a surface. Thanks to its flexible design architectural constraints are reduced and less space needs to be freed up. There are also no visual gaps between sheets. Weighing less than 6kg/m² and only 5mm thick (incl. louvers), the R10 is offered in sheets up to 4.68 meters long. Cabling, control, and power electronics are integrated on every sheet. The R10 is driven by the Infinipix image processing platform that provides a straightforward web-based interface for display configuration, dimming, control,

monitoring, and maintenance. Based on HTML5, different operating systems and mobile devices can be used to control the R-series.



Australian Distributor:
 Barco Systems
www.barco.com
 or (03) 9646 5833



COMMUNITY I SERIES COMPACT

Community have released three I SERIES Compact models designed to match the performance, appearance and voicing of the larger I SERIES Point Source and Subwoofer models. The 6.5-inch IC6-1062 features a very wide dispersion of 100° x 100° and a fabric dome HF on a shallow waveguide. The single 8-inch IC6-1082 and symmetrical dual 8-inch IC6-2082 are available with two rotatable horn patterns (120° x 60°, 90° x 60°) paired with high output 1.7-inch diaphragm HF compression drivers. Compact I SERIES are available in textured black or white or in a custom colour, or as a weather-resistant version. U-Brackets, Vertical Yokes and a 70V/100V autoformer are also available.

Australian Distributor: Hills
www.hills.com.au or 1800 720 000



IC6-1082

IC6-1062

04



IC6-2082



BSS BLU-USB

BSS by HARMAN have introduced the Soundweb London BLU-USB interface. BLU-USB is an accessory product for interfacing USB audio to BLU link-enabled audio systems. BLU-USB allows a PC or Mac to send audio to, and receive audio from, the BLU link bus. Ideal for corporate meeting room applications that use a variety of web-based conferencing services, BLU-USB is an affordable accessory that easily integrates any computer with the local conference audio system. BLU-USB can simultaneously send and receive up to eight channels of audio.



05



Australian Distributors:
Jands www.jands.com.au
or (02) 9582 0909 and avt
www.avt.tech or (07) 5531 3103



CROWN DCI-DA 06

Crown by HARMAN have introduced the DCi-DA Series amplifiers with Dante networked audio transport. The Crown DCi-DA Series consists initially of the DCi 8 | 300DA, (eight-channel, 300W, Dante, 2/4/8Ω and 70V/100V), the DCi 8 | 600DA (eight channel, 600W, Dante, 2/4/8Ω and 70V/100V) and the DCi 4 | 1250DA (four channel, 1250W, Dante, 2/4/8Ω and 70V/100V). The Crown DCi-DA Series is fully compatible with HARMAN's HiQnet Audio Architect™ software.

Australian Distributors:
Jands www.jands.com.au
or (02) 9582 0909 and avt
www.avt.tech or (07) 5531 3103

CADAC CDC SIX



07

The CDC Six is the latest in the digital console line up from Cadac. Based on the user interface developed for the CDC eight, the CDC six is far less menu dependent than traditional digital consoles. The user interface is accessed via a widescreen 23.5 inch touch screen. The console features 64 input channels, 48 assignable busses, 4 band fully parametric EQ, extensive dynamics, 16 VCA groups including 'VCA unfold' navigation, 8 assignable buttons with OLED displays, 16 stereo on-board effects, 31 band graphic equaliser on all outputs as well as 4 band fully parametric EQ, compressor/limiter on all outputs, input and output delays and a snapshot automation system.

Australian Distributor: Hills
www.hills.com.au or 1800 720 000

MARTIN MAC AXIOM HYBRID

The Martin MAC Axiom Hybrid is an all-in-one product, combining beam and spot into one compact unit that also offers diffused wash functionality. It outputs 16 000 lumens wide and 14 000 lumens narrow, with a continuous zoom from 2 to 44° (no Beam/Spot modes). It has an independent 16-slot colour wheel, two gobo wheels (9 rot. & 16 stat.) with animation effects integrated into the fixed gobo wheel, independent 3 and 8-facet prisms with unique patented dynamic 'prism lineator' zoom effect, a beamsmoother for flat field projection, and a frost for wash effect. The implementation of the MAC Viper CMY colour palette gives designers the advantage of unlimited choice from subtle pastel shades to deep and saturated colours.



for flat field projection, and a frost for wash effect. The implementation of the MAC Viper CMY colour palette gives designers the advantage of unlimited choice from subtle pastel shades to deep and saturated colours.

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

MEYER SOUND GALILEO GALAXY

09



The Meyer Sound Galileo GALAXY is the first Meyer Sound loudspeaker processor to be fully networkable, with multiple units sharing 24-bit/96 kHz multi-channel audio via an AVB network. Maximum input count has been increased from six to eight for easier implementation of 7.1 systems, and a new generation of FPGA-based processing with 96 kHz floating point resolution delivers increased dynamic range, a lower noise floor, and super-low latency of 0.6ms analogue in to analogue out. Other features new to GALAXY include a delay matrix, easier integration with Crestron and other third-party controllers, a word clock input on the AES3 version, and improved equalization tools. The first three versions, GALAXY 816, GALAXY 816-AES3, and GALAXY 408, will ship September 2016.

Australian Distributor: Meyer Sound Australia
www.meyersound.com.au or 1800 463 937

CRESTRON DIGITALMEDIA PATCH PANELS, JACKS, AND PRE-TERMINATED CABLES

Crestron is shipping its new 24-Port Keystone Patch Panel (DM-RPP-K24), DigitalMedia™ ULTRA RJ 45 Keystone Jacks (DM-CONN-ULTRA-RECP), and pre-terminated DigitalMedia CAT6A cables in various lengths (DM-CBL-ULTRA-PC). These new products bring AV into the IT world, and make cabling, installing, and servicing systems cleaner, faster, and easier. The new Crestron DigitalMedia ULTRA cables, connectors, patch panels, and wall plates provide



10

enterprise-grade signal routing and performance that exceed 4K/60 4:4:4 up to 100 meters. All cables are fully shielded and CAT6A compliant. The DM ULTRA keystone jacks can be used with off-the-shelf wall plates, panels, and back boxes.

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

MACKIE PRO DX

11

Mackie's ProDX Series mixers are ultra-compact digital mixers for applications with low channel counts. Both mixers are equipped with Mackie's Wide-Z mic preamps, with two on the DX4 and six on the DX8. Users can control processing via the companion MixerConnect control app for iOS and



Android, plus play back wirelessly from any Bluetooth capable device. Both models have L/R output via balanced TRS jack, a 3.5mm jack input and headphone out. The DX4 has one aux bus with TRS out, the DX8 has two aux busses with TRS outs. The single knob front panel control allows adjustment of any level, while the integrated control bridge provides a cradle for your phone.

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



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QSC ACOUSTICDESIGN SERIES



QSC AD PENDANT MOUNT LOUDSPEAKER

QSC has introduced two new pendant mount loudspeakers to the AcousticDesign Series, the AD-P4T 4.5" two-way with 150° conical DMT coverage, and the AD-P6T 6.5" two-way with 140° conical DMT coverage. Both models are available in black or white and include snap-fit magnetic grills, Directivity Matched Transition for improved off-axis performance, low loss 70/100V transformers with 16Ω bypass, and sealed weather input cover.

SPA SERIES AMPLIFIERS

Two new models have been added to the SPA Series amplifier range. The SPA2-200 and SPA4-100 offer 2x200W or 4x100W per channel into 8Ω and 4Ω outputs, with the ability to bridge channels for 70V and 100V capability. These half-rack size amplifiers are ENERGY STAR compliant, with fast and quiet power-up circuitry. With a unique mounting system for flexible options, such as under the table or wall-mounted behind a display, their aesthetic design easily blends into a corporate environment.



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Q-SYS AV-TO-USB BRIDGING SOLUTION

QSC's Q-SYS platform AV-to-USB Bridging solution includes the Q-SYS I/O-USB Bridge and two PTZ-IP Conferencing cameras; the Q-SYS PTZ-12X72 and Q-SYS PTZ-20X60. The new Q-SYS PTZ-IP Cameras and Q-SYS I/O-USB Bridge will solve the problem of the meeting room geography when integrating soft codec conferencing with camera feeds and audio by introducing IP-based cameras and USB bridge into the Q-SYS platform. The Q-SYS AV-to-USB Bridging solution leverages driverless USB 2.0 for webcam video emulation and AEC speakerphone audio. This means no additional software or drivers are required to make the solution work with modern PC operating systems and soft codec applications such as Skype for Business, ClickMeeting, Adobe Connect, GotoMeeting, WebEx, and others.



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

TASCAM SD-20M



TASCAM's SD-20M is a simple-to-use solid-state recorder for installations. The 1U rackmount includes a pair of microphone preamps with phantom power for direct microphone recording. Both mic inputs and line inputs can be recorded simultaneously in four-channel mode. The dual recording mode captures a copy of your audio at a lower level, as insurance against distorted takes. Batteries can be fitted into the unit so should the main power source fail the unit will automatically switch over to be battery powered.

TASCAM iXR

13

The Tascam iXR is a full featured iPhone/iPad/Mac/PC audio interface featuring direct connection to iPhone and iPad via the Lightning Connector, dual microphone preamps, MIDI in and out, and balanced stereo outputs. It includes support for high-resolution recording formats up to 96 kHz and 24 bits, zero-latency direct monitoring. Its balanced XLR/TRS input jacks can provide +48V phantom power, and there are separate controls for line and headphones output.



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

PHOENIX AUDIO CONDOR

The Condor is a 120cm wide multi-microphone array with a pickup range of up to nine metres. It also features a built-in SIP phone, which can be controlled using a dedicated application that runs on your smart device. Created with the goal of decluttering conference rooms, the Condor sits above or below your monitor, eliminating cumbersome devices and wires from the conference table. It can easily connect to any video conferencing system, and use any type of loudspeakers, including external sound bars or your monitor's internal speakers.

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Australian Distributor:
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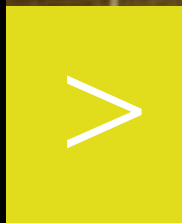




Gertrude Street Projection Festival

Grass Roots, Digital Arts

Now in its ninth year, **Melbourne's Gertrude Street Projection Festival** is the antithesis of that other big projection festival up north – it's totally volunteer run, small, fiercely loyal to the coolest strip in Fitzroy, and proudly inclusive and confronting in equal measures. Jason Allen returned to his former neighbourhood to see how they've lit up the place....



2016

's event ran 15-24 July from 6PM to midnight across 38 sites in and around Gertrude Street, with almost

all of it free, except a couple of specially ticketed live events. Truly grass roots, the festival is totally volunteer-run by the arts community. Free from corporate or advertiser influence, artists are free to tackle 'difficult' issues like race, politics, identity, disability and gender.

COMMUNITY POWERED

"We collaborate with the people of the area, who are connected to the history of the area," said Festival Director Nicky Pastore. "Gertrude Street is unique in that one building will be an art organisation for kids affected by drug and alcohol abuse, the next one is a fancy restaurant, and the next is an indigenous centre. We're very lucky to collaborate with these different communities, working together in the digital art medium."

"We rely totally on our partnerships and contributors," continued Nicky. "It's more exciting to work with people in a partnership context, because they're excited to collaborate with us." One of the partners new to supporting the festival is Epson, keen to demonstrate what can be done with their high-powered 3LCD projectors. "Epson wanted to branch out and meet more creatives to discover the diverse ways that people are using their equipment," explained Nicky. "They approached us earlier this year and asked if we'd be interested in a partnership, and it was something that we were eager to explore."



PROJECTING ONTO REALITY

One of the main sites of the festival is much-loved watering hole The Builder's Arms. Artist Kate Geck's work 'Apeiron' is being projected onto its façade via an Epson EB-Z11000WNL, handily mounted in costume hire institution Rose Chong's, across the road. "I've been working with projection for about eight years," offered Kate. "I work in installations, and video and moving image is just one part of what I do. Projection became a way for me to create big, immersive spaces in my installations. I work with acrylic and projection, and different printed substrates that can be projected onto. I recently started working with augmented reality so you can scan surfaces and elements of the projection and interact with your phone."

"The Builder's Arms is an interesting site in that it has a lot of windows," she continued. "It's a broken, fragmented façade. I had to modify the work to fit on this surface, and there's also trees, power lines and windows to take into account. It made me make the work more abstract. I put together a test file with different kinds of animations to see what would work on the surface. Some of it was too intense, too hectic with light. I modified it and went with a more pattern-based work than I planned, and it works on the surface."

TOOLS OF THE TRADE

"I created 'Apeiron' with Adobe Illustrator and After Effects," explained Kate. "I make patterns and textures in Illustrator that I bring into After Effects as an image sequence. All the animation happens in After Effects." Working for the first time with an Epson 3LCD projector, what did Kate think of the 11,000 lumen EB-Z11000WNL? "It sounds like a big plug for Epson, but I'm really impressed by the quality of the projector," she relayed.

"The saturation of the colour and the crispness of the image; it's beautiful."

Olaf Meyer, director of Multimedia Events, has been with the festival since the beginning, and supports it with his art, time and equipment. Olaf's company provides the majority of projectors for the festival, and Olaf holds the title as the festival's Technical Director. "Multimedia Events sponsors the festival," he confirms. "We started as a creative content production company. As the company grew, we acquired large format projectors, which we now supply to the festival at discounted hire rates. We mainly run NEC and Barco 3-chip DLP. For large-format building projections I favour xenon light because it cuts through ambient street light, but it is very expensive to run."

NEW PARTNERSHIP

Olaf has welcomed Epson's presence at the festival. "We have a community festival that provides an opportunity for artists to present their works, and Epson are supporting the community. Epson are driving innovation in this technology, and there's a commercial incentive to do so. But now we're using light to create public art, technology partners are important."

With a long career of using projection technology to create art, what does Olaf think of Epson's offerings in the field? "The lens selection Epson offer is the best I've ever seen," he assessed. "There's really short throw available, definitely useful for weird and abstract installations. Coming up with those sorts of solutions for artists is always a challenge for multimedia events. Epson have listened to the installers and now have the same feature set that you'd expect from NEC and Barco."

NEW OPPORTUNITIES

"We are proud to support the collaborative work of artists to help them showcase their projection artworks using Epson technology for the benefit and enjoyment of the community," said Priscilla Dickason, Group Product Marketing Manager at Epson Australia. "Our partnership also provides opportunities to explore new and exciting challenges around projection as the artists push the boundaries of what is technically possible. Moreover, the great work the festival does through their mentorship programs to encourage new artists and develop local talent resonated with us, and was perfectly aligned with our philosophy of helping them to realise and showcase their artistic visions with our projectors."

"Technically, the 3LCD technology used in Epson projectors is particularly suited to live performance and staging applications thanks to its reliability, installation flexibility, and vivid colours," continued Priscilla. "In fact, we have a number of exciting products launching soon that underscore Epson's commitment to high end installation, large venue and grand scale projection, including outdoor light-art galleries for all to enjoy. These will open up further possibilities and hopefully put us in a good position to continue our association with the Gertrude Street Projection Festival into the future."



Nicky Pastore, Festival Director



Olaf Meyer, Director, Multimedia Events



Epson's Priscilla Dickason



Artist Kate Geck



KATE GECK – APEIRON BUILDER'S ARMS, 211 GERTRUDE STREET

"Apeiron is a cosmological construct from early Greek philosophy. It is understood as the boundless substratum that generates the material world, and to which the material world will inevitably decay back into. Like memory, apeiron is a space without edges, ebbing and flowing the real world out of and into itself endlessly. This artwork manifests a technological apeiron – a meditative video loop that tries to transpose the codes of hyper connection into a boundless abstract space. The post-internet, maximalist aesthetic speaks to the deluge of content that has destroyed the artists attention span; the minimalism of traditional relaxation spaces now making her bored and restless."
– (text courtesy Gertrude Street Projection Festival)

'Apeiron' was projected with an Epson EB-Z11000WNL, a 3LCD chip projector outputting 11,000 lumens at WXGA resolution.



GABI BRIGGS - CLEANSE, TONE, OBSCURE EVERLEIGH, 150-56 GERTRUDE ST

"Like your beauty regime, my oppression is daily." Gabi Briggs is a sovereign Anaiwan and Gumbangier kajira (woman) who documents her body and how it occupies places and the viewer's gaze (you). She does so in order to examine power, privilege and the colonising and politicising of her body and narrative. Forever complexed and possibly hoodwinked, Gabi looks to the arts as a place to have agency, to decolonise and to find absolute autonomy and sovereignty." - (text courtesy Gertrude Street Projection Festival)





**IAN DE GRUCHY - DIGITAL OP POP
TURNING POINT, 54 GERTRUDE ST**

“Digital Op Pop is an abstracted series of coded texts re-animated to reflect the dynamism and buzz of our city. Kaleidoscopic effects travel up, down and across, emulating the movement of traffic, people, information and ideas. Our perception of colour is distorted through abstract light and movement, creating a perpetual osmotic display of travel and dissolve.” – (text courtesy Gertrude Street Projection Festival)

‘Digital Op Pop’ was projected with an Epson EB-Z10000UNL, a 3LCD chip projector outputting 10,000 lumens at WUXGA resolution.



**FCAC - ARTLIFE SPACE BODY MOVE WORK
(WITH XANTHE BEESLEY AND ZOE SCOGLIO),
BREIZOZ FRENCH CREPERIE,
CNR BRUNSWICK & GERTRUDE STS**

“ArtLife is a program at Footscray Community Arts Centre that engages artists with disability in collaboration with professional artists. This is a very moving work where artists of all abilities are dancing on the facade of a building. The work addresses the relationship people with a disability have to private and public worlds. The performance reveals lived narratives of attachment, separation, vulnerability and ‘fitting in’ when the only space you feel safe is home. By placing these large scale bodies on the facade of a building, the artists aim to challenge the invisibility of people living with a disability in our community. The work presents compelling images of how important it is to belong.” – (text courtesy Gertrude Street Projection Festival)

‘Artlife Space Body Move Work ’ was projected with an Epson EB-Z9870UNL, a 3LCD chip projector outputting 8,700 lumens at WUXGA resolution



**LUNZENA ADAMS – REVERIE
MEGAN PARK FACADE, 200 GERTRUDE ST**

“Reverie merges reality and fantasy elaborating on the mystification and enigma of redheads. This recessive gene makes up 13% of the population and is a trait that rarely goes unremarked. With a loaded history muddled by myth and taboo, redheads are mysterious, verging on the fantastical. Using photographic footage of the female form immersed underwater, Luzena Adams has created a surreal work engaging the viewer in an intimate moment of reverie.” - (text courtesy Gertrude Street Projection Festival)

AptoVision

Uncompromising Video over IP



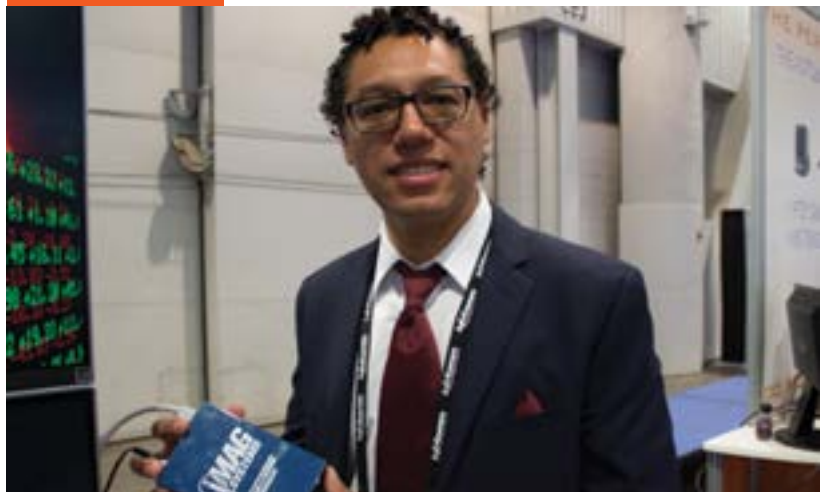
In video distribution, we're way past the analogue sunset and firmly in the middle of the digital work day. At 2016's InfoComm in Las Vegas, it was clear that we are now in the time of video over IP, with almost all manufacturers showing off their solutions. Canadian company AptoVision are dedicated to manufacturing chipsets that provide the best possible experience to the end user. Jason Allen spoke to them about what's really important to their customers...

The product demo that stuck with me the most at InfoComm 2016 was a simple yet effective one. AptoVision, who manufacture chipsets that integrate video, audio, control, long distance extension, IP-based switching, and signal processing of Ultra-HD video, showed off their product's capabilities not with 4K video of an effects-heavy blockbuster, but with a Windows 10 desktop. I had already tried and failed to pick the difference between uncompressed and compressed versions of movies like 'The Life of Pi' on five other stands, but when you start compressing simple things like text on an Office document, problems of resolution and latency get real, fast.

"Our best test pattern is an Excel spreadsheet," says Gerry Raffaut, managing director of AXIS Audio Visual, who are integrating AptoVision's chips into their iMAGsystems Lightning product. "You'll soon see missing lines. When a compressed solution is fed fine, pixel-width lines, it

needs to calculate where to get rid of a pixel. Compressed solutions are fine for moving images in sports bars and similar applications, but we're talking about presentation environments; spreadsheets, medical imaging, and command and control, where lines need to look like lines."

Gerry Raffaut



TIME TO SWITCH

"If you look at the Pro AV market over the last 10 years, the dominant technology platform was HDBaseT," adds Gerry Wilkins, Director of Business Development – APAC, at AptoVision. "It was uncompressed and low latency. AptoVision came to the conclusion that the real market is for uncompressed. We are targeting the HDBaseT customer base that wants no artefacts and low latency, but wants it over an Ethernet switch rather than a proprietary circuit switch. We're leveraging off the power of the IT industry, which is magnitudes larger than the pro AV industry, who have developed all these wonderful 10 GB switches which are available off the shelf, with all of the bandwidth that we could possibly want. They're telco grade, reliable, robust, and their service networks are already in place."

"For integrators, consultants, and designers, this is a great opportunity to study up on this new technology and gain a market advantage," says Justin Kennington, Director of Strategic and Technical Marketing at AptoVision. "Those who embraced digital distribution and all its hardships in 2009 and 2010 are now established successful leaders in the field. The same will be true of those who learn to design and integrate Ethernet networks to support high bandwidth video distribution. Let's take advantage of the biggest and most widely deployed communication and data distribution standard in the world – Ethernet. The IT industry is a trillion-dollar global industry. The more we can leverage its R&D and ideas, the faster our own industry's state of the art can advance. Why reinvent the wheel?"

THE MATRIX

The advantages of moving away from dedicated video matrix switchers are pretty clear when spelled out; scalability (you aren't limited by the switcher's frame size), economy (you don't have to run separate cabling to the existing network) and flexibility. So what are the current barriers to Video over IP? "Integrators need more education, and more reasons to move away from HDBaseT," explains Gerry Raffaut. "You don't want to use technology just for technology's sake, you want to use



Justin Kennington

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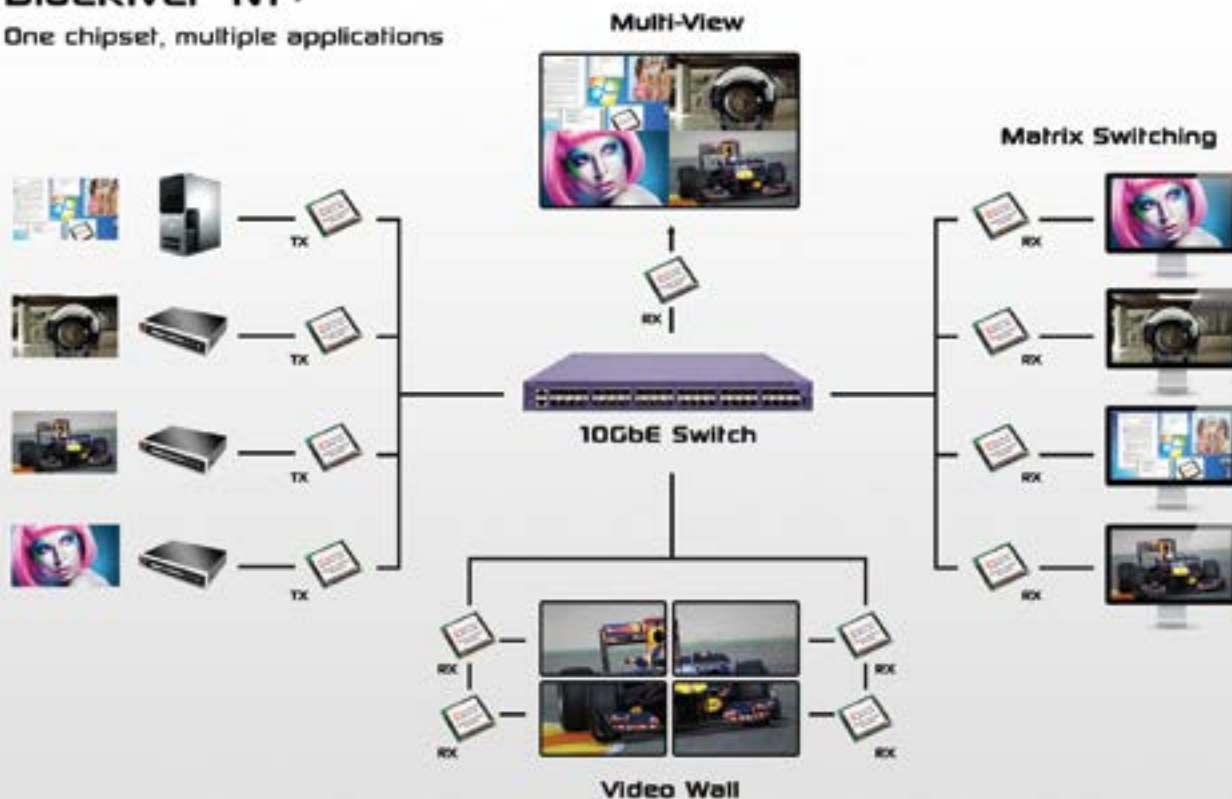
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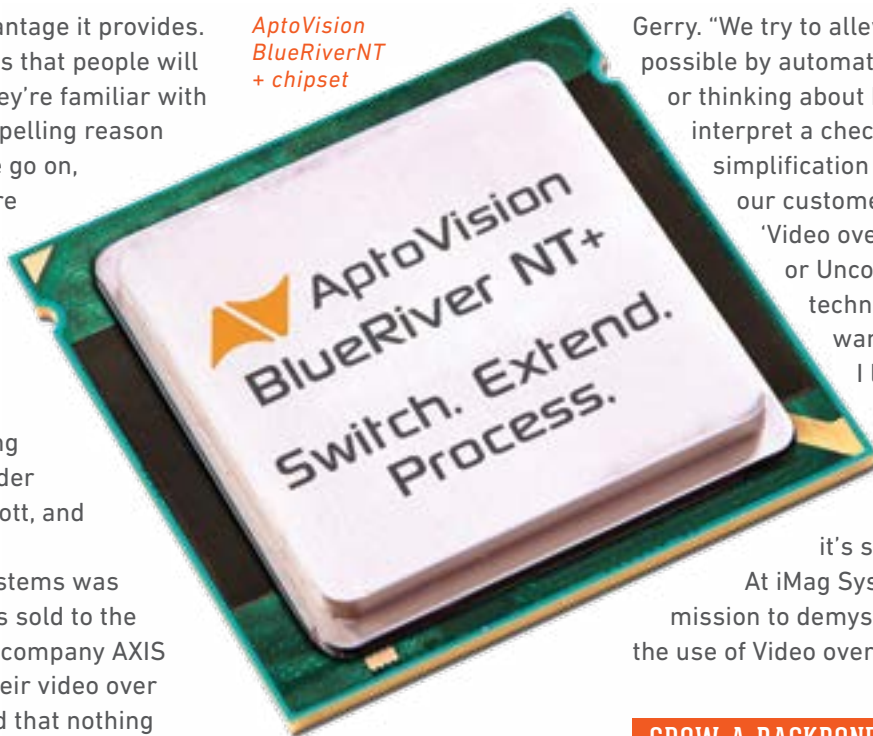
BlueRiver™ NT+

One chipset, multiple applications



the product for the advantage it provides. Human behaviour shows that people will continue to use what they're familiar with until there's a very compelling reason to change. The more we go on, there are more and more compelling reasons to use Video over IP and customers are becoming more comfortable with it. On the consultant side in Australia, we're seeing a lot of support from Alder Consulting, NDY, Hewshott, and Hanson Associates." Gerry Raffaut's iMAGsystems was launched after SVSi was sold to the Harman Group. Gerry's company AXIS AV needed to replace their video over IP range, but soon found that nothing currently on the market was of adequate quality. AptoVision's chipset ticked all the boxes, so thus the iMAGsystems Lightning was born. "We try to ensure that every aspect of using our product is as simple as possible; designing, ordering, installing and commissioning," relates

*AptoVision
BlueRiverNT
+ chipset*



Gerry. "We try to alleviate as much pain as possible by automating some processes, or thinking about how a user might interpret a check box. It's about simplification – we don't want our customers thinking about 'Video over IP', 'Compressed or Uncompressed', or the technology; we just want them to use it. I like the analogy of a toothbrush - whether it's electric or just a normal toothbrush, it's still a toothbrush. At iMag Systems, we're on a mission to demystify and normalise the use of Video over IP."

GROW A BACKBONE

Some in the Video over IP space point out that the 10 GB network backbone required to run an uncompressed 4K AptoVision solution isn't yet the norm in the corporate world. "The majority of existing corporate

infrastructure is 1 GB," concedes Gerry Wilkins, "but in the ever increasing demand for bandwidth, the 10 GB switch is gaining momentum rapidly. We believe that all new constructions and all new systems will be built around 10 GB or more. If you look at Amazon and the other cloud providers, their farms are all made of 40 and 100 GB switches. We think the 1 GB is a bad investment because anyone building new infrastructure on 1 GB is going to run out of bandwidth." Gerry Raffaut agrees; "From

my previous experience selling compressed systems, 90% of the time customers had a separate AV network anyway. They were rarely using their corporate network even though it was quite capable of doing it. There was a comfort factor for the IT department. We've never seen 10 GB as a hurdle." Gerry Wilkins continues; "With AptoVision, you can be running 4K 30fps 4:4:4 at 6.8 GBs per second and that still leaves you with 3.2 GBs per second, more than their whole 1 GB infrastructure. The reality is that

even 10 GB is an interim technology, as they all are. When 8K comes, and regardless of what anyone says, it's coming, then demand for bandwidth will grow even more. But here is the advantage of this technology: we don't need to develop anything new. The IT manufacturers are already shipping 25G, 40G, and 100G switches, which will follow the IT price curve until they are affordable commodities as well. Imagine a pro AV manufacturer trying to develop their own 100G switch. It's laughable."

DESIGNING THE FUTURE

With leading Video over IP manufacturers like ZeeVee, Aurora Multimedia, DVIgear, IDK, Zigen and VuWall all incorporating AptoVision chips into their equipment, their vision of an uncompressed, low-latency, networked AV future is becoming reality. What does this mean for consultants and designers today? "Freedom," states Gerry Wilkins. "They can do a lot more. Audio does not have to follow video, control signals can route independently. We support a full 1 GB data network; think of a digital signage system where every single

one of our endpoints has a 1 GB port on it, which means you could hang a Wi-Fi access point on it. Now the end-customer doesn't have to cable their digital signage and Wi-Fi separately, which they currently have to do. That use case alone is enough to save a corporation tons of money. Any particular enterprise right now has an IT network, an AV network, a digital signage network, and a security network. It's now possible to have all of those running on a single set of cabling and hardware using our technology. That is a powerful cost saving for the corporate customer."



Gerry Wilkins



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Beautiful

By **Julius** Grafton

Carole King Musical

I can't help comparing this Broadway hit with *The Jersey Boys*, since both tell the story of a star. A mega talented star; each of whom had a key collaborator who features in the show. Composer Bob Gaudio wrote all the hits for Frankie Valli and Gerry Goffin penned some lyrics for Carole King.

While *Jersey Boys* has been making big returns for over a decade, *Beautiful* is just finding profit after three years and is branching out with a US tour and a season in Sydney

later in 2017. It is running on the West End as well.

King wrote over 110 Billboard hits including many for other artists. The show has many voices, with her catalogue rich enough to carry proceedings despite the story being less than riveting. It is a representation of the hurdles she faced and the torturous life of a songwriter.

Jersey Boys better portrays the guile and deceptions of the music industry, while *Beautiful* glosses over the ripoff's and broken promises. The show hangs off the smile and





These
**jukebox
musicals**
just get
better

presence of King, voiced beautifully by Chilina Kennedy at the Broadway production.

These juke box musicals were considered impossible twenty years ago. 'Who on earth can be Frankie Valli? Or Freddie Mercury?' they said. Fast forward and observe the oceans of talent queued up for a shiny floor talent show like America Has Talent, and there's your answer. There ARE females who look, sing, and play just like Carole King does.

The set (scenic design by Derek McLane) is itself beautiful, drawing gasps from the audience in the reveal. It is a deeply complex dual level condominium which also travels, seemingly an impossible distance to one side.

Unlike Jersey Boys, a full show orchestra performs from the pit, adding all the texture needed to a lush song list. The lighting designed by Peter Kaczorowski is brilliantly nuanced, changing feel for cameos by actors playing The

Drifters, The Righteous Brothers and The Shirelles. Neil Sedaka pops on and off in his own shimmering halo of light.

Other songwriters feature too; so the show isn't locked down to the sounds of King. In her career she collaborated with many, which gave the writers plenty of license to add dimension to the show.

All departments are firing on all cylinders as the hits roll out; there are 29 numbers in the show. Brian Ronan's audio design was Broadway perfect as we expect these days.

One thing troubled me in row 1, and that was the noise floor from the lighting fans overhead. It was clearly there, white noise to most but irritating to me and I believe unacceptable these days.

Beautiful is headed to Australia in the later part of next year (2017), announced back in May with what seems like a very long lead time. I'm sure it will be a hit.



CONSUME SPECTRUM RESPONSIBLY

In the live production industry, we like to think that our use of wireless spectrum on events, takes precedence over other users.

By Simon Byrne

This thinking is grounded in the desire to deliver a perfect production to our clients and audience. Reliable wireless microphones and in ear monitors are particularly critical for a successful event. However, the reality under the law, is that our use has zero priority over other users. Fortunately, other than TV broadcast stations, there are few other users in the valuable 520 - 694 Mhz band. This is good because this band of RF real estate is a choice part of the spectrum for two reasons. It's wavelength propagates well so less transmission power is required (i.e. longer battery life), and it turns out that it is comparatively easier to make equipment in this frequency range (reliability and price).

Most of the wireless audio and wifi type gear we use is regulated by the Radiocommunications (Low Interference Potential Devices) Class Licence 2015. Rather than licencing users, the class of equipment is licenced. Manufacturers and importers are required to ensure their product meet the technical requirements of the licence including record keeping and labelling in order for it to be sold and used in Australia.

The class licence states that a receiver tuned to the transmitter will not be afforded protection from interference caused by other radiocommunications devices. That is, 'no interference' and 'no protection' basis. As well as no protection, users must take steps to ensure that their devices don't cause interference to other radiocommunications devices.

Seeing that your rights are close to non existent, you need to be smart and cooperative about how you manage the frequencies used on your events.

Scan and monitor - The major manufacturers provide excellent and free RF scanning and coordination programs as well as online tutorials for their wireless products. They also contain a geographical database of the TV stations in your area. You should take full advantage of these tools to coordinate your wireless devices.

Have spare frequencies planned - Not just for you, but for other users too. For example TV crews are renowned for turning up minutes before an event which can cause grief. With spare frequencies standing by, you can quickly and confidently change on either your gear or ask them to.

Hey venues! It is 2016. Perhaps it is time that you guys factored visitors into your frequency coordinations. Rather than giving a list of your frequencies already in use, how about providing a list of frequencies that visitors can confidently use without compromising the venue's existing allocations.

Frequency squat before the show - If battery life permits, turn and leave on your transmitters well before the event starts. I typically use



PCB Log Periodic Antenna
Just solder on a connector and fit a mount and you have an excellent paddle. Can be painted without affecting performance.



RF Venue Diversity Fin
A true diversity antenna which achieves diversity by polarisation rather than spacing 2 antennas apart.

the batteries from the last show for this purpose and put fresh ones in just before the start. By doing this, you are staking your claim over those frequencies. Remember, another user is not permitted to cause interference to you so if you are already up and running when they arrive, they should not claim a frequency that you are already using.

Transmission power - Only use as much as you need and put it where it is needed and no more. Using too much power for your situation creates a higher overall RF noise floor as a consequence

of stronger intermodulations (interactions between adjacent frequencies). For example I reliably get 50 metres range with just 10 milliwatts of power, as long as I use the right receiver antennas.

Most of the time that means LDPAs (Log Periodic Dipole Array Antenna), often called paddles mounted high. My favourite antenna for general purpose use is the Diversity Fin from RF Venue. It is a compact paddle/dipole design with true diversity configuration using polarisation in a single unit.

Paddles are analogous to cardioid microphones meaning their pickup pattern is directional, dramatically reducing the overall RF noise floor.

Haven't got the money for paddles and are OK with a soldering iron? Get yourself some of Kent Britain's log periodic printed circuit board antennas (link below).

Use good quality coaxial cable between your antennas and receivers. You will have signal loss in all coaxial cables but some are much better than others. RG8X is an excellent compromise between signal loss, flexibility and cost.

By the way, in a well planned system, you can get away with using 75 ohm cable instead of 50 ohm. Quality 75 ohm cable is cheaper to make than 50 ohm so it might be an attractive alternative. Basically, a standing wave sets up between a 75 ohm to 50 ohm junction resulting in about a 5% loss per junction. This loss may be quite acceptable provided the antenna's are reasonably close to other transmitters.

Insert attenuators in the receive antenna chains if you have plenty of signal, but a high noise floor. If your paddles are side of stage, you should have plenty of signal. Yes that's right, if you have plenty of RF strength, you can confidently insert an attenuator to lower the overall noise floor and increase the reliability of your systems.

Physically separate your IEM transmitters and your microphone receivers as well as their antennas. The input stages of receivers are sensitive. It does not make sense to put comparatively more powerful IEM transmitters in close proximity to them when your actual wireless microphones are many metres away, even if they are on different frequencies.

Work in with others - this is the big one. All users of wireless devices have a legitimate use and just as you want reliable transmission, so do others. It is rare for not enough spectrum to be available so with adequate planning, I have never come across a situation where all user's needs have not been met.

Lastly, if you find yourself in an extreme environment where the 520Mhz to 694Mhz is not enough, you can apply to ACMA for a short term apparatus licence to use frequencies in the now illegal 694-820 MHz region (at a cost). ACMA recognise that there are some rare circumstances where extra spectrum would be helpful. In these cases, an application can be made to use other spectrum and ACMA will assess each application on a case by case basis depending on what spectrum is available in the area.

Useful Links



Mini Circuits - Suppliers of lots of useful splitters, RF amplifiers and attenuators.

<http://www.minicircuits.com>

Kent Electronics - Suppliers of cost effective log periodic printed circuit board antennas

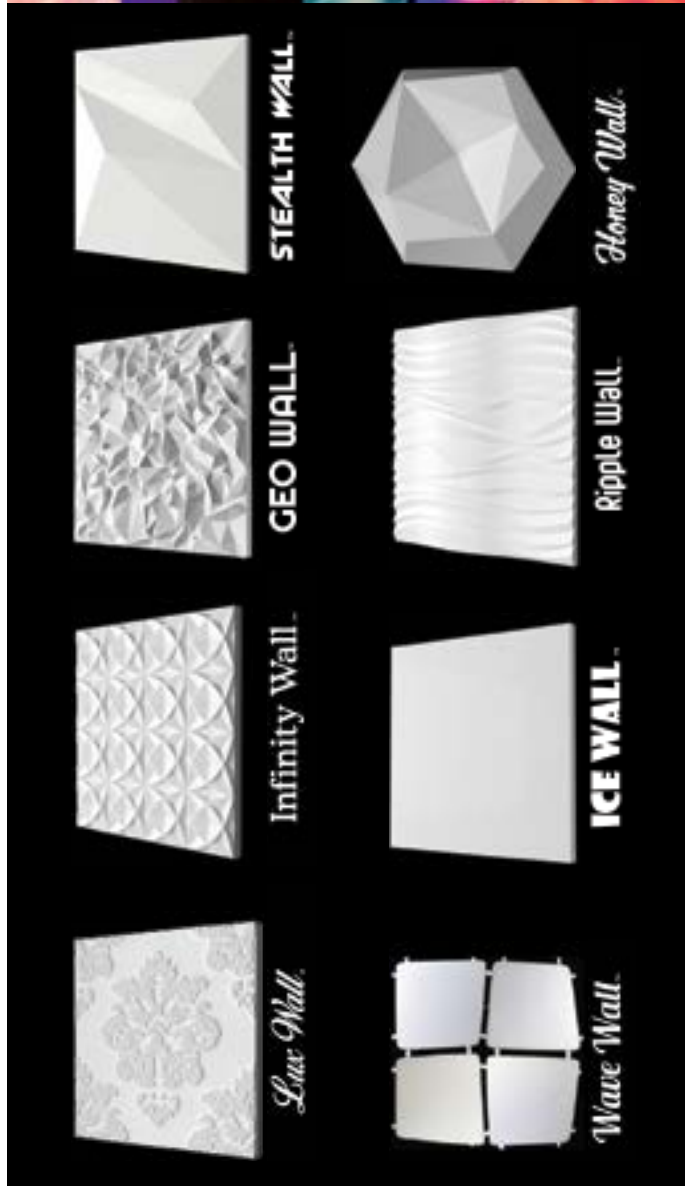
<http://www.wa5vjb.com/products1.html>

RF Venue - Suppliers of Antennas, RF Distribution equipment and Spectrum Analyser products for use with wireless microphones.

<http://www.rfvenue.com/>

ACMA - Information regarding short term apparatus licences

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VULTURE GORGES on Pizza

Inside the Eagle Boys disaster



By Julius Grafton

As an ex roadie I have a healthy interest in pizza and beer. The former is of course easy road food, and Eagle Boys was one of the more ubiquitous franchise chains, behind dominant Dominoes and Pizza Hut, purveyors of the best Hawaiian pizza in my opinion.

Vulture fund NBC Capital acquired an 85 per cent stake in Eagle Boys in 2007 and immediately fell foul of the 340 franchise holders. These are people who invested everything they had, and who were the life blood of the business.

When a group of franchise holders complained, they got short shrift.

Worse still, because NBC slowed down or stopped advertising, sales fell. Then many franchise holders started to lose money. When some of them shut their stores, they were pursued by NBC – hounded for money under the terms of their franchise agreement.

It reminds CX of the Blockbuster Video store franchise in our previous suburb, where the franchise holder resigned from Blockbuster due to excessive fees. Reopening under another brand they were mercilessly hounded and sued and subsequently closed down by Blockbuster.

There are over 1,100 firms selling franchises in Australia. Some notable failures are Krispy Kreme and Pie Face. The biggest disaster in franchise is currently convenience store chain 7/11 which appears to be unprofitable for any franchisee if they pay award wages.

But back to Eagle Boys, which is now in administration. NBC have had nine years of franchisee fees that they have ruthlessly and brutally pursued while many of their franchisees have gone stone motherless broke.

In the 1970's Pizza stores took off, and in the 1980's video

rental stores did the same. Soon the franchise chains were selling overlaps and shrinking territory so that only the best operators were viable.

The horror of many retail franchise agreements is that the franchise chain hold the shop lease, so that if you stumble they simply boot you out and send in a manager. This company backed dude is empowered to dress up the business using whatever means to make it look good to sell to another sucker.

At the top of the totem, the big retail landlords in malls hold ultimate control over tenants, with a thing called Overage.

Overage rent is a term used to describe the additional amount of rent that a tenant needs to pay once sales reach a pre-determined target. The big mall owners know what you turn over.

They know how many people walk past your store, and thus using actuarial algorithms they know what that means for your sales. They can count empty milk bottles in your trash, if you sell coffee, to figure out volume.

Overage means you pay more rent when you sell more. You pay this also to the franchise company, who make a tidy profit from the fee they charge you every week, and from the markups on the goods you must buy off them. Too bad if you can buy it cheaper elsewhere – you are not permitted to do so.

Oh and about the mall rent? You are obliged to open your store all the hours the mall is open. Too bad if you feature lunch and the mall is open until 9pm.

Honestly, I've had a mall lease and I've looked hard at franchise deals and I cannot see any upside in any of it. For the sucker on the coal face; the franchise holders can scale fast and get fat off your sweat as you go broke.

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THE MILL REPORT

By Andy Stewart

WHERE IS THE MIDDLE GROUND?

There used to be one... a place where people spent moderate amounts of money on good audio equipment. Not big money, mind you, only modest amounts.

They did this primarily because they needed to; either because their businesses were clubs, bars and pubs, or studios of different sizes and persuasions.

Now they're all hoping to spend \$1.75 on speakers and still they're grumbling about the price!



What has happened? I mean really. What is going on in the audio industry? How have we reached the point where not only does sound never seem to figure in the design of physical spaces of any kind, apart from the extremely rare gold-plated concert hall, people purchasing pro audio equipment now expect gear to cost almost nothing.

Meanwhile at the bowtie twirling, cashmere jumper wearing audiophile end of the market people are contemplating \$100,000 turntables while poo-pooing un-braided USB cables and IEC leads (unless they cost \$7,000 a metre). They like their leads to be off the ground too, thanks very much, and river stones from Canada placed beneath them to decouple the electrons passing through them from the earth's disruptive magnetosphere.

It's all happening at the audiophile end of the market, believe me. Every snake oil salesman is there, peddling their nonsense to gullible rich people who somehow take leave of their senses when it comes to purchasing audio equipment.

If only there were a middle ground.

GULF OF CRAP 'N' ESOTERICA

I have seen only the extreme ends of the audio spectrum this past month, repeatedly and without respite. It's

been so in my face I'm beginning to think the middle ground has vanished without trace.

Publicans running big venues are trying to spend tip jar money on install PAs. Restaurant and bar owners build raucous new spaces, spend precisely zero on acoustic design and treatment, then wonder why their clientele can't hear themselves across the dining table. Worse, they then expect the solution to their problems to also cost zero. Home studio owners want a pair of professional control room monitors for \$400 a pair, and bands want whole albums mixed for \$1,000. Meanwhile, audiophiles are spending 100k on a turntable with a one-inch thick frosted glass platter and ebony sides.

I know us middle-grounders are out there, but I get the distinct impression (this week at least) that we're a dying race. Out in the big wide world we call punter-land it seems there are mainly only haves and have-nots. You either want large monitors but couldn't possibly imagine spending a paltry \$15,000 a pair on them (that would be embarrassing), or you want large monitors but couldn't possibly fathom anyone spending that sort of money on speakers!

Both expect great sound of course, but only one thinks they should pay for it, and the higher the price tag the better. Ironically, it's only in the middle

ground where common sense and empirically driven audio development seems to prevail. There are still great designers out there in the pro audio market building fantastic new analogue and digital consoles, active and passive speakers, amps, mics, reverbs, software, you name it. Problem is, only a rapidly shrinking group of individuals seems to ascribe proper value to this equipment, and that's troubling.

The natural extension of this trend is that everything will eventually need to cost less than a Happy Meal to manufacture, and because there will be almost no-one left who can hear the difference between good and awful sounding gear, genuine developers will vanish like ice from Antarctica. Some of the more cynical amongst us would argue we've already reached this tipping point.

A GRAND REVERSAL

Somehow this trend towards valuelessness in the audio community needs to be reversed, lest we eventually have no decent equipment left with which to do our jobs.

But how might this reversal take place, particularly when it seems the whole manufacturing world is heading in this same direction?

I spend all my waking hours dealing with audio in one form or another and I certainly can't conjure up a solution. I

can acknowledge the phenomenon and witness the downward trend, but what can I, or any of us, really do about it? In the long term, education is probably the key... though this statement feels already like quaint theorising.

I am constantly advising people on what they should buy (or avoid like the plague), depending on their circumstances, but more and more this advice seems to fall on deaf ears. The common problem I see everywhere is a false economy based largely on a lack of long-term vision. People, it seems, don't want to spend large sums of money up-front on things like PA systems or decent monitors for their studio because they can't see past next week let alone 5 or 10 years into the future.

The consequence of this short-term myopia is that the cheaper option – in some cases just plain stupidly cheap – is seen as the more economically prudent choice because their businesses

can't justify the spending. But then of course they shell out this same amount again and again, purchasing poorly manufactured items every

year or two that have no long-term warranty or prospects. When the gear inevitably breaks it's not worth fixing, even if you could find someone to do it. So what happens then? They purchase the same crap all over again.

All this means in the end is that buying cheap simply means enduring bad audio over the 'unforeseen' long term. No money is saved. Indeed, arguably far more money is spent if you look carefully at the figures. And for what? Crap audio equipment that ends up in the garden shed or landfill. It's nuts, economically and sonically.

DOWN, DOWN PRICES ARE DOWN (FOR THE COUNT)

I understand the downward pressures on price and quality that certain companies in our industry place on the market (by stealing designs off others and re-fashioning look-alike products out of beaten egg-white and recycled

tramp iron). I know the world is awash with cheap crap that does the job for scarcely enough time for the retailer to make good his escape (the taillight warranty in full view for only a minute or so). But the reasons for this aren't necessarily what they seem.

I suspect our aural faculty (hearing perception) somehow lacks primary focus in people's minds these days. Perhaps it has always played second fiddle to our other senses, like sight for instance, who knows.

Irrespective of whether this is true or not, examples of this phenomenon are everywhere you... well, look.

A business that doesn't have any direct involvement with audio per se might spend \$200,000 making its premises look amazing, and literally nothing on making the place sound any good. This is not necessarily a conscious decision either. People mostly just never even consider sound when they're developing an interior design

or building a brand new structure. What a space ultimately ends up sounding like is almost always purely accidental. It's only when a space sounds horrible that

something is occasionally done about it.

To illustrate this point further, let's turn this concept around for a moment. Imagine a world where everyone built office towers, domestic homes and shopping malls to satisfy only one human sense: hearing. In this world there would be no concern for physical layout, traffic flow, visual aesthetics like furnishings, colour schemes or ergonomics. On the contrary, it wouldn't even occur to people to equate style with how something looked. Seems insane doesn't it, yet this is precisely how most people treat sound – the sense perception upon which our whole industry is based.

The point here is that audio is already a hard sell from the point of view of the general public. As an industry we need to push sound back up the totem pole with education, rather than box peddling the industry into oblivion. Easier said than done though I fear.

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

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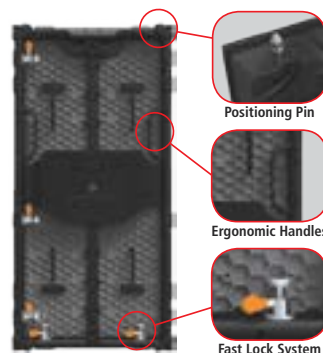


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LISTEN HERE

TIMING IS EVERYTHING

By Andy
Stewart

Musicians

A musician's timing is crucial when you're tracking a song in the studio. Nothing sounds worse (apart from bad pitch) than poor timing, and problems around it can quickly spiral out of control if you don't keep an eagle eye on every performance.

Like building a house on dubious foundations, a song can come crashing down on your head if you don't pay careful attention to timing throughout its tracking process.

If a song's first building blocks are wonky and unstable, things are going to get exponentially worse as you try to add extra overdubs. Like hitting a butterfly in mid air with a spud gun, a musician can spend most of his or her time and effort just trying to match the errant timing of previously tracked material, even though it may not be a conscious thing. Hardly a recipe for capturing inspired takes.

In my experience, it never pays to rush into a recording session without first paying close attention to how, and in what order, things are likely to be tracked. If a song needs a click track – and it nearly always does – set one up before you do anything else, and make sure it's musically relevant, easy to play along with, and adjustable. But most importantly, make sure it's the right tempo! You won't get far if it's not.

To dwell on tempo for a moment, whether you're a producer or a musician in a band, wherever possible you should try to firm up a song's tempo before the studio sessions start. During rehearsal is the obvious time to experiment with this, or even around the coffee table with an acoustic guitar, or unplugged around the piano. This gets everyone into the mindset that tempo is crucial to the recording process, rather than some triviality best ignored. (I can't tell you how many times I've seen debate rage in the studio around whether or not to use a click track, and if so, what tempo it should be. This decision is best made long before the kick-off.) It also pays to scrutinise a song's tempo repeatedly on different occasions, if you have that luxury. Sometimes five different days will throw up five different tempos, highlighting the need for a decision to be made about which one to lock in. If a song's speed is on the move and fluid, and you don't establish a tempo before the recording session, you may end up tracking the song at the wrong pace, which can be a real problem later on.

TIMING FORK

Analysing tempo is easy. Just get a metronome app on your phone (if you don't have one already), and whenever the opportunity arises – even if you're the only one who can hear it – set the thing running and adjust the timing so that it plays along at approximately the same tempo as the band. It's actually preferable if the musicians can't hear it at this early stage because initially this allows the band to play the song at a speed natural to them on the day, as well as allowing you to adjust the tempo to them, rather than the other way around.

If you do this repeatedly – at rehearsals and gigs etc – on each occasion noting down the tempo, eventually

you'll develop a firm sense of what that song's tempo should be, as well as what it has been. That way when someone later asserts that, "we play this song much faster live" you can clarify their suspicions by testing the current tempo in the room and comparing it to previous measurements.

Tempo can be elusive, and studios can cause bands to lose perspective on the speed at which they typically play a song. Particularly if they don't have any studio experience, bands will often play music at a slightly slower pace in a recording session – maybe it's the lighting that causes it; maybe it's the confined conditions, or the headphones, or the quiet isolation... it's hard to say exactly. But it happens. I've mixed dozens of songs over the years that have been sped up at the last minute, either off tape or via software. I can't ever remember slowing one down.

PRE-PRODUCTION TEMPO MAPS

You could take your tempo preparation one step further as part of your pre-production by setting up recording session templates for each song on your laptop. If you're feeling sufficiently organised, and with whomever is going to be monitoring the guide during the track laying, develop a click track that's enjoyable for them to play along with.

Though click tracks and tempo maps might feel time consuming and restrictive upon the natural ebb and flow of performances (particularly in the beginning), they ultimately liberate studio performance by removing the uncertainty around timing, especially if you've prepared them beforehand. Admittedly, they can take time to get right, and when they hold up a recording session they quickly cause frustration and anxiety. Do this prep work beforehand outside the studio is my advice.

GOOD MONITORING = GOOD PERFORMANCE

What's important to appreciate, regardless of whether you're the engineer or musician in a recording session, is that monitoring during an overdubbing session is crucial to getting these new parts right. This fact cannot be overstated.

Headphone mixes are absolutely fundamental to a musician's ability to play along to the music, regardless of whether it's all going down live or one overdub at a time. If you're engineering, you can never, under any circumstances, adopt the mindset that the headphone mix you're sending a musician "is what it is" or "can't really be changed." That's utter garbage.

Engineers must always respect and remain sensitive to the fact that the musician's role is by far the most important, and that getting their headphone mix right so that they feel comfortable with both the song and their instrument – regardless of how mad that mix might seem to you – is of paramount importance.

If you doubt me on this, just try going into an overdub booth yourself and play an instrument you can't hear very well along to some music with an indecipherable beat. Listen back to the results. When you hear how crudely you've played, how hopelessly out of time your performance is you may come to appreciate how hard it is to perform under this sort of duress.

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

TO CLICK OR NOT TO CLICK

Of course, many would disagree that click tracks are vital to good studio recordings, and some of the greatest songs ever recorded were performed without a click track anywhere in sight. In some cases I would agree; they're not always required. But no-one ever mentions the opposite truism do they – that some of the worst songs ever recorded were performed without a click track anywhere in sight.

If a band is talented enough and tight enough to play as one during a recording session, then fantastic, let's roll tape and capture things quickly. No-one would argue with that approach. If the drummer is a human metronome that plays consistently from take to take, even better.

But mostly bands aren't quite that good, though they might think they are. They often have a more heightened sense of their own abilities in this regard than live studio recordings bear out. That's why it's important to learn to make the judgement call about whether a band is capable of playing everything at once or not. If they're not, then often it's a click track that helps keep them together.

And of course, most of the time these days, there is no band. Even when there is, half the time they can't all be at the recording session. Then there's the possibility that someone might want to put loops into the song arrangement, or edit five takes together. That's when playlists come into their own. It's much better to edit takes that are layered on top of one another in time courtesy of a tempo map than to record a bunch of freewheeling unstructured takes along a timeline. For all these reasons, a click track and tempo map form a hugely beneficial structural foundation.

Take the guesswork out of timing issues in the studio and everyone will thank you for it.

Get headphone mixes right and things will go well, get them wrong and musicians don't stand a snowflake's chance in hell of performing at their best. Remember, when you put headphone on musicians you make them deaf to their instrument – it's your responsibility to restore this perception immediately, and in some cases, heighten it. No excuses.



SYMETRIX PRISM 4X4

By **Jason Allen**

Ostensibly, this is a review of the Symetrix Prism 4x4, a half-width, four analogue in, four analogue out, Dante enabled 1 RU DSP unit that's the baby of the Prism range. In reality, you can't review the unit on its own – it's part of the total processing and control environment that is Prism, and that's where its value lies.

Prism processors come in four analogue I/O sizes; 4x4, 8x8, 12x12 and 16x6. All have their analogue I/O on Phoenix connectors for your wiring convenience, with input gains switchable from 0, 12, 24, 44 or 54 dB with ± 24 dB trim. A 64x64 Dante port is standard on each model, though just a Primary port, no Redundant. This may have been a simple real estate decision though, as the units also have separate Ethernet and ARC (Symetrix's 'Adaptive Remote Controls') ports. All set-up and configuration is via Symetrix's Composer software, which anyone who has ever programmed a DSP before should find intuitive and straightforward.

Using the same DSP engine, but distinct from Symetrix's higher-end Radius and Edge products, Prism do not offer AEC, expansion slots or RS-232 control. What they do offer is affordability, a huge range of control options, and, in the case of the handy little 4x4, cool tricks like PoE, making then a really scalable solution. With Dante already built-in, they are easy to build into a new distributed system, or add into an install already running Dante. However, you'll get the most value-for-

money out of your Prisms by integrating them into a complete hardware control solution from Symetrix, and the ARC-WEB browser interface.

ARC-compatible devices include five different hardware remotes that can be wall mounted, a PoE expander and extender, a control expander (including RS-232 interface), and ARC-WEB, a web interface which you can use to control multiple parameters in your Prisms with your tablet, phone or computer via its embedded web server. You can have four different levels of ARC-WEB access running on your system with variations in parameter access and capabilities.

Out of the box, getting a simple design up and running on the Prism 4x4 was remarkably easy. If you're connecting via a switch with a DHCP server, the Prism supports that. I connected directly from the PC to the unit and gave my PC an IP address in the same range as the unit. Composer found the 4x4 straight away. In terms of processing, everything you need is there- multiple types of EQ, dynamics, mixers, matrices, automatic gain control, ambient sound analysis and compensation, and even feedback suppression. Adding components is via the familiar drag-and-drop method, and wiring is via right-click. Once completed, I uploaded the design to the 4x4 in seconds. Like most competitors, you can save

settings as a template (including non-DSP items like IP address settings) and upload them into units that you're using in similar applications.

Integration of Symetrix





ARC remote controls, creation of customised GUIs, scheduling, presets, logic, third-party control and security are all handled by Composer, much like many competing products. One feature that did stand out to me, and I thought was a real time-saver, was the ability to handle all Dante related patching, naming and subscriptions from within Composer – even of other devices. Sounds like a small thing, but it's functions like that that keep all of your patching information and control in the one place that save errors and headaches in the long-run.

Brand: Symetrix
Model: Prism 4x4
RRP: \$3,328 inc. GST
Product Info: www.symetrix.co
Distributor: www.pavt.com.au

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ROBE SQUARE

Because all
of a sudden,
it's hip to be...

By Jimmy **Den-Ouden**

S

quare. Because let's face it, there are certainly enough round moving lights out there. It's almost as though we've reached a point where the challenge is not to produce a better light than everyone else, but more to come up with something new that nobody else has done and get it to market first.

The Robe Square is certainly different. We've seen fixtures with square panels that move and pixel map, we've seen fixtures with optics that spin, and we've seen fixtures which can zoom multiple elements as single bars. We haven't up until now seen all these features combined into one thing, but that's exactly what the Square does.

First thing to know about this unit is that it's physically big. Really, it's quite big and at times it can be a little noisy too. This is not exactly uncommon for these new age effect lights though, and I think the argument is that it's unlikely this type of fixture would be deployed in noise sensitive environments anyway. So as long as you've got a mate to help lift the thing, none of this matters.



Perhaps the interesting thing to wrap your head around is that despite its name and appearance, the square projects circular beams of light. It does this via 25x 30 Watt RGBW LED sources. These are laid out in a 5x5 grid, and each row of lenses can be independently zoomed. Furthermore, nine of the engines have a multi-beam rotating effect option. All this is built into a head which can index or pan and tilt continuously through 360 degree range.

With a zoom range of 4 to 38 degrees the square actually makes for a pretty good wash light as well as an effect unit. The standard Robe virtual colour wheel is included, providing a selection of colours and white light in varied colour temperatures from 2700 to 8000K. Red shift and thermal delay allow the unit to simulate tungsten dimming in its two lowest colour temperature modes. Light output is stated at 35,000 lx at 5m.

You've got to hand it to Robe for consistency across their range - I never need to read the book on how to configure any of their fixtures, not only because the Robe Navigation System is very good and intuitive, but also it has remained very consistent ever since it was introduced. It's not the only feature which remains consistent across multiple fixtures either, and I really like that the company does things this way.

Probably the biggest winning point about the square in my eyes though is the way Robe has included a bunch of pre-programmed pixel effects. This is a serious time saver for anyone who doesn't want to individually program colour parameters for all 25 pixels, plus five zoom parameters, plus intensity parameters, plus strobe, plus all the other stuff. It's pretty easy to turn the thing on and get a selection of good, interesting looks out of it. In a time when budgets are becoming more scarce, and plotting days are increasingly rare I reckon that's pretty important.

All told the square does all that it's supposed to, and does it really well. It's unique, and easy to use. But then again I'm not all that hip.



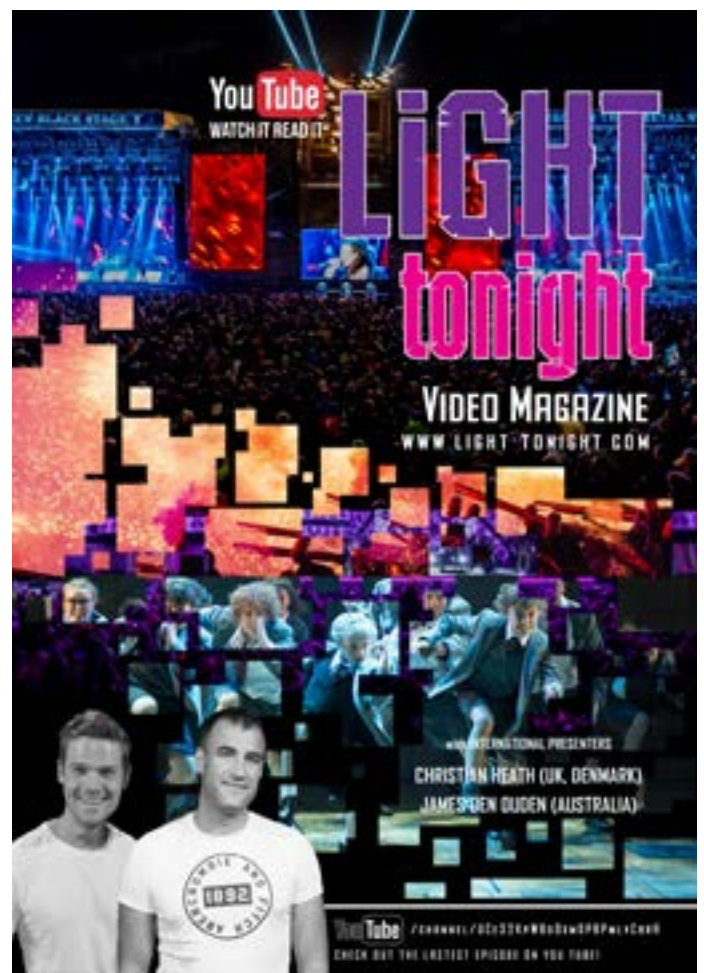
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ROBERT JULIAT DALIS 860

Serious LED Cyclight

By Jimmy Den-Ouden



W

hile the Robert Juliat company is perhaps most widely known for making follow spots, perhaps less known are their other products. Robert Juliat in fact makes a large range of profile and fresnel luminaires, and (of particular relevance to this review) they make cyc lights too. The DALIS 860 is a 300 Watt LED source cyc light fixture. Physically it's a metre long, 147mm high, and 143mm deep. At just 11kg, it's a timely reminder of the efficiencies LED sources have brought to the lighting industry, not only in power consumption and heat generation, but also by way of weight reduction.

11kg might not seem like an ultra light-weight cyc light, after all it's not like a 4x 500W cyc batten weighs a lot. But then consider the colour gamut a 4x 500W batten can produce and compare it with that of the DALIS 860, and the advantage becomes more obvious. An extremely flat field is another advantage of the DALIS. The reflector design looks quite strange when you check it out close up – sort of an asymmetrical dual scalloped design is the best way I can describe it. Weird or not, it sure works well. The quick spec sheet gives a graph showing optimal throw distance to achieve flat coverage over varying height cycloramas. In our studio 1.2 metres is the magic distance.

Power in and loop are via PowerCON True1 connectors, with 5 pin XLR for DMX control. Control can also be input via EtherCON, and any such signal is also passed to the XLR output thanks to an internal DMX node. The fixture uses an eight colour system to achieve a huge array of different colour possibilities. Technically it's six colours plus white at two colour temperatures (2200K & 6500K). Not only does this allow the DALIS to produce strong saturated colours through to the most delicate pastel shades, it also opens up a wide range of options where white light is required.

The pastel feature is interesting to me - I was recently chatting with a prominent LD who was talking about being able to dial white light in with coloured LEDs in a particular theatre, and he seemed quite excited about the range of options this affords.

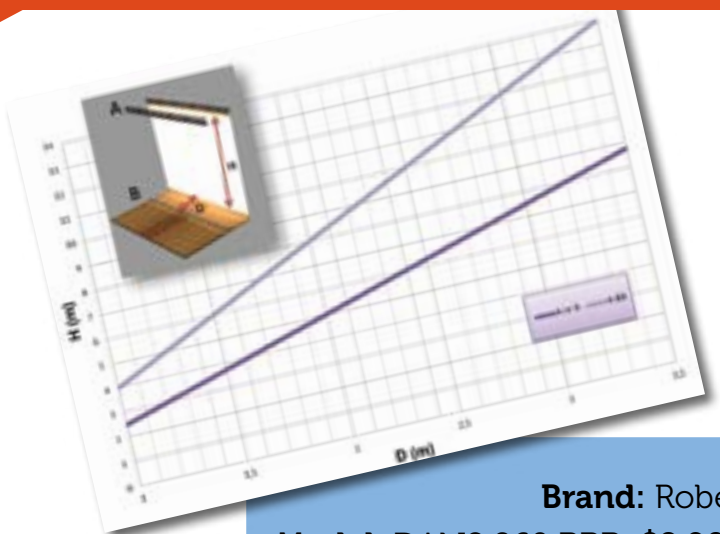
Setting up the DALIS 860 is nice and easy too. The rigging system is very much reminiscent of fly track employed on flown point-source loud speaker systems. Clip the QuickRig mounting spigots anywhere on the unit, attach a clamp, then hang the fixture. Safety chains attach to the same track in the same manner.

The setup menu is straightforward, and allows for a standalone operation mode, in which you

can dial up various Lee colours or white light in a selection of different colour temperatures and at variable intensity. Most users will opt for remote control via DMX, ArtNet, or sACN. RDM is supported too. In its most basic mode, the DALIS requires 7 channels for control. This provides channels for 8 bit dimming, colour preset selection, CCT, strobe, response time and control mode. At the other end of the scale is mode 6, in which 72 channels provide 16 bit intensity and individual colour control over the fixture in four different segments. Another four control modes exist between these two extremes, each offering a different level of functionality. There's a menu item which tells you what angles the fixture is set at, both side to side and front to rear. This is useful for ensuring nice accurate alignment.

Physically because the DALIS has no rigging elements at the ends of the fixture, it's possible to rig multiple units end to end. Up to 8 fixtures could be daisy chained safely from one 240V 10A power run. The unit operates silently, so it's perfect for theatre and TV applications where noise is a problem. DALIS does exactly what it says on the box, and that's a good thing indeed.

DALIS throw distance



Brand: Robert Juliat
Model: DALIS 860 **RRP:** \$8,908 ex gst
Product Info: www.robertjuliart.com
Distributor: www.showtech.com.au

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DBX DRIVERACK VENU360

More DriveRack
for your Dollars



By **Jason Allen**

The latest incarnation of dbx's DriveRack line is all about more; more processing, more options, more support, more control. With nine DriveRack models now extant (10 if you count the China-only 'Premium' model), the VENU360 seeks to be all things to all PA applications, and makes a good case for being the 'go-to' processing solution for small to mid-sized venues.



Physically compared to the DriveRack 260, the VENU360 adds another input, bringing the total to three, two of which are 2-channel AES capable via shared XLR. Outputs remain at six, the RTA input is still standard, but the 360 adds Ethernet control for wired or wireless operation via Android, iOS, Mac, and Windows. In terms of processing power and performance, the 360 leaves the 260 in the dust; it has lower THD, higher dynamic range, better CMR, and lower power consumption. dbx cite that the 360 has seven times the processing power, and, with the additional delay time, EQs, and auto tuning capabilities, you can see where it's gone.

The 360 offers 1000ms of delay on its outputs, compared to 10ms for the 260. The Advanced Feedback Suppression algorithm has been

Brand: dbx DriveRack

Model: VENU360

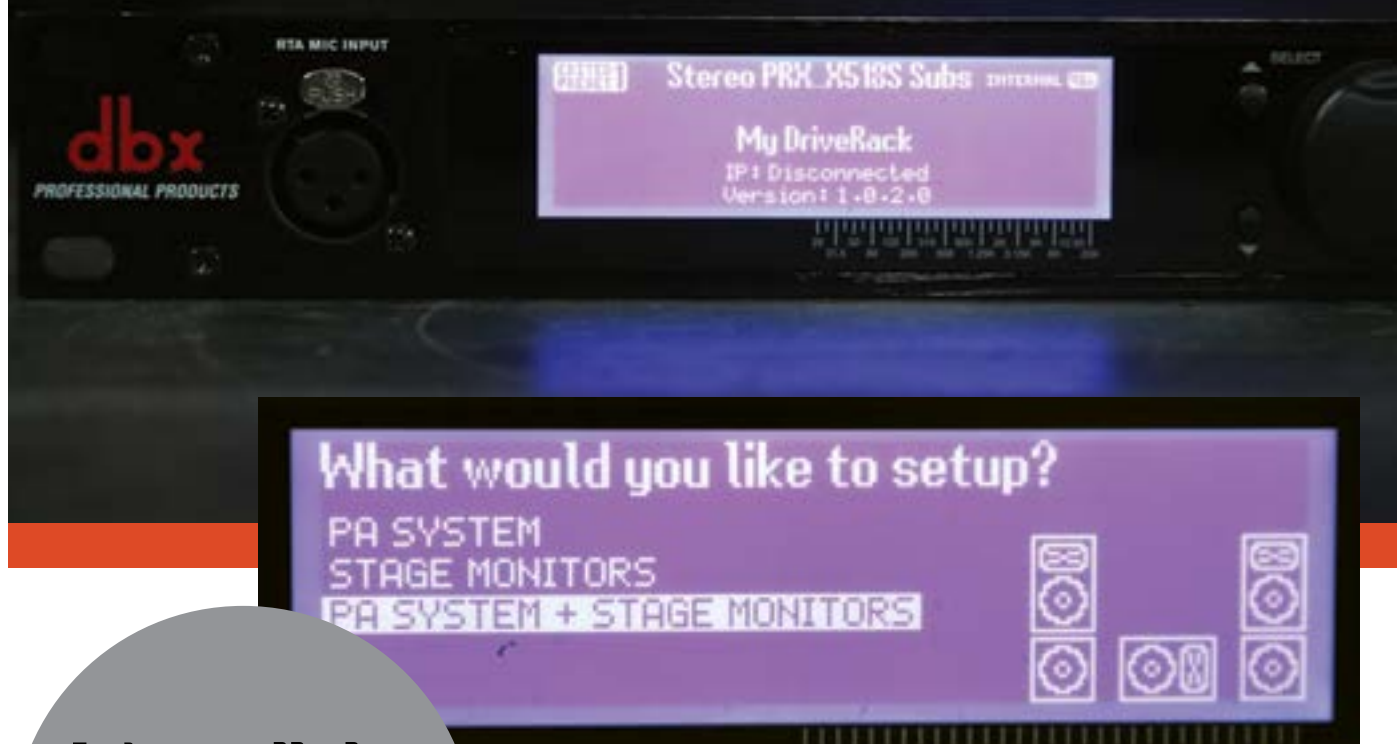
RRP: \$1,949 inc. GST

Product Info: dbxpro.com

Distributor: www.jands.com.au

updated and is available on every input. The new AutoEQ algorithm uses sine sweeps instead of pink noise for tuning, and runs independently on each of the output stages. With an RTA hooked up, just under two seconds of sine sweeps have any of your outputs tuned and ready to go, be they FOH or foldback, without anyone having to be blasted by a wall of noise. Eight completely adjustable parametric EQs handle the tuning, with four more available for tweaking the result.

DBX DRIVERACK VENU360



It has **all the processing** you'd expect

Most audio engineers would have found themselves in front of some version of a dbx DriveRack over the last few years, and will appreciate that the easy-to-use front screen interface has been retained. The 'anyone can set up a PA!' Wizards that guide you through any aspect of DriveRack setup, including system type and tuning, are all still there. There are a huge range of presets available for almost any conceivable system, including amp and speaker processing presets for some of the Harman Group's major competitors, like EAW. JBL options are unsurprisingly comprehensive. Unlike some front panel LED Screen interfaces, navigation is easy and intuitive with a combination of the Select wheel, and Up, Down and Back buttons. Even copying and pasting parameters is easy via the dedicated

buttons, something rarely true on a front panel interface.

Digitally speaking, the VENU360 runs internally at either 48 or 96 kHz with 32-bit floating point processing. If you'd like networked audio connections, there are two other models available; the VENU360-D with Dante interface and the VENU360-B that adds BLU Link for connection to other Harman stablemates BSS and Crown.

There's not much you could throw at the VENU360 it couldn't handle. It has all the processing you'd expect in terms of output EQ, compression, limiting, subharmonic synthesis (if you must), and gates, but throws you handy options like being able to mix the four AES inputs with the other analogue input. Multi-mono, stereo, aux-fed subwoofers, LCR systems, fills, stage monitors, delays and extra zones are all covered. The DriveRack can handle, and handle well, just about any PA requirement until we start to get to larger halls and touring, and that's pretty impressive for its size and price.

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APIA TOUR

PHOTOS BY TROY CONSTABLE

For the fourth year running, the **Apia Good Times Tour** traveled up and down the country with a stellar line-up including **Daryl Braithwaite, Kate Ceberano, Jon Stevens and John Paul Young**. Each artist took to the stage to perform their hits separately and finally together as a group, always backed by a world-class, six-piece band.

For the second year in a row **Rohan Thornton** was the lighting designer utilizing a rig supplied by Johnston Audio*. Top priority was budget, truck space and truck weight.

With four different artists, performing between them around thirty songs, plus budget and political restraints, getting a variety of looks was a daunting task for Rohan.

"This year I wanted to go with a lot more little fixtures plus I wanted to add a video element to the show," said Rohan. "Having living scenery is the best way to create a notable difference between the artists."

Five 1280 x 1280 mm LED screens were hung in a large inverted V shape at the back of the stage, forcing the perspective to make the stage set look bigger than it actually was. Rohan sourced free content and also used what he already had in his own library to keep costs down.

** Really. Johnston Audio IS now a lighting company!*





“Some songs were easy such as Love is in the Air which screamed for mirror balls,” he commented. “I was careful to avoid some of the clichés such as floating clouds during Horses. Plus I had to come up with content that worked in a square format rather than 16:9.”

Rohan used ArKaos as his media server preferring to run it in console mode so that he has access via the lighting console to all of the parameters. He used his own **LSC Clarity LX600 console**, again saving on budget so he could hire more lights. Rohan also owns the ArKaos media server he used as well as a coolux Pandora’s Box.

“I have always been a supporter of Australian product,” said Rohan. “The Clarity suits me although there are plenty of good consoles around. I find the Clarity effects engine - or

dynamics as they call it - is really good, certainly one of the better ones on the market. In terms of fundamental operation it’s really no different to anything else. The best feature was the fact that I owned it so I could get as much preproduction as possible done beforehand.”

The lighting rig was dominated by eighteen Martin RUSH MH6, Rohan’s latest favourite fixture. Originally he specified some RUSH MH4 to compliment them but ended up with TourPro LightSky X Beams that thankfully performed well.

“They were good and did the job although I would have preferred a fixture that faded colours rather than fixed colours,” Rohan commented. “All jobs have some form of compromise in them - unless you’re Patrick Woodroffe!”

Most of the gigs were theatres where Rohan ran two lighting bars; six X Beam and eight MH6 on LX1 and eight X Beam and ten MH6 on LX2. Four Robe Robin 600 LED washes were situated on the ground to add a bit of fill and side light. Beneath each square of LED screen was a blinder bar.

“All artists had some form of audience participation and like to see the audience, it was really nice to use the blinder bars rather than duets,” said Rohan. “It meant I didn’t have to worry about dimmers and they were certainly bright enough as well as adding dynamic to the rig. I was very happy with how

Daryl Braithwaite



Kate Ceberano



Jon Stevens



they turned out.”

The crew on this tour got on extremely well and spent an extraordinary amount of time playing practical jokes on each other. Darryl Braithwaite’s FOH

engineer **Brad Parker**, who mixed the entire show, was the butt of most of them.

“They did gang up on me a bit but I just tell them where to go,” he laughed. “We had a lot of fun on this tour, all the crew were great as were the artists.”

However Brad’s biggest challenge on the tour was not the constant practical jokes rather lack of sleep as the tour comprised of several weeks of

four shows in a row with late finishes and early lobby calls.

“You’d get to bed at 3am and then have to get up at 5am to catch a plane to the next destination,” he said.

Brad’s favourite gig of the tour was Sydney’s Enmore saying that the house crew were fantastic, the room sounded great and the PA system was fantastic.

“They have heaps of PA in there so you don’t have to push it,” he said. “I also enjoyed the Canberra Theatre and The Palais in Melbourne.

All the gigs went well although some were just more difficult. The hardest one for me was Hobart’s Wrest Point Entertainment Centre where we had to use the inhouse PA and it wasn’t big enough. If I had seen the facts and the





specs beforehand, I would have used the PA we traveled and not the flown inhouse one. It was half the amount of PA used in the Enmore yet 1000 more people. The PA will only go so loud which meant I had to be very careful how I ran it avoiding dirt or distortion in the sound system to keep it sounding powerful enough. We brought some extra subs in which helped."

The aforementioned touring PA was a triple Nexo Alpha system comprising three Nexo S2's Dual 18's subs aside plus three Nexo M's and three Nexo B's aside. There were also five Lab Gruppen 6400 amps aside. A full Nexo PS15 monitor system and infill toured to each show as did a few front fills, multicore and consoles. The audio gear was supplied by Howard Sound.

"We also toured all backline, microphones, stands, cables; basically everything to put the sound

“ We had a lot of fun on this tour, all the crew were great as were the artists. ”

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“Brad was very keen to show off his cab mic holders that he recently purchased from Aussie company Tone Revival.”

system together,” commented Brad. “I was mixing with an Avid Venue SC48 and mixing for different artists was fine, they all sing at different volumes and are already set up and saved. The challenge was when they all got on stage together and encouraged the audience to stand because then I couldn’t see or hear anything! It was set up for a seated show and once they stood up, especially if the PA was stacked rather than flown, I had to refer to my Audio Technica M50 headphones. When they’re all together I leave the vocal mics open anyway.”

Brad reports that he didn’t have to do anything flash for anyone’s vocals. He used Waves particularly his favourite plugin the L2 Ultramaximizer which he used over the main vocals and mixed buss. Brad says the L2 works really well on vocals as it stops big peaks from singers singing quiet and soft resulting in a more even sound. Outboard he had a Dual Klark 360 EQ and DBX 160a’s stereo compressors over FOH.

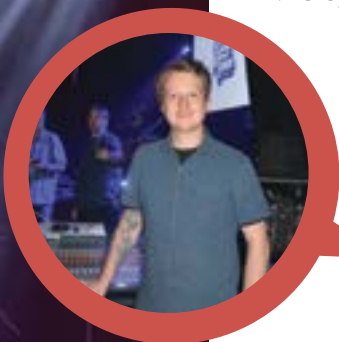
At the show Brad was very keen to show off his cab mic holders that he recently purchased from Aussie company Tone Revival. These attach to any guitar or bass cabinet, are all rubber mounted so you get no vibration and Brad says it is just like having a mic on a studio shock mount.

“It means you can get perfect position of the microphone on the cabinet exactly where you want it,” he remarked. “I place a couple of AKG 214’s on the guitar cabs with them and they’re great. I’m a big fan and I reckon they will sell a lot of them.”

Microphones included two Shure ULD radio mics as well as a heap of other Shure models: Beta 58, SM58, Beta 57, SM57, Beta 91a, and Beta 52. Added to that were Audix D6, Beyer 88, AKG 3000, and Sennheiser 914, 901, 902 and 904 models.

On his third year doing the APIA tour, monitor engineer **Josh Barker** also used an Avid Venue SC48 with four mixes of Sennheiser G3 in-ears running.

“I would have liked more faders but I’m so used to using the SC48 you organize a workflow in your head and deal with the work surface that you’ve got,” he said. “The SC48 allows me more time to look at the stage rather than the console which is great.”



20

QUESTIONS
with

James 'Oysters' Kilpatrick

FOH sound engineer

James 'Oysters' Kilpatrick is one of Australia's most experienced FOH engineers and has mixed for a who's who of Australian music: Midnight Oil, Eskimo Joe, Delta Goodrem, Rogue Traders, Yothu Yindi, The Living End, Slim Dusty the list is endless.

1. What are the three best things about your job?

The crews that work in it, they are like my extended family.

Getting to use state of the art audio equipment with some great acts.

Seeing an audience go home happy.

2. And the three worst things?

Poorly treated crew, ignorance, cheapness.

3. What do you never leave home without when working?

USB stick with showfiles, plug in licenses, iPhone, earmuffs, multifocal glasses - everything I take on tour fits into a regulation carryon bag including my gym gear.

4. What was the worst nightmare you encountered on the road?

Having a crisis at home when you are on the other side of the globe and taking days to get back or just being stuck there helpless.

5. What has been the strangest request from an artist?

Asking if I could rub moisturiser on a shirtless, well known female singers' back.

6. Who was hell to work with (probably best not to actually mention name but allude to it)?

Anyone who is ignorant is hell to work with, fortunately most people are nice.

7. What is the most stupid request you've had from a member of the public, artist or promoter?

It's nearly always from some physics-challenged individual that doesn't understand I can't un-mumble or endlessly turn up or fix somebody's poor singing or speech comes with the territory. There is a reason cockpits have locked doors.

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

For sheer brilliance it would be Midnight Oil in Werchter Germany 1990. Best I have ever seen them play - straight out of the blocks flat out, was really



something to see. I remember everyone (including the other crews and acts) looking around saying 'what the fuck just happened'?

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

Pat Pickett's Apollo Strut.

10. Who do you admire in the industry and why?

Wyn Millson, Bob Daniels, Ernie Rose, Jimmy Mac and Howard Page ... the godfathers of modern sound engineering.

11. Which venue is your favourite and why?

Rod Laver Arena, perfect sounding venue and home town gig.

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

Vertical arrays, I went from throwing sound everywhere in a "clumped" array to aiming a measured dose.

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

Not fit to print. I'm now a grandfather but was once 20.

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

Supercell with a microburst at a Xmas carols in the park at Fitzroy - green clouds, windshear, lightning - we set most of the gear inside the trucks and just shut the doors while it passed and hoped that the trucks didn't flip over.

15. What invention would make your job easier?

A universal console software platform that didn't run on stripped back Windows 1848.

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

I like mixing at high 80's low 90's decibels so I'm usually in the realm of cheese or back heritage acts, I do like surprises though.

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

Your pay doesn't go up if you crack the shits.

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

There is nothing much left of it, it is all internationals, theatre or comedy. If it wasn't for those acts coming over and hiring me, I would have to move overseas to work.

19. Do you have a preferred sound console and if so, what and why?

Avid Profile, I own plugins for it, it is available everywhere and doesn't break down. The audience can't tell what I mix on. For them they either have a great time or don't. I go for an overall good show instead of fretting over the sound of the floor tom. Having said that if it is a large orchestra, broadcast or opera and a one off probably a DiGiCo SD7 with a Waves server.

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

A live sound engineer (true) or join the fire brigade or elite forces infantry.

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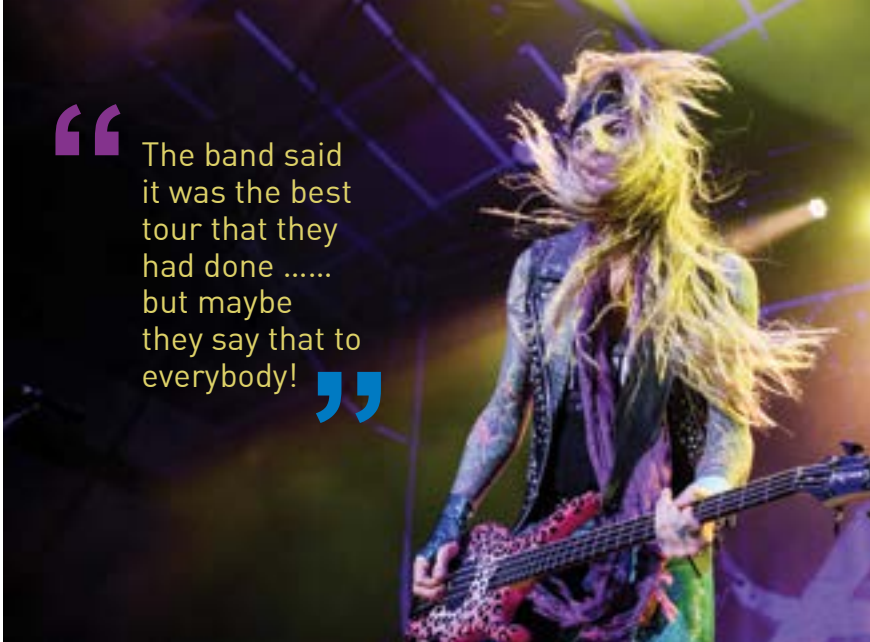
PHOTOS BY ASHLEY MAR

Steel Panther, the comedy glam metal band from Los Angeles who have achieved the same stature as the subjects that they parody, toured Australia for the third time in two years. With songs such as Fat Girl (Thar She Blows), Balls Out, Asian Hooker, It Won't Suck Itself and Weenie Ride, it's not a concert for the faint hearted.

For this tour the band decided to hire a local lighting designer and **Bryce Mace** of Entertainment Installations was stoked to get the job. His dad, Neale Mace, was just as stoked to be providing the equipment!

"My name was put forward by the local tour manager and we went backwards and forwards from there," said Bryce. "It was great because they're the type of band I like - a loud guitar rock band that likes fun and big lights, strobes, molefays and smoke."

“ The band said it was the best tour that they had done but maybe they say that to everybody! ”

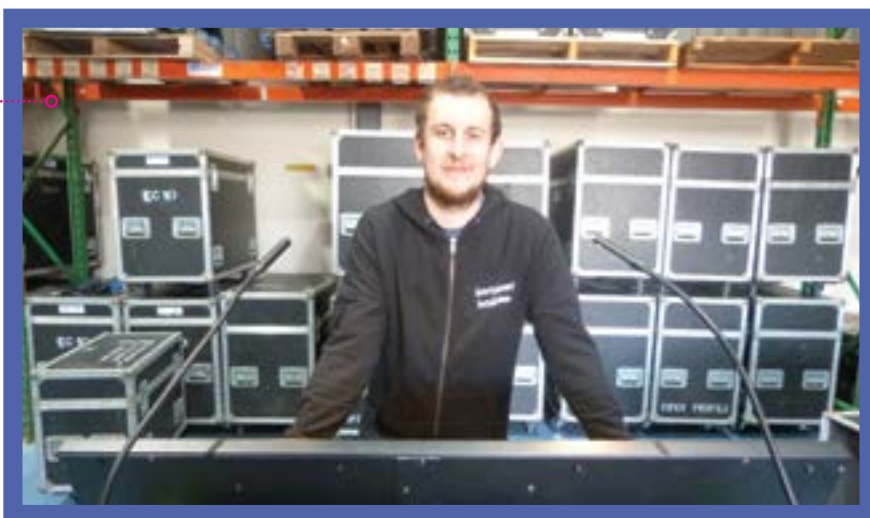


Fortunately for Bryce there was a good enough budget to achieve some big rock looks although Neale admits he may have added a bit more in order to see his son realize his vision. Sydney's Luna Park Big Top gig had the full design and specified gear whilst other gigs had to be slightly adapted to fit the venue and available gear.

Bryce's design was splendidly old school, especially for someone who is only twenty-eight. Initially he was looking at using sixteen Studio Due CS4 fixtures but they were too difficult to source around the country and so he went retro with sixty-four ACLs. The essence of the glam rock 80's concert was delivered with classic fingers of ACL light. Most of the ACL's were sub hung in groups of four, at varying angles, from the three lighting trusses. Some were on the floor with the ACL bar hooked between two roadcases at the back of the stage.

"I wanted an old rock look but also fun because it is a comedy act," added Bryce. "The ACL's blend in with the new stuff giving me the best of both worlds."

Martin MAC101 LED wash lights were scattered over the stage and whilst the ACLs were always open white, the MAC101's provided interesting colour and movement. Occasionally Bryce would run the MAC101's so that they looked like an ACL making a massive rock look.



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“They ended up being quite a good workhorse in the rig,” said Neale. “I saw the Luna Park gig and was very impressed by them. Bryce also had Martin MAC Viper Profiles which did their thing with lots of aerial work. There was a lot of big colour, big movement and good highlights.”

Martin MAC700 washes supplied colour wash from the front truss and Clay Paky Stormy CC LED Strobes were used to light up the backdrop. Atmosphere was from Look Solutions Unique Hazers.

Bryce rendered the show in WYSIWYG and programmed to their songs prior to the tour. As usual, Bryce used a MA Lighting grandMA2 light.

“At the first gig I hardly had to touch up anything, just busk the new bits so by the second gig everything was programmed in and tightened up,” he explained. “I use MA every time, in fact I won’t use any other console. I ended up cloning a lot as the fixtures varied so much show to show. It worked really well, all I had to do was update a few presets and I’d have

the exact same show with different fixtures.” There were a multitude of molefays and duets for audience lighting as the show features a lot of audience participation. Neale is still recovering from the sight of so many female fans baring their attributes. Audience members are also invited on stage during the show and so it was important to be able to light the entire stage area especially for the song ‘Seventeen Girls in a Row’ where they have just that. Every night Bryce would have a tech on standby for this number as invariably the girls would knock lights over as they exited the stage.

“The band said it was the best tour that they had done but maybe they say that to everybody!” said Bryce, who admits to being in his element on this tour with a decent rig, civil time sheet and even nice hotel rooms.

Entertainment Installations also supplied the risers for the Luna Park gig as well as touring a few audio items.



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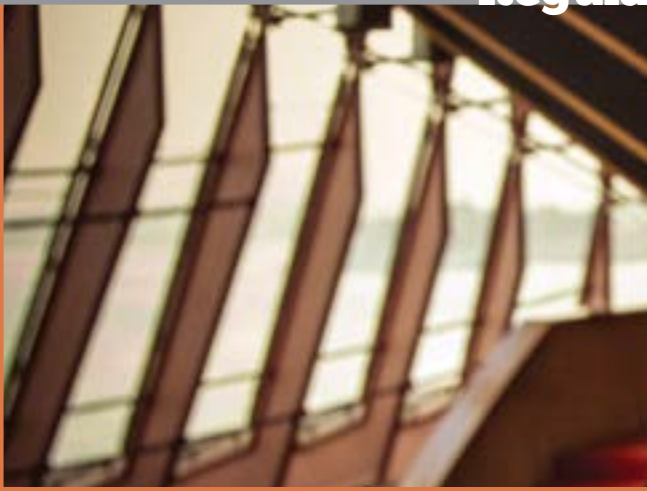
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Industry Women

With Toni Venditti

Sarah Black, audio op
Broken Hill to London. Via SOH

Being raised in Broken Hill, NSW, Sarah's mum really wanted her daughter to become part of the solution to gender disparity in the mining/mechanical engineering industry so she encouraged Sarah to study 3 unit maths, chemistry and physics at school. While this didn't lead to Sarah staying in Broken Hill, her mothers' concerns were taken on-board and led Sarah to forging her own path. In doing so, she has become a role model for other women entering the industry.

Sarah is a Sound AV Supervisor at the Sydney Opera House. She started working there almost 6 years ago as a casual, and then moved into a contracted technician role before becoming a full-time supervisor.

Growing up in Broken Hill the idea that you could work in the performing arts seemed pretty far-fetched. While the town boasts a very creative population with lots of visual artists, going to see her friends in bands was about the only time Sarah ever saw a PA. Her interest in a career in audio started around this time as Sarah began providing mix tapes for her friends, (it was the 90's) and absorbing everything she could about bands. By 1999 Sarah made the decision to move to Sydney and begin her new life.

Sarah always loved music and as a child, she played in youth orchestras. One highlight was going on tour to Japan and playing at Tokyo Disneyland, which Sarah says was mind-blowing when you're an eleven-year-old kid from regional Australia!

Prior to working at the Sydney Opera House, Sarah was mostly in the rock side of the industry. Early on, for about three years she was the in-house tech at Spectrum, a small venue on Oxford Street, Sydney. This is where she got her mixing chops up and learned to run things in a live environment. She also freelanced a bit doing FOH for bands, and enjoyed being her own boss.

When Sarah moved to Sydney she attended the College of Fine Arts and graduated with a degree in Digital Media. She continued educating herself by undertaking an honours year where she was making noise art. Sarah called herself Black Noise and says it was terrible although it did allow 24-hour access to the studios on campus. She lived close by so she would go in late at night and stay until 4 or 5 in the morning just messing around with Pro Tools and microphones and figuring out what the buses did and how to patch things in. She said this was a great way to get a grip on the fundamentals.

After she graduated she really wanted to get into studio work, but didn't know where to start. She saw an ad for technicians at a production company and although she was not experienced in live work, and would be the only female out of about 25 technicians, they took her on. This was her entry point, and changed her focus from the studio to live work. From there she bounced around in various production roles, trying on a few hats. She started getting regular and varied work doing some playback for music videos, boom-arm operation and even lighting – anything that gave her more experience in the industry although gaining the skills to mix bands was her main objective. She became a sponge and learnt how the consoles worked; how the graphics worked; and how to put it all together.

Darren Robinson looked after the PA at the Hopetoun Hotel and Spectrum and became Sarah's teacher and mentor in the live environment. She approached him about helping her learn how to mix bands and he started her off with Monday nights at the Hopetoun. She went along every week and learnt about setting up the stage; tuning a wedge and how to mix. There came a time when they needed someone to fill in and Sarah's name was mentioned. She started mixing on her own and it wasn't long before she became part of the Hopetoun's list of preferred engineers. Darren is still one of her best friends today.

Sound engineering is the perfect job for Sarah saying that for

her, it's both creative and concrete. Both her parents were science teachers, and she believes this has influenced the way her mind developed and the technical and scientific side of working in audio appeals to her. She really enjoys complicated patching, and gets a real kick out of it being correct. Sarah says "Working in live sound, you are constantly making decisions in time-pressured situations. You sometimes have to figure out the best way to get an end result very quickly. Aside from artistic choices, that kind of decision making is a form of creativity. This job is a mixed bag of skills".

Sarah says it's a privilege working at the Sydney Opera House with some amazing gear and a welcoming and dynamic in-house crew. Being part of the Sydney Opera House team there is a commitment to excellence and professionalism that comes across in how they relate to clients or visiting crew and generally it is reciprocal. There are seven main venues within the Opera House which are mostly kitted out with D&B speakers and Midas consoles. She loves D&B saying the speakers sound great and she has found them to be an innovative company. In particular she thinks their ArrayCalc software is pretty cool saying "you can use it to plot speakers and predict coverage in customised 3D-modelled spaces. It's a handy tool for figuring out unique set-ups and also gives you pick-up points and splay angles for rigging". That's great for someone like Sarah, whose least favourite part of the job is rigging.

Another favourite for Sarah is the Mixtender app which works with Midas consoles. After setting up a wireless access point the Mixtender can be used on an iPad as a controller for the console, with the latest version having so much capability. Sarah says that it's a great tool for working with musicians when doing monitors as you are able to stand next to a performer and both see and hear the changes you are making. There's immediacy to what you are doing which helps build trust and rapport with the artist. The Mixtender app is also good for FOH as it enables you to roam the venue freely and make adjustments as required.

As a female technician Sarah says women have the agency to shift the industry paradigm. She is aware of explicit and implicit discrimination. The implicit inequity is that there are fewer women than men working in technical roles, especially in audio. Sarah says that if women aren't visible in technical


leadership roles then what's the take-home message for both women and men? Addressing this is especially important for younger people entering the industry. As a woman in a technical leadership role, Sarah says being visible is an important step toward changing the culture.

Women face different issues to men across most industries and this industry is no different. She wonders about having children and how this would affect her professional development, saying women everywhere lose out on promotions and superannuation when they take time off to have children, although the irregular shift work does make it more challenging.

For anyone entering the industry Sarah offers great advice - seek out opportunities if they don't present themselves, people are surprisingly generous with their time and knowledge, and have confidence in yourself and your abilities. Sarah tells you to "be brave and don't let anyone reduce you. There's no male or female upper hand when it comes to technology, the equipment couldn't care less who is using it".

Having just completed the Vivid LIVE festival Sarah is looking forward to the next chapter of her life by making the move to London at the end of July.





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TOOLBOX REVIEW



By Andy
Stewart

PUNCHLIGHT RECORDING LAMP USB



It's the product that everyone with a studio should own really – a professional 'record light' for your control room, recording space or overdub booth. The Punchlight Recording Lamp is a no-brainer USB-powered LED recording lamp that feeds off the record-arming switch of your DAW software, providing visual cues that were once standard hardware in million dollar facilities.

But the Punchlight does far more than this I quickly discovered. It also indicates 'record ready' and 'play' modes, and can even take a MIDI feed off your DAW's time signature, allowing recording artists to see a visual metronome of their song's tempo. A fantastic option for when headphone timing cues prove elusive.

All these features can be easily customised via the Punchlight's utterly simple utility window. Colours for each of the facilities can be customised via a familiar set of RGB drawbars to literally any colour you like, and brightness can be varied from subtle to rude. Be aware, however, that before you can get up and running, the Punchlight software must be downloaded from the company's website before it can function. I downloaded the tiny file and had the unit up and running in about five minutes – no need for any pesky reboots or fancy footwork. (In ProTools it's a simple matter of setting up the Punchlight as a MIDI device, which took about 30 seconds – the device also interacts with Nuendo, Cubase, Logic Pro, Logic Pro X, Digital Performer,

Sonar, Vegas Pro, Reaper, Reason, Studio One, Saplitude and Sequoia. From this list it's also apparent that the unit is PC or Mac compatible.)

The Punchlight recording lamp consists of a simple, lightweight plexiglass dome with a non-slip base that allows it to sit snugly on a wide variety of surfaces, even if they're a long way from horizontal. (I've had it sitting on a 45° angle on the open lid of my turntable for 48 hours and it hasn't moved at all.) The unit also comes with a 5m USB cable that can get you a reasonable distance from your USB source (typically your computer).

Since I've been using the Punchlight I've found clients have responded to it incredibly well. They've not only voiced their interest in the light quite independently of any prompting, each and every one of them has seen it as a clear indicator of the professionalism of my setup – apparently it wasn't before.

I wasn't quite expecting the affect this light has had on my recording process. In some respects I thought it might be just a cool device that only I'd get a kick out of. But it's proved far more useful than that. It's been a fantastic aid to many of my clients, who in this modern age often have absolutely no idea whether they're recording or not half the time, which can sometimes make for unfocussed performances. Now, amazingly, when the light goes on people switch into gear like this is their moment. So much for the notion of red light fever; the exact opposite holds true. People respond to it, are intrigued by it, and even (dare I say it) inspired by it. I certainly didn't expect that.

Now I want Punchlights all over my studio: in every room, outside the front door, in the foyer... I'm so sold on them I feel like a kid in a candy store.

Price: **\$199**

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or www.punchlight.com.au

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The first generation
of an **industry**

and its **unique**
leadership is moving on

We change focus this month in addressing an issue that is beginning to impact negatively on Australian industry including entertainment technology. Whilst it will elicit indifference, debate, even denial, it will however resonate with many; we are talking about 'leadership' the innate core quality that defines and drives an industry. Based on feedback, observation and experience, we present the hypothesis; our entertainment technology industry is confronting a changing of the guard. We are moving from a first generation leadership to one that needs to be ready, willing and able to take care of business and meet the challenges of a constantly changing landscape? So the question is, are we now ready as an industry for leadership transition, we suggest the answer is an emphatic no.

We have been served for thousands of years by entertainment technology; look at the way the old world designed amphitheatres and the staging in a Shakespearian period theatre. But the first quantum leap came with the discovery of electricity, facilitating a multitude of possibilities, including storage and distribution of aural and visual information. Australia was there from the beginning creating technology, manufacturing

Many of the entertainment technology enterprises we know today were born in, or of the 1960's, which enabled the passion, the impetus and reason for being.

it, using it and producing entertainment content. We know that much progress was made throughout the first half of the twentieth century, led by sound and colour for moving picture. As we entered the 1950s more sophisticated recording techniques and technology were developed and higher quality recording of music was possible, oh and television arrived for us in 1956. The period also gave birth to Rock and Roll that would inevitably help facilitate another quantum leap, the music and pop culture explosion of the 1960s, the sheer magnitude and diversity of which, had never been seen before. The explosion of music recording and performance during the period impacted positively on all aspects of entertainment technology; bigger, louder, deeper was the order of the day, creating opportunity for all sectors including audio, lighting, staging and vision. Many of the entertainment technology enterprises we know today were born in, or of the 1960's, which enabled the passion, the impetus and reason for being.

As we entered the 1970's, consumption of entertainment technology increased, new import companies were born, accompanied by new position descriptions and careers. On the service side, the equipment rental business developed into a substantial sector, deploying a burgeoning array of equipment and employing numerous individuals. New recording studios opened and production of program for television grew, we could go on, but in a nutshell, if the 1960's was the preparatory school, then the 1970's saw the entertainment technology industry graduate to evolve as we know it today, the first generation. As an aside, it needs to be noted that industry veterans in the UK and USA express exactly the same narrative for their part of the world. Over ensuing decades the students of the 1960s

steered the entertainment technology industry in their inimitable manner, some failed, and many didn't. Some of the survivors did so on gut instinct and sheer determination, some understood change and weren't afraid to embrace it. However all things must pass and this first generation is moving on and the leadership that drove companies and industry will be consigned to memory. Moving forward, our industry leadership will view a different landscape than that which confronted the students of the 1960s, neither harder, neither easier, but much different. The consummate enabler, entertainment technology today, is also at the core of, or associated with, a number of other vital industries including communication, information, media, and consumer electronics, all central in contemporary culture. Leaders in the future will need to view our industry from a technology perspective more so than the historical sectorial position and are we prepared for a changing of the guard?

In general terms we are not well prepared for a leadership transition, there is little evidence of planning or training, and we are not attracting appropriate skill from outside. There is no suggestion we populate our industry with 'empty suits' or those hell-bent on gouging a quick buck, invariably they do not succeed. The

wise among us know it is not an industry where fortunes are made overnight, an abiding passion and affinity are the traits that have and will underpin the drive and sustainability required, but we must produce the qualities that define leadership, and part of the answer lies in starting from within, enter ACETA.

It is foolish to deny and prudent to plan, confronting the issue is clearly a shared responsibility and ACETA will lead, however we do not yet have a strategy. Industry leadership challenges including mentoring will be addressed at the next board of management meeting based on what we know and what you contribute, so we need your feedback to arrive before we can develop a strategy. In the interim we are looking at running a pilot leadership training program, which will be convened in Melbourne, if an ACETA member wishes to participate (at no charge) and send a suitable candidate(s) please advise your interest by e-mailing info@aceta.org.au or telephoning ACETA HQ on (03) 9254 1033. Let's hear your thoughts.

All the best
Frank Hinton
President - ACETA

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Are you concerned about your mate's mental health?

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

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¹Passion, Pride, Pitfalls Dec 2014

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Shrinking the PA



he phone rang a couple of weeks ago, and as luck would have it, the rasping tones of LL, the drummer from the Harris Tweed band assaulted my ears. Since retiring disgracefully down the coast, the phone is his favourite method of communicating, usually with some chore he wants done. But not this time.

"Mate, we've got a gig!" He paused for effect while I got up off the floor.

"You're kidding me," I said "Who's it for? I'm not driving all that way down there to do a freebie at the Shady Daze retirement compound."

"No, even better - it's near you. It's a real paid gig at the yacht club. They love us there."

Hmm. With a gig there approximately once every five years they must be absolutely delirious about us! Still, someone was actually coughing up good money to hear the band play so the news wasn't all bad.

"What sort of a night is it going to be?" I asked.

"It's their presentation night - a big deal. You'd better wear your formal t-shirt! I'll text you the details." And with a click he was gone.

I remembered doing other presentation nights at that club. Not the most exciting of gigs, consisting of three hours of speeches where they all give each other awards then stand around telling each other how great they are, followed by an hour of music from the band. The best part? A delicious well catered for meal; oh, and getting paid! There are worse ways to spend an evening.

The band's rule has always been that everyone carries their own equipment to the gig. If you want to play it, you bring it and carry it. With all the band members approaching the early foothills of impending middle age, though, some leeway has crept into this policy. The bass player's double knee operation has meant that his 4 x 10" speaker box needs some

help, as the alternative to it means no bass! The drums have changed from a mega Pearl professional kit needing a team of Olympic weightlifters just to carry the traps case, to a lightweight stripped down kick/ snare/ tom setup. The other guitarist/singer has swapped his all-valve Marshall combo for a new all-transistor Roland, which now weighs less than his pedalboard!

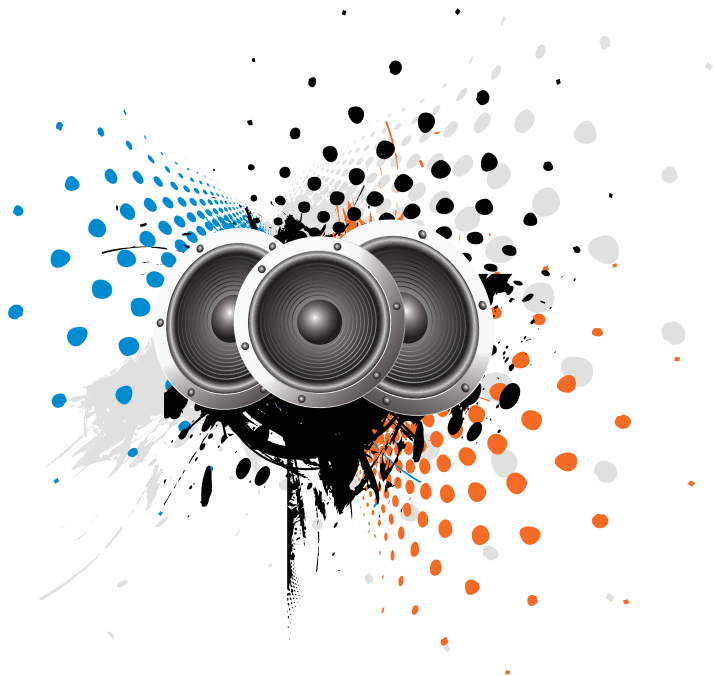
Regular readers (who they? Ed) may remember an article a few years ago where I discussed at some length the ways of simplifying and lightening the PA system, and giving examples of things that could benefit from some weight loss. Naturally enough they won't be surprised to learn that thinking about it is all I've done!

I arrived at the gig with the trailer and the usual system, and started unloading and ferrying the gear to the foyer of the club. All that was left in the trailer was the amp rack. I needed some help getting this out, so I ran upstairs to get the guys to give me a hand.

I should have known better, as a litany of "Sorry Dunk, my back is stuffed" "My knees aren't working properly yet" "The doc says with my heart I'm not to lift anything" and so on poured out of them. Retirement is obviously working out well for the lads!

I looked around and spied a strapping young barman who was watching us set up, and after telling him he could sing a number with the band if he helped me, he ran upstairs with the amp rack all by himself. Ah, the sultry irresistible lure of fame!

The night was not without other problems too. The amp running the monitors flatly refused to work, causing much angst amongst anyone singing. Still, when the going gets tough, the tough are forced to arrange the Front of House speakers in my favourite 'important people who don't like noise' configuration.



What's that, I hear you ask?

Well, it's always the oldest, crankiest, most important old grognans and their wives who sit closest to the band. Then, at the first note they start complaining, eventually lurching to their feet to batter you into submission with their walking sticks and ear trumpets. Careful placement of the speakers can minimise this problem.

I set up each speaker so it pointed diagonally across the dance floor, focusing somewhere in the middle. The band had some concerns about this:

"But the people over in the corners won't be able to hear properly".

"Stuff 'em – they'll hear enough. It's the people on the dance floor who need to hear best. More importantly, these tables of VIPs won't be in the direct firing line of the speakers; instead, they'll have the buffer zone of the dance floor to lessen the impact."

I leaned in closer "Bear in mind these are the people who'll be paying us. You do want to get paid, don't you?" 'Nuff said.

An added bonus for this layout is that the edge of the horn coverage travels just across the front of the stage. Not too close to the microphones to cause feedback problems, but when the stage monitors don't work, it's close enough for the singers to get some idea of how they're singing.

Driving home that night, after pushing, dragging and rolling everything back out to the trailer I started to drift away, thinking that from this moment on, everything in the PA had to be pickable up by one person - namely me, and easily fit in the footprint of a standard 6' x 4' two wheel trailer.

Judging by this recent gig, none of the band is getting any younger, so, to quote football legend Ron Barassi, "If it is to be, then it's up to me!"

The minimum amount of equipment that can do the gig, and allow me to get in and out in as fast as possible, with the least amount of trips back and forth from stage to trailer. Maximum efficiency, minimum size, at a cost that still allows me to make a profit on each gig.

Surely that's not too much to ask in these high-tech days?

I've already made a start and organised a pair of plastic front of house speakers with onboard lightweight digital amps. Personally, I prefer the sound of a 12" midrange, but I've gone with 15" and horn models, even though they are slightly bigger but still easily carryable. However, as every band member knows, more biggerer is more betterer and these should ease the transition period.

I also got a very good price on a couple of powered 12" and horn boxes to be used as monitors, so at last there will be no hernia-provoking amp rack to lug around.

And speaking of hernia-provokers, subs can often be the largest/heaviest thing in the trailer. We need subs because every PA system gets a paradigm shift in quality with some good sounding subs, rather than trying to squeeze low frequencies from boxes that were never designed for reproducing them. At the moment I can fit two compact subs plus an amp on a wheel dolly, so I don't see much room for improvement there. Let's say they're a work in progress.

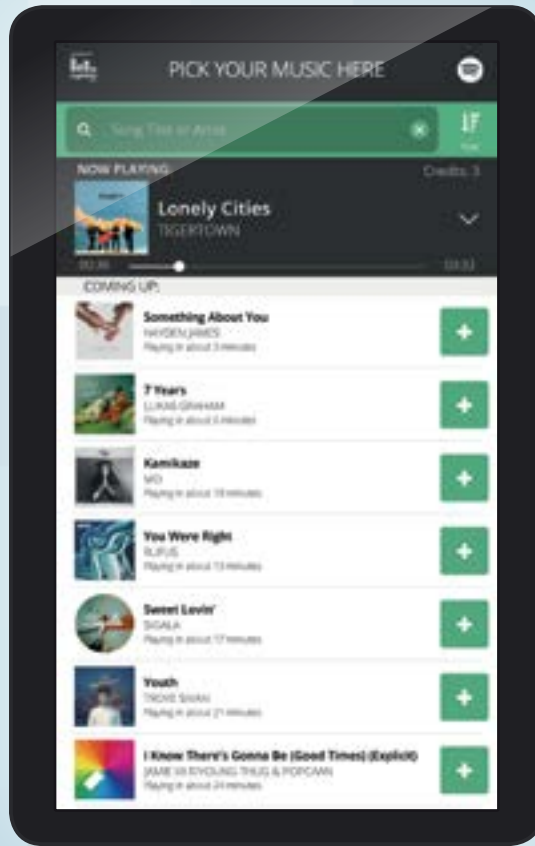
I'm still using an analog mixer, because everyone knows how to use one. But the trickle-down effect, with pricing diving from astronomical down to economical, means that digital mixers, with masses of onboard EQ, effects, dynamics control, and more, are everywhere. They will lessen the amount of outboard gear I'll need, if nothing else! If only they all worked the same. Sigh.

Although not really part of sound, having the house lights on all night just doesn't cut it for atmosphere! Lights are an essential item for making the production look good, and I can charge for it accordingly. At the moment I've got four Par 64 LED cans, with built-in DMX control. All plugged together, they run on a medium chase all night. Sweet! No lighting trees either, to save space. The subs have poles that run to the top boxes, which will have T-bars on top of them and two lights clamped to each of them.

So the system shrinking process is on with a vengeance. It can be done - I know someone who manages to pack his whole PA into the back seat and boot of his car. **The fact that he's packing it all into a Mercedes means he's obviously got a better handle on how much to charge than I have!**

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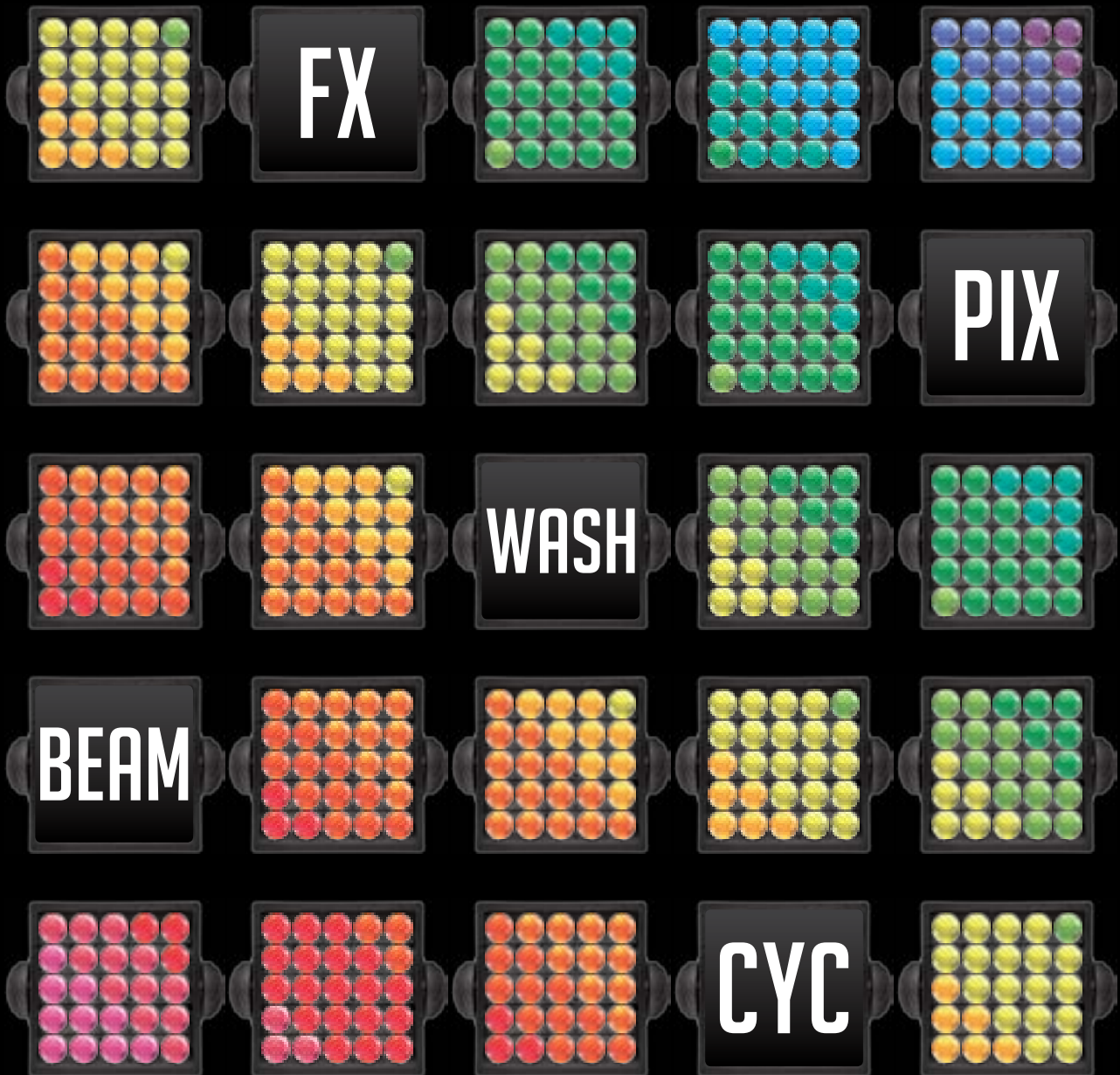
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