



MONTHLY TECH NEWS

CX114 MAY 2016
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Inside the box at **Barangaroo**
How Staging
Connections tamed the beast



Melbourne
Comedy Festival:
Live Production
is No Laughing Matter

**Flinders
University Hub
& Plaza**
Interactive,
Collaborative & Live

> REGULARS:

- Industry Women
- Duncan Fry
- Andy Stewart
- Biz Talk – more!

> REVIEWS:

- Robe Viva
- Shure KSM8
- Luxul wifi
- HK Linear 5

> NEWS:

- Syntec returns
- Hillsong goes global
- Son's death sparks appeal
- LPA opposes 4 hour call

> ROADSKILLS:

- Bryan Adams
- Tom Jones
- Modest Mouse

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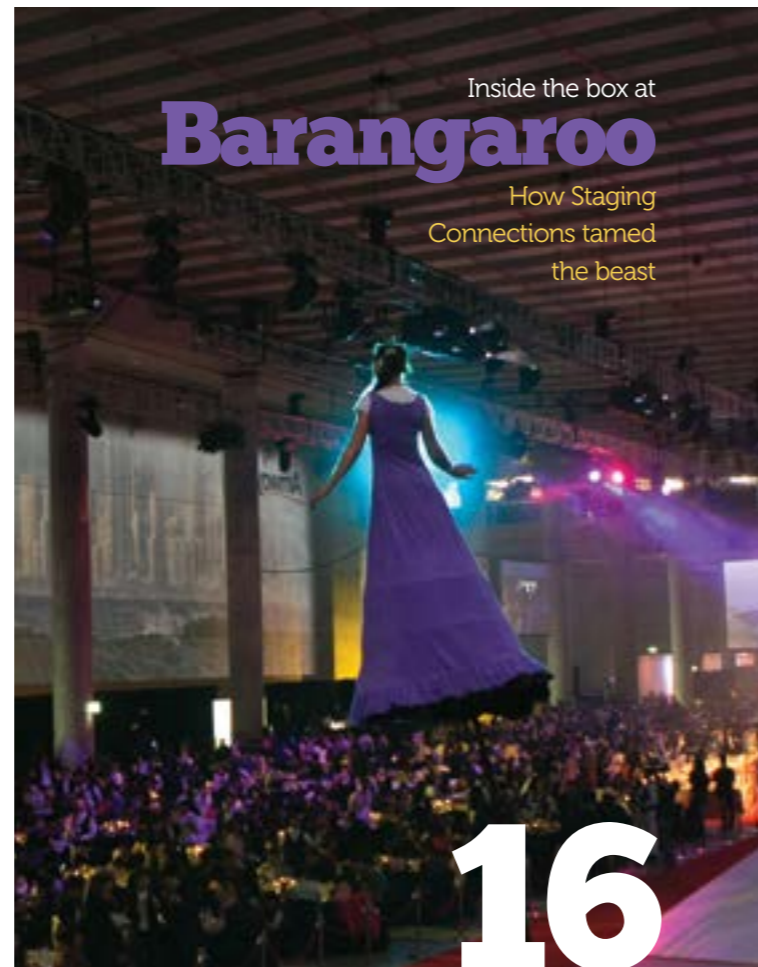
A consummate performer
Bryan Adams 38



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from the **editor.**

between 2011 and 2012 may recall we moved design off shore at that time because we needed Apple APP compatibility to allow for an iPad reader version.

That was a journey, which led us back to local design when Apple moved the goal posts making APP compliance a larger chore. Times have changed and now we are on the Maz digital platform; our magazine is dished up to whatever screen you have – and we don't have to have an Apple developer account any more. This led to a sad farewell for our art director, Lee Murray who was completely fabulous to work with.

So welcome back Dimas Jústiz, the CubanSurfer, and his team. Midway through designing this issue, Ecuador was hit with a major earthquake which fortunately did not affect Quito. We are suggesting anyone with good intentions and a little spare cash donate some in that direction, as it is not a rich country.

ALSO NEW AT CX

One of our institutions here at the Chatswood studio and HQ was Jimmy Den Ouden who ruled the coffee machine with barista excellence. Last month Jimmy left full time employment with us, headed down the road to a most excellent gig with an AV installer.

He has moved to the 'regular contributor' dept, which cheers us greatly. In his wake, we are hiring more contributors so if you have words to share, share them here!

Jimmy was – and is – highly valued by us here at CX and by many of you too, judging by our feedback channels. Long may he coffee – none of us quite have his talent in so many departments.

Julius Grafton
CX Magazine

NEW AT CX

Change is constant in media, and we've made some. Most obvious is a redesign, caused as we have returned to our previous layout company, based in Quito, Ecuador. Readers

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Volume III (+)

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ALLEN & HEATH



Hillsong hits the accelerator Adamson sign on for the globe



PIC: Ricki Cook



sydney based mega-church Hillsong are undergoing a wide ranging expansion, adding new churches internationally and in Australia. Widely credited as pioneering a slightly lighter more musically based form of church, the Pentecostal based church first expanded overseas to London a decade ago.

Now Hillsong has a presence in a dozen countries including the United States along with a string of campuses up the east coast of Australia, from Hobart to Darwin.

Hillsong pioneered 'big church production' and elevated its standards to include the best in wide screen projection, lighting and crucially audio. With as many as 14 band members, a choir, and eight singers on stage, the church pursues constant and controlled delivery of audio to every seat.

Now Hillsong have announced a partnership with Adamson Systems Engineering to provide sound reinforcement to multiple Hillsong venues worldwide. This partnership has come from Hillsongs successful association with Adamson Systems Engineering through it's Australian distributor CMI Music & Audio and the successful installation of Adamson systems in a number of its campuses over the past 5 years.

"It started with our looking for a new system that would better meet our needs for the City Centre worship space in Sydney," explains Hillsong Production Facilities Manager Steve Le Roux.

"At the same time, we knew that there were existing systems in other venues that needed to be upgraded, plus new churches under construction that would require sound reinforcement. It made sense to be incredibly thorough - we sat through many, many product demonstrations - in order to decide upon one manufacturer to work with for everything. In the end, Adamson through CMI came out the clear winner."

The majority of Hillsong sanctuaries planning to install new sound systems in 2016 are mid-sized venues. Most of those systems will rely upon S10 line arrays and S119 subwoofers for sound reinforcement.

Hillsong Director of Audio Ricki Cook adds, "In particular we were impressed with the compact S-Series system. It clearly stood out after extensive shootout and real world testing scenarios. The sound is very clean, the control in demanding acoustic environments is amazing and the low end capability makes it actually sound like a much bigger system. It handles everything you throw at it no matter how dense your arrangements are, clarity remains impeccable where other systems give up. The music performed at our churches varies depending upon the service. It was important to find loudspeakers that sounded great with everything. After listening to many different demos it was a delight to hear Adamson - we knew their products would take us into the future."

ENTECH NZ DOUBLES UP TWICE THE SIZE HALF THE FREQUENCY



ENTECH NZ was designed for a dozen firms to show lighting and audio products across NZ July and at presstime it has signed 22 firms on 27 stands. Starting in Auckland on July 26, it travels to Wellington on the 28th and Christchurch on August 1st.

Fuelling demand is the troubled tradeshow history in NZ where no one large format, one city tradeshow has worked well enough to stick. On the other hand, smaller events like the ETNZ Conference



every second year are well established. Roadshow bridges both formats, bringing major distributors to trade users in a one day format.

ENTECH NZ runs on the off year to the ETNZ conference, which will next run in 2017.

This year's ENTECH features seminars on the new safety laws in NZ, and ETNZ will update the industry on new qualifications for the country.

www.entech.nz



Michael Sloss with Beyer's Kamal Mahtani

Syntec Reborn Sloss family return

Three years after selling to Sennheiser, the Sloss family have returned to audio distribution with the debut of Synchronised Technology Pty Ltd - Syntec for short.

It's the same, but different, they say.

"For over 40 years, Syntec International was proud to be a sales partner of many key global brands.

With the benefit of the experience gained we are well positioned moving forward with the new company. We will not only be able to serve our own customers with our expertise and excellent service, but also extend this to the end-users of our distribution partners products," says Michael Sloss, Managing Director.

Michael explains further; "Upon the successful sale of the Syntec International business in September 2013, we are now in a position with Synchronised Technology to continue on with

(continued over)

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To start with Syntec has been appointed a distribution partner for beyerdynamic GmbH & Co. KG. Germany in Australia and New Zealand for their full portfolio of Consumer Headphones and Professional Headsets.

Also lined up are Fostex for their wide range of Recording Equipment and Speaker Componentry,

HeadsUp for Headphone Stands and Rycote for their full range of Windshield Systems and Shock Mount Systems.

Syntec was first launched by Michael’s grandfather Clive Sloss, and his son Robert ‘Bob’ Sloss built the business into a major performer. Bob will have an advisory role at the new Syntec.



LPA OPPOSE 4 HOUR CALL AWARD VARIATION MOOTED

Live Performance Australia (LPA), the peak industry body for producers and promoters has opposed a move by the ACTU to vary the Live Performance Award. Under the proposal, all awards would provide a four hour minimum call for casuals, up from three hours in live performance currently.

A further proposal called Casual Conversion provides any casual that has been casual for six months or more with the right to request a fulltime or part time job from the employer. This would create enormous problems within theatre and crewing agencies, as the employer is obliged to only refuse the request on sound business grounds – a provision that threatens a blizzard of paperwork to defend.

Elsewhere LPA called on the Federal Government to hand back funds to deliver jobs and growth for the live performance industry in the Federal Budget on 3 May.

LPA are very concerned that due to the unprecedented funding cuts to the Australia Council last year, 40 percent of small to medium theatre companies are losing funding and face going under.

“If the Government is serious about an innovation agenda designed to deliver growth and jobs we expect to see the Budget return the \$72.8 million over 4 years it took from the Australia Council last year so that our major funding body can deliver its Strategic Plan, including investing in the small to medium sector”, said LPA head Evelyn Richardson.

“The live performance industry employs 34,000 people and generates gross output of \$2.5 billion. It supports more than 500 performing arts companies around Australia, and attracts more than 18 million Australians to shows in capital cities, regional centres and country towns.”

Death of a Son

At our Blog is the dreadful story of the death of young Australian crew member Micah Maxwell-Milne at the Baku European games. It’s written by his dad Stuart Milne. The story has a call-to-arms, for the memory of Micah.

Please read it, here:

<http://cxmagblog.com/2016/04/21/death-of-a-son/>



Micah Maxwell-Milne

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ACME CYC-200FC



01

The new Acme CYC-200FC is a flood fixture powered by one 150W RGBW LED. It produces 970 lux at two meters, with a beam angle of 90°X113°. Colour temperature can be set from 2800K to 6000K, with DMX control in four or nine channel modes, as well as a stand-alone mode.

Australian Distributor: ULA Group
www.ulagroup.com or 1300 852 476

IMAGSYSTEMS LIGHTNING



02

iMAGsystems has partnered with Montreal based technology company AptoVision to produce Lightning, an uncompressed, zero frame latency Video over IP system using CAT6A, the first of its kind in Australia. Lightning delivers HDMI video up to 4k resolution together with RS232/IR control and gigabit Ethernet over 10gig networking infrastructure. It is ideal for routing computer video data through venues and corporate facilities using existing or stand-alone networks. The benefit of using off the shelf standard networking switches compared to proprietary systems is ease of deployment, reduced maintenance and cost savings.

Australian Distributor: Axis AV
www.iMAGsystems.com or (03) 9752 2955

JBL VTX M SERIES

The JBL VTX M Series is a new line of premium stage monitoring products, utilising JBL's proven Neodymium Differential Drive woofers and D2 Dual Diaphragm high frequency drivers, along with a new high frequency Image Control Waveguide. The series is comprised of two models - the VTX M20 and VTX M22. The M20 features dual 10"

woofers and a 3" D2 compression driver, while the VTX M22 features dual 12" woofers in addition to the 3" D2 compression driver. The M Series allows for both Dual-Channel (Bi-Amp) and Single-Channel (Passive) operating modes that can be set via the easily accessible selection switches.



04

JBL CONTROL 23-1, CONTROL 25-1 AND CONTROL 28-1

JBL Professional by HARMAN have introduced the newly updated JBL Control 23-1, Control 25-1 and Control 28-1 commercial loudspeakers. The latest versions of the series feature a contemporary look, a flatter and wider frequency response, greater bass extension, improved coverage for on- and off-axis sound and a higher maximum SPL. The models combine

70V/100V ("T") and low-impedance ("non-T"), retain the InvisiBall brackets as standard and add U-brackets as an option. New outdoor features include a redesigned grill with improved plating and finish, screw-down input terminals, and an optional WeatherMax aluminium grill with a toughened finish and optional MTC-PC3 watertight panel covers for wire side-exits in tight-to-wall applications.



Australian Distributor: Jands
www.jands.com.au or (02) 9582 0909

MACKIE REACH



05

Mackie Reach is a self-contained PA system. The ARC (Amplified Radial Curve) high frequency array technology in Reach utilizes three horizontally angled high-frequency drivers paired with dual vertically spaced high-output low-frequency drivers providing 150° of coverage for audiences spread over a wide or deep area. The built-in EarShot personal monitoring system gives performers flexible stage monitoring without the need for additional speakers. Wireless streaming and control over the built-in 6-channel digital mixer is via the Mackie Connect app for iOS and Android which also provides control over levels, EQ, the feedback destroyer, and effects.

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

DBX VENU360D AND VENU360B

dbx have introduced the Dante enabled VENU360D and BLU link compatible VENU360B DriveRack speaker processors. The VENU360 provides all the processing and flexibility needed between the mixer and amplifiers to optimise and protect loudspeakers. The units include the latest advancements in dbx's proprietary AutoEQ and AFS algorithms, additional input channels, and Ethernet control via an Android, iOS, Mac, or Windows device. With an RTA Mic "listening" to the room, the updated DriveRack VENU360 AutoEQ algorithm sets speaker levels and room EQ automatically in a matter of seconds using sine sweeps. The Advanced Feedback Suppression algorithm "listens" for and anticipates feedback and automatically removes it.

03



The Di4 four-channel direct box



The Di4 four-channel direct box solves the problem of converting unbalanced signals into balanced output suitable for use with mixers, PAs, recording consoles and more. The Di4 also functions as a multi-channel stereo line mixer. This

feature allows users to connect their keyboards, samplers and modules into one unit and supply independent XLR balanced outputs to the front of house engineer, as well as set their own independent mix for stage monitoring.

Australian Distributor: Jands
www.jands.com.au or (02) 9582 0909

SHURE MICROFLEX ADVANCE

Shure Microflex Advance is a portfolio of premium networked ceiling and table array microphones, audio interfaces, and control software for enhanced AV conferencing. The Microflex Advance Ceiling Array can be flush-mounted alongside standard ceiling tiles, the Microflex Advance Table Array introduces an innovative "toroid" polar pattern,

and the IntelliMix Digital Signal Processing Suite includes Steerable Coverage technology for control of audio capture in any location of a meeting space. Microflex Advance Array Microphones use the Dante audio networking protocol, with all control, audio, and power signals carried through a single standard Ethernet cable connection.

06



Australian Distributor: Jands
www.jands.com.au or (02) 9582 0909

RUSH MH 7 HYBRID

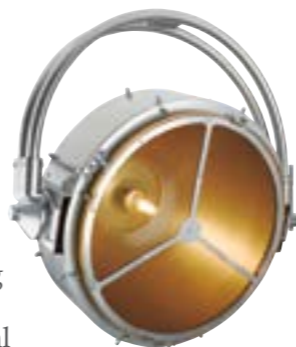


07

The Martin RUSH MH 7 Hybrid is an all-in-one beam, spot and wash moving head. Its features include optics with 3 zoom modes: 2.2 to 15 degrees in beam mode, 2.5 to 24 degrees in spot mode and 15 to 45 degrees in wash mode. Fitted with a Philips Platinum 11R 250W 7800 K lamp, the fixture also includes 8 rotating/indexing and 12 static gobos, 10 selectable colours, and beam effects from its 8-facet circular and 4-facet linear prisms.

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

ROBE PICKLEPATT



08

The Robe picklePATT is the compact addition to their tungsten classic family. It is the second fixture made in collaboration with lighting designer Tim Routledge, which combines traditional aesthetics and modern build quality. The picklePATT is specifically designed to further the current trend for tungsten eye-candy on stage and set for bands, television, film and general prop lighting, while keeping its vintage looks and utilising the modern, readily available 575 W HPL lamp. The 575 W tungsten softlight is formed around a 392 mm sleek, spun parabolic aluminium body which maximizes its curves to look as good on stage as the performers it illuminates.

Australian Distributor: ULA Group
www.ulagroup.com or 1300 852 476

SYMETRIX PRISM

Symetrix has announced the launch and immediate availability of its Prism digital signal processing platform. Joining the manufacturer's line of Dante enabled DSPs, Symetrix Prism has been developed to deliver cost-efficient, high-powered networked audio processing for a wide range of installed sound applications. Prism features the same digital signal processing power, mic preamps and AD/DA converters as Symetrix's Radius and Edge products while providing expansion via 64 channels of Dante networking. Integrators can customise, connect, and configure Prism

09

using Symetrix Composer, a Windows-based CAD program. Prism can be controlled from Symetrix ARC wall panels, ARC-WEB browser-based interface and third-party touchscreens. An embedded web server enables remote audio metering and diagnostics of Prism hardware.

Australian Distributor: Production Audio Video Technology
www.pavt.com.au or (03) 9264 8000



ARC-WEB
BROWSER-BASED
INTERFACE

VOID ACOUSTICS
AIR VANTAGE

10

Created as a DJ monitor for larger club environments and arena-type EDM events, the Void Acoustics Air Vantage delivers wide and even coverage throughout its stated dispersion, allowing DJs the freedom to move anywhere around the booth whilst continuing to experience even and balanced sound reproduction. The system's vertical dimensions



have been kept low to allow good sight lines between the audience and DJ and any rear LED screens. The same attributes that make it suitable as a DJ monitor, such as point-source transmission and smooth frequency response also shine through when it comes to filling a dance floor with high SPL and accurate sound.

Australian Distributor: Audio Logistics
www.audiologistics.com.au or 1300 859 341



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AN OSRAM BUSINESS

Biggest event to date at Barangaroo

STAGING CONNECTIONS DELIVERS HUGE-SCALE FUNCTION IN SYDNEY'S NEWEST EVENT SPACE

By Julius Grafton



Sydney's new **Barangaroo Reserve** sits at the north-west edge of the city, replacing a huge shipping wharf on a headland with staggering harbour views.

Hidden underneath the Reserve is 'The Cutaway' which boasts one of the largest and most unique internal spaces in Australia. The space is raw, a blank canvas, basically a concrete bunker with a vast natural and open sandstone feature wall. The space was created

by building up from wharf level and backfilling over it to create the landscaped parkland. It is BIG, at 7,500sqm, it measures 150m long by 50m wide with a 15-18m high ceiling.

It was only a matter of time before someone hosted an iconic event in there. On Easter Sunday it happened, with a Gala Dinner to cap off the Amway Taiwan Leadership Seminar week.

Amway Taiwan arranged for 56 busses to transport attendees to the venue and they were greeted with an

extensive line up of performers/entertainment including stilt walkers, 7m high vertical performers, bouncing kangaroos, lifeguard, five-person water ski formations in neighboring Nawi Cove and a petting zoo featuring tame Australian wildlife.

CX met a group of the key Technical Event Directors a few days later at Staging's Sydney HQ to debrief. The team was still buzzing from delivering such a huge and successful event.

Problem solving is part of a gig like this

One of the location's key features, but also somewhat challenging was the exposed sandstone wall. Staging Connections used this unique feature to the event's advantage and projected vast, rustic images and video onto the rock face.

The next test was the venue's acoustics. The Cutaway has a seven second delay, which makes amplifying sound challenging and probably the worst nightmare **CX** can think of.

Sound Director, **Gavin O'Hare** explained how he overcame this.



"My first solution was to fly a line array. However, when I mapped it out and with the height of 15 meters it would just create more reflections. We ended up using six ground stacks of Meyer M2D about 20m apart with heavy overlap for full coverage. We set up a 200m expo shell scheme and a drape line behind the audience, and mapped it so the array shoots through the audience, and then hits the drape line to minimise first reflections. If the PA was flown as originally planned, we'd have most of the sound in the ceiling with a lot more reverberation. Bringing the PA down to audience level; any reverberation detrimental to the show is minimised."

The event Production Manager **Daniel Quinn** explained:



"As expected, for an event of this size, in a new venue we encountered a few teething problems."

CX asked the technical team how much power the venue had available and they all laughed. There were just eleven 32amp, 3 phase points spread through the venue with two made inaccessible just days prior due to removal of an old harbor control tower from one part of the space.

Daniel Quinn: "We installed a 500kva generator in the loading dock and thankfully we didn't have to worry about

The show was content rich

fumes coming through as it was located in the open air loading dock.”

“We had two further challenges that needed to be resolved. There was a problem in the roof where the fire pipe partially covered a rigging point critical for one of the aerialist performers. We installed an M16 extension and bypassed the pipe so that the artist due to be suspended from this location could still be part of the seven person aerial performance.”

“We also had to slightly move our planned location for the additional toilets, but apart from that everything went like clockwork.”

Rocco Anzellotti is the Lighting Director at Staging Connections.



“The initial lighting design had a truss at the centre of the room, but this was moved closer to the pillars and the rock face. The key thing for us in regard to rigging was ensuring the points shown (on the plans) actually existed! The video and lighting also shared the trusses, which we generally try to avoid because of the moving lights.”

“For table lighting and event performers we used Vari*Lite VL 3500 spots, and VL 3500 washes. I had 20 Sharpy’s on vertical trusses as there were no rigging points out near the pillars. The strapping of the truss to pillars delivered a great result.”

“There were Sharpy washes on stage, some LED profiles. I had Mac 350’s with gobos for the walk-in tunnels, and some Quad 18’s in there.”

Projection of images and video was the hero of the vision delivered at the event, and the rock wall came alive.

“We projection mapped the face of the rock wall”, said **Jason Fieramosca, Vision Director.**



“There were a total of 28 projectors, – there was 56.2m of mapping and we had to map around the pillars. We also had to think about how you make content pop on the texture of a rock face, and which colours would work.”

Video also played on a huge 60m x 12m screen and four 5m screens. There was a 40’ camera jib, four floor cameras with actual footage to side screens and they could put a PIP anywhere.

“If they asked for something, we could do it.”, said Jason. “We had a great camera director on the night.”

Head of Production and Showcaller for this event was Daniel Lourenco.



“We were in planning with the client for about 5 months out, with the last 3 months in full swing. All the motion content was developed in-house based on the Event Director’s storyboards. Our Multimedia Designer, is based interstate so we use the Aspera high speed transfer system, which pushes content around the country up to speeds of 1gig a second.”

“We were building pixel to pixel content and one segment alone was 95Gb”, said Daniel Lourenco.

“We kicked off the renders overnight and were checking on the render machines from home to ensure we had no issues... Staging Connections have the technology to really push forward, so all the content was unique and newly created for the show.”

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Building the content

When asked about the length of time taken to create the content, Daniel Lourenco commented: "You break it into sections. How much content is needed for walk in, opening, middle as well as the headline act. We utilise online asset libraries and look at the artists' tracks to see what will work. Matt Simpson our Multimedia Designer spent 1 1/2 months designing the content. The main render for the middle section took 58 hours."

"The overseas performer had rehearsals at Staging's HQ in their theatre space the day prior, with the foldback engineer who would be mixing the show."

"Fiona Robinson was our Chief Stage Manager and she had support from a team of six additional Stage Managers who worked closely with the performers. She timed everything to perfection, even measuring things like how long the elevator took because the main green room for the 131 performers was in another section of the Cutaway", Daniel Lourenco concluded.

Every show needs contingency planning

Jason Fieramosca commented on the pre-planning of the event's vision. "We had spare Presentation / Watchout machines connected and had Matt (Multimedia Designer) on standby. We even went as far as bringing a render machine on site so we could do anything when and if needed."

With all event theming also in house, the whole crew couldn't have been more efficient. An example from Jason (Vision): "Once my vision crew were done a few hours earlier than expected, one radio call to Dan (Quinn) and the team were able to go help others. Our crew are cross trained on everything."

Rocco (lighting) had two Grand MA consoles and a trunking system. Rocco and Daniel discussed if they should run the lighting on time code from the audio tracks, but came to the conclusion that manual cues were better as it was too hard with the variations in talent timings.

The show concluded with a 15 minute firework display, to show off the amazing Sydney Harbour. The show was five minutes longer than Sydney's NYE fireworks.

Gavin (audio) had a full redundancy system, running Dante with a Yamaha CL5 and a QL1 console. "More importantly we ran Shure Axient wireless mic's and one of the MC mic's actually switched to a backup frequency. The radio mic redundancy saved us, it just did it and we saw it on the log afterwards. Frequency is one area you just can't control."

Chris Lewis, Event Director, Staging Connections commented: "The event showcased the very best that Australia has to offer, and we know it will be remembered for many years to come as one of the most elaborate and exciting events the city of Sydney has hosted."

In the end it all went flawlessly and the client could not have been happier.

Rocco programmed the show in MA 3D, pre programming the 46 VL's. He used the 3D visualizer on site to get ahead of the setup.

Staging Connections delivered a world class Gala Dinner, in a unique, yet challenging venue, utilising the latest technologies whilst supporting the best talent and highlighting the best of what Sydney has to offer.

Another contingency that arose in planning was the noise of catering. "We had a line of soft walls, and we checked their trolley wheels to make sure they were quiet. The sound of plating up and glasses, we checked everything", said Daniel Quinn.

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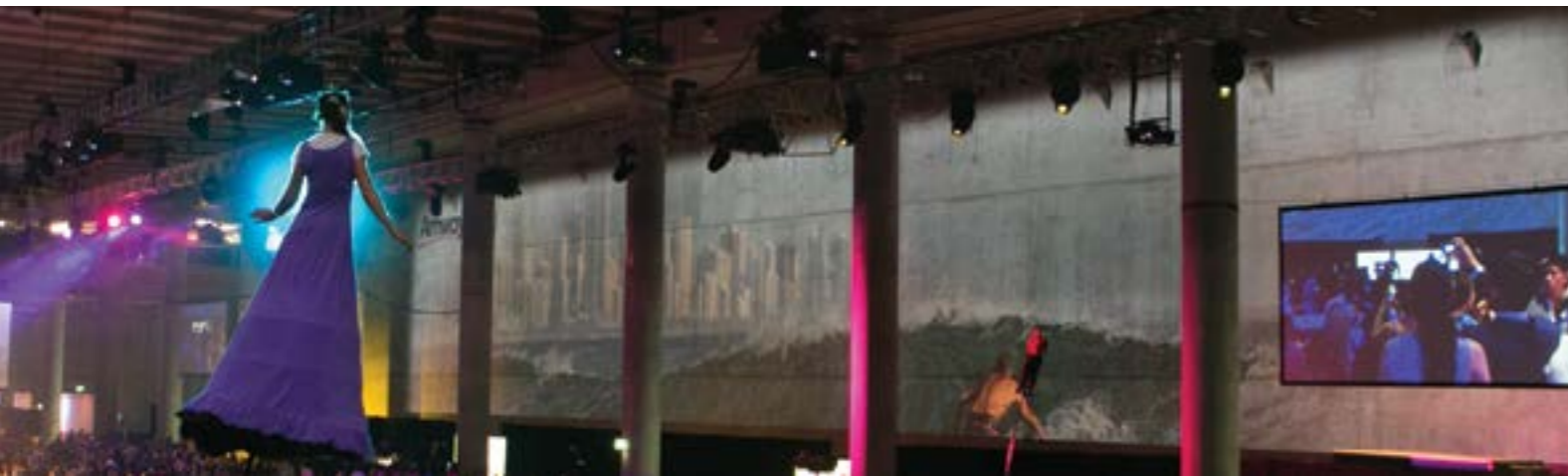
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THE MILL REPORT

By Andy Stewart

HALL REVERB - GOOD OR BAD?

Anyone got an abandoned community hall near them that's going to wrack and ruin? I've got a few. And I'm determined to give at least one of them a sonic facelift that just might bring it back to life.

Some people like small halls for their enormous unfettered reverb. They make everything sound enormous, even the clatter of the old ladies' knitting needles. But as anyone who's tried to play an amplified gig in a space like this knows, the sound of these small halls can get out of control very easily, and there's very little anyone can do about it once they're on stage.

I'm treading the boards in one such hall this Saturday night... but I have a cunning plan to fix it that's been in the pipeline for months.

In the last few weeks I've been flat out down here at The Mill, and yet I've hardly turned the studio on once. Maybe I've kicked the place into life half a dozen times or so, but that's a new record low for me.

THE REASON?

No, I'm not going broke or out of favour with my clients. I've just been giving The Mill a bit of a facelift-slash-overhaul, and jobs I thought might take a week have taken well over a month. And I'm not done yet. Not by a long shot.

I've been determined to finish off a few things around my studio that have badly needed attention; the entranceway and overdub booth primarily. Both were half-arsed constructions that I'd been apologising for for longer than I care to admit.

So now things are looking vastly improved, despite my shoestring budget and determination to try and build things out of 'found objects' - stuff around the place basically.

I'm one of those people who never misses an opportunity to grab things like double glazed glass panels or small quantities of wood off someone who's chucking stuff out. With several large sheds around me I have plenty of places in which to stack it all. I'm a magpie I guess, and make no apology for it. My wife describes the stacks as 'piles of junk'. Everyone perceives things differently, I guess.

MEANWHILE...

The other task I've been involved with in the last month - which is the main subject of this 'ere article - has been modifying the acoustics of a local country hall, with the aim of turning the place into a functioning, good sounding music venue. It's becoming quite a trend in regional areas across Australia, and indeed all over the world apparently. People are rediscovering hidden gems in their country towns; buildings that have been virtually abandoned by their communities either due to a lack of funds, or through bureaucratic stonewalling.

Hall committees are notorious too it seems for being comprised of people who don't know how to embrace change or harness youthful enthusiasm. As a consequence, many of the halls they claim to be 'preserving' have instead fallen into disrepair and irrelevance. But despite that, and quite suddenly it would seem, things are really starting to happen in these spaces all over the country. Isolated gigs and 'Small Hall' tours have been setup by various local and international acts, with bands often playing to packed houses of enthusiastic, music-deprived locals.

ARCHIE'S REBIRTH

Down at Archie's Creek near where I live, there's a similar story to tell. The local hall there has been sitting virtually closed for far, far longer than it should have - decades apparently. So long in fact that plenty of people aren't even aware the hall exists, despite the fact that it's one of the biggest buildings in the main street.

Recently a few local musos, including myself, put plans in place for a fundraiser for the hall, to help pull the building back from the brink, and inevitably this has been centred around a gig. But of course, there was no way I was going to get involved in playing a gig at Archie's Creek Hall without attempting a few crucial changes to the sound of the space beforehand. I just couldn't help myself. I figured if the place was going to try and market itself as a music venue, it would want to sound half decent from the get-go.

So quite apart from playing at the upcoming fundraiser, I've been developing plans for new acoustic treatments. Some of these are already up on the walls and sounding great. I've also built a new stage to replace the hopelessly inadequate one that was previously situated, somewhat bizarrely, right beside the main entrance and men's toilet.

To control the reverberation in the hall, which previously had major standing waves and an RT60 time of several seconds, we built 25 membrane absorbers that have been screwed directly to the rendered brick walls. Twenty-five

sheets of CSR Martini Absorb XHD50 (2400 x 1200 x 50mm) - a thermally bonded polyester fibre insulation panel that provides acoustic absorption across a broad range of frequencies - were purchased, along with timber and material to wrap it all in. The Martini Absorb XHD is a great product: non irritant (no glass here), easy to handle, and made up of around 80% recycled PET packaging such as empty drink bottles.

Handling a little like the old Tontine Acoustisorb 3, albeit slightly stiffer, Martini Absorb, like its name suggests, is highly effective at absorbing sound.

We hung the 50mm sheets of Absorb XHD inside 90mm timber frames, with the acoustic material at the front edge of the timber, leaving a 40mm air-gap between the Absorb and the wall. The sheets are only connected directly to the frame at the top edge with screws (the material doesn't disintegrate at all, making fixing it in place with screws or nails a cinch), leaving the material free to hang inside the box away from the wall, to maximise its acoustic performance.

The reverberation in the hall, which at a previous function had been so bad you couldn't hear the person next to you let alone the music, is now substantially controlled, more so even than I had predicted. It's been money very well spent, and now the space is primed and ready for amplified sound...

WELL ALMOST.

The remaining problem is that the building has a false ceiling, which has a tendency to ring at around 900Hz, mainly because the gabled roof hidden above it is enormous,

completely without thermal insulation, and comprised of corrugated iron. Sound finds its way into this cavernous space, and the cavity then acts like a giant reverb tank. You can hear it come back at you through cracks and gaps in the ceiling if you're standing at certain points around the hall. It's frustrating not to be able to quell this reverberant overtone easily, but that's a job for the future.

It's a massive task to remove the false ceiling in a space this big of course. It's in excess of 200 square metres and made of who knows what. If it were removed you'd then need to insulate the exposed gables for heat and sound, but ultimately that's the aim. The outcome would look incredible, but the reality is that it will take a serious community grant of some kind before any of this happens. Meanwhile, I'm sure I'll bodge something up to help tame it a little.

LIVE SOUND & HALL REVERB

I've been in quite a few of these small halls in recent years: playing gigs, watching gigs and recording albums. I worked on Paul Kelly's ←←Spring and Fall→→ album in one such hall (the location of which is a sworn secret). It was very similar to the one at Archie's Creek, in fact.

For recording, the extreme reverb time of this particular hall was a fantastic asset, and Paul loved singing in the, virtually empty space. His voice sounded amazing in there, and the captured performances on that album are really pretty special. (It was just a pity we had to survive almost

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Melbourne International Comedy Festival 2016

Live Production is No Laughing Matter

By Jason Allen

With hundreds of shows per night, the four week long Melbourne International Comedy Festival is a massive undertaking for the multitudes of tech staff working on the event. With 16 shows over the festival and up to nine in one night, The Athenaeum Theatre is working just as hard as any venue. Jason Allen spoke to technician Damian Clarkson about the frantic schedule, mad turnarounds and what it's like to hear the same joke dozens of times...

Damian Clarkson is operating sound and lights in Athenaeum One, the 1,000 capacity proscenium arch theatre the venue is best known for. Upstairs, Athenaeum Two has been converted from being the old Comedy Club into an updated performance space. Damian is in for the long haul, running all of the Festival shows, a job he first did last year. "I started at The Athenaeum at MIFC 2015," he said "I did the month and I've just stuck on. My background in production started in studio recording, but

I've gravitated towards live over the last five years. I find it a lot more interesting than the studio. I gets you out of the house, you meet a lot more people, and see a lot more venues. I find the work far more interesting. In some ways, it's a lot more stressful, but that's a good thing."

MICF thrives on low-budget, low-price events and the public loves it. You can see several shows a night all in close proximity, with venues like The Athenaeum, Melbourne Town Hall and ACMI running multiple rooms that host multiple shows. It's fast, anarchic, and a huge amount of fun. "It's been a really hectic two weeks, and we're just over halfway," agreed Damian. "Getting the old Comedy Club upstairs up to scratch was a lot of work. The first week there were a lot of tech rehearsals for different acts. They were long days, then we went into shows. We started with one show the first night and we've been adding as we go."



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It's Time TO PLAY THE MUSIC



This reporter visited The Athenaeum on a Sunday night to see 'Sammy J and Randy Land', a wild, theatrical performance from "everyone's favourite man/puppet musical comedy duo", as they describe themselves. On the back of years of gigging and their recent ABC TV series, the duo had pulled a full house; not bad for a Sunday night. The show relied heavily on snappy and sudden lighting changes, pre-recorded and live audio cues, songs, and carefully placed blackouts. It would have been a challenge for two operators with a stage manager, but Damian ran the show single-handedly.

"There's more than 60 lighting cues and more than 30 audio cues in under an hour," continued Damian. "It's taken a few shows to learn it properly. I'm following a script, but that is a limited help until you understand the context. There's always a bit of improvisation, so you have to know the line or visual that's the cue, and you're waiting for that. They usually come back to some set part of the script, and you go on that." Amazingly for such a complex show, but normal for MICF, there was no real tech or dress rehearsal. "We did a very quick cue-to-cue after we programmed the lighting desk," explained Damian.

"Then we had a show that night, which went surprisingly well, considering. I was pretty nervous, as it was a big crowd. I had no idea of the story line or anything. That's the Comedy Festival – it's so hectic and there's no time. It's probably harder for Sammy J and Randy as their show is quite complex. Now I've had five runs, it's great. Getting to know the show is fun, and coming from doing musicals, following a script is something I'm used to."

It's Time TO LIGHT THE LIGHTS



Of all the shows that Damian is operating, 'Sammy J and Randy Land' is the most complex. "A lot of the other shows are one person stand-up like Stephen K Amos and Dave Hughes. It's pretty relaxed and they're pretty straightforward. Friday and Saturday we have a show after Sammy J and Randy, Alex Williamson. It's not too complex, but it has a video screen, laptop and guitar. There are only 15 minutes to changeover between our shows.

The only way to deal with all these 15 min changeovers is to allow yourself plenty of time at the start of the night to make sure everything is ready to go. I reuse the same equipment and patches for efficiency. For example, Sammy J and Randy don't use handheld mics, but they're there for backup, so they become Alex's main mic and backup. I already have the power run for the laptop, and have its table side of stage. I just have everything for the whole night ready to move."

Lighting control is via the house's ETC Ion, with audio handled by their DiGiCo SD9. Damian keeps on top of all the cues and music for the show with QLab. "It's really easy to set up the DiGiCo to fire QLab," Damian illustrated. "QLab has saved my butt; what you can do with it is amazing. I use it for everything; all of the pre-show music, stings, for all the acts. I've also set up a couple of macros on the desk to help me. It really helps a lot having a digital desk that saves and recall settings. Every act sounds different and has its own attributes, so that saves a lot of headache, as does having 48 channels of input."



What's it like to deal with the Festival's relentless schedule? "I enjoy it, but it's tough," conceded Damian. "Last night was my 17th night in a row. It does get a bit old when you see the same comedian 14 times in a row. It's interesting in its own way because there is so much variety over a night and a week. I hadn't had that much to do with comedy before this. It's amazing how vastly different the acts can be and how they can control a crowd. Its great working at The Athenaeum and getting to see so many different shows. There's so much variety, from opera to comedy. Having come from doing pub bands, it's awesome to be able to do so much different stuff."



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FLINDERS UNIVERSITY HUB

BY JASON ALLEN

PHOTO CREDIT - LAUREN MCGRATH

& PLAZA INTERACTIVE, COLLABORATIVE, AND LIVE

For its 50th birthday, South Australia's Flinders University gave its students a present; a new \$63 million heart for their Bedford Park campus. With an emphasis on BYOD collaboration and multimedia, the new Hub building and 2,000 capacity Plaza amphitheatre are designed to increase the student's engagement with the campus, which it achieves with a mix of technology, hospitality and entertainment...

The Hub houses student services, a refurbished section of the central library, administration, hospitality, retail and multiple spaces for students to work together and access computers. With such a heavy emphasis on working together, the AV systems installed were going to have to accommodate a wide variety of users, use cases, and devices. Doni Bruno, Audio Visual Solutions Architect at Flinders University, worked on the project from the outset. "My role is looking after major teaching spaces, designing, consulting, and documenting standards," explained Doni "For the Hub and Plaza, we had to build a platform for AV. The AV side of the project was almost two years from the first concepts and budget figures. Flinders

University had a lot of involvement with students to determine what they needed. We then worked closely with the Universities Project Director and AV consultant on how to make it work."

John Dyson, Technical Director from Mott MacDonald undertook the Project Director role on the project. "The new facilities were designed from the outset to entice students to spend more time on campus and

OPEN DAY



PHOTO CREDIT - LAUREN MCGRATH

STUDENT BAR

engage in university life outside of classes. With a focus on interaction, engagement and services we continually came back to the guiding principles when scoping the new plaza and hub will be a vibrant place to learn, connect and play."

Roneel Singh, Associate Director, Technology Systems ANZ Discipline Lead at WSP Parsons Brinckerhoff, headed up the AV systems project from their side. "We worked through function and design," Roneel stated. "We went through each of the user's requirements and came back with what we thought was the right solution based on functionality and budget requirements. There are a lot of spaces in the Hub and Plaza that aren't run-of-the-mill, so we made function key. If anything changed during the project, we could say 'the aim of this space is to do XYZ', so if a change was needed, it was easy to point out what feature or functionality would be affected."



working THROUGH function and design

Bringing it Together

With standards already in place across the University's AV systems, certain brands and models needed to be incorporated into the design. "We use Crestron control and switching predominantly," Doni pointed out.

WORK SPACES



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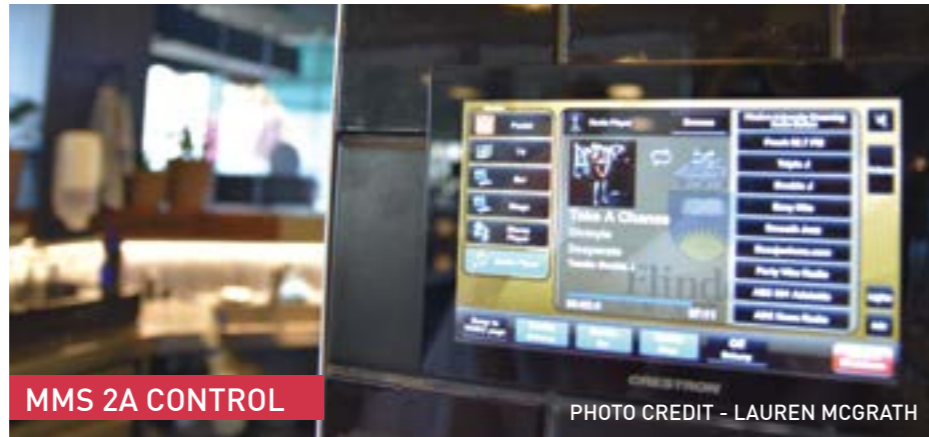
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COLLABORATIVE SPACE



MMS 2A CONTROL

PHOTO CREDIT - LAUREN MCGRATH

"We also use Extron for switching and video processing, and segregate for serviceability. Crestron has been incumbent nine years, and we were the first commercial fitout in South Australia. Extron has provided us with good service and reliability, and with the head office here in Adelaide, there's great technical skill available. If a switcher goes down, we can replace it within a few minutes. With major teaching spaces, we can't be down for an extended period, we've got to be back up quickly."

With requirements and objectives

in place, Roneel and the team completed the design for the public tender. "Our design was prescriptive to the last tee," he recalled, "though we did leave space to accommodate new products or project changes. Some of the newer product that went in to the Hub included larger Extron XTP CrossPoint frames for

video switching, Cisco web-based conferencing, and lots of BYOD and USB switching. The Plaza is a unique space and was treated as a separate project. For the Plaza, we consulted the tech, media and performance staff, as well as external production companies Novatech and Staging Connections, in order to determine what kind of connectivity, power supplies, and cable types were needed. It's designed to have three modes of operation, from automatic, to control position operation, to full production where everything is bypassed."



INSIDE THE HUB

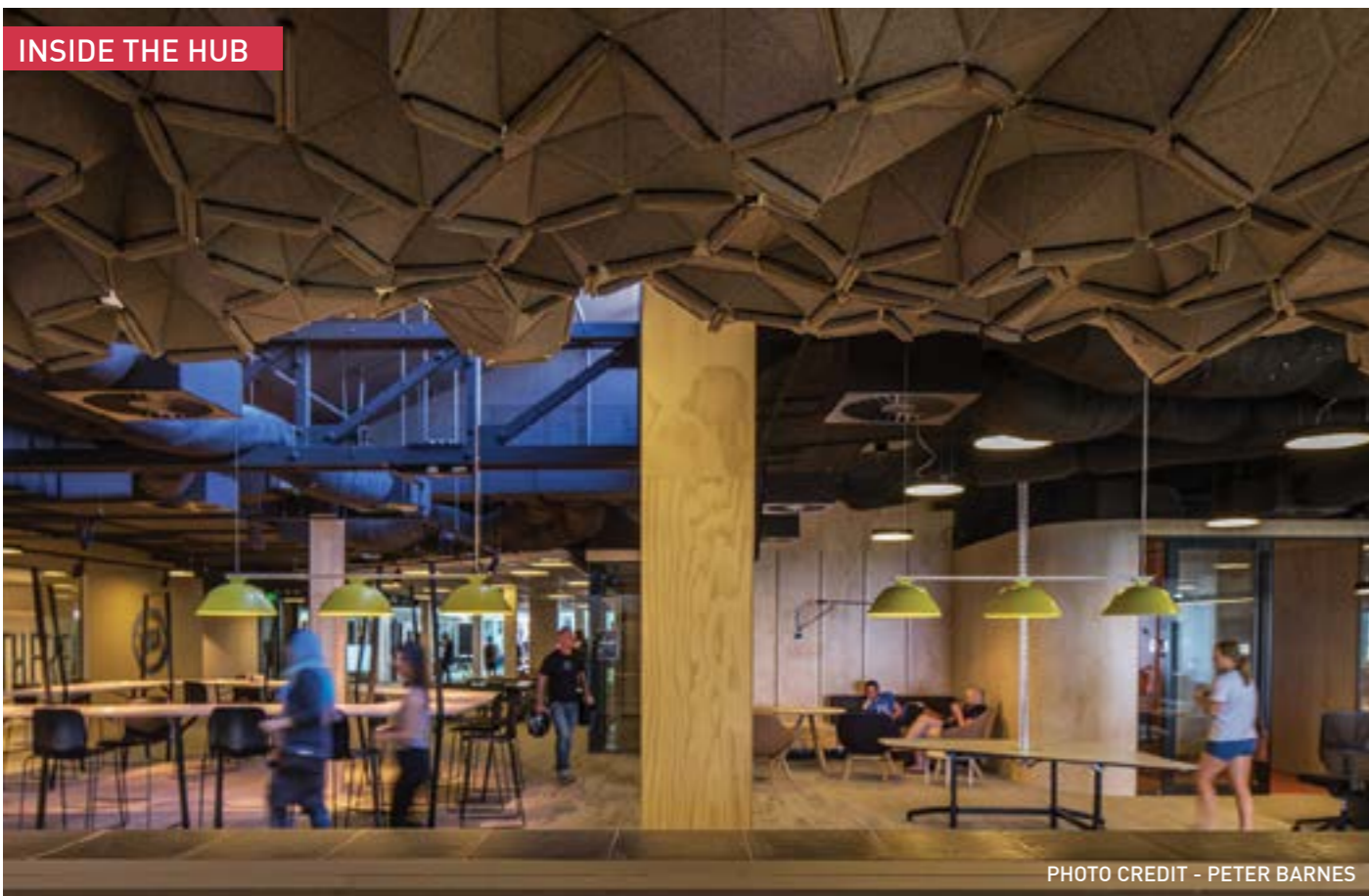


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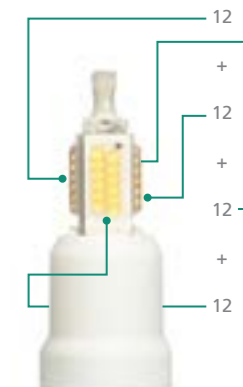
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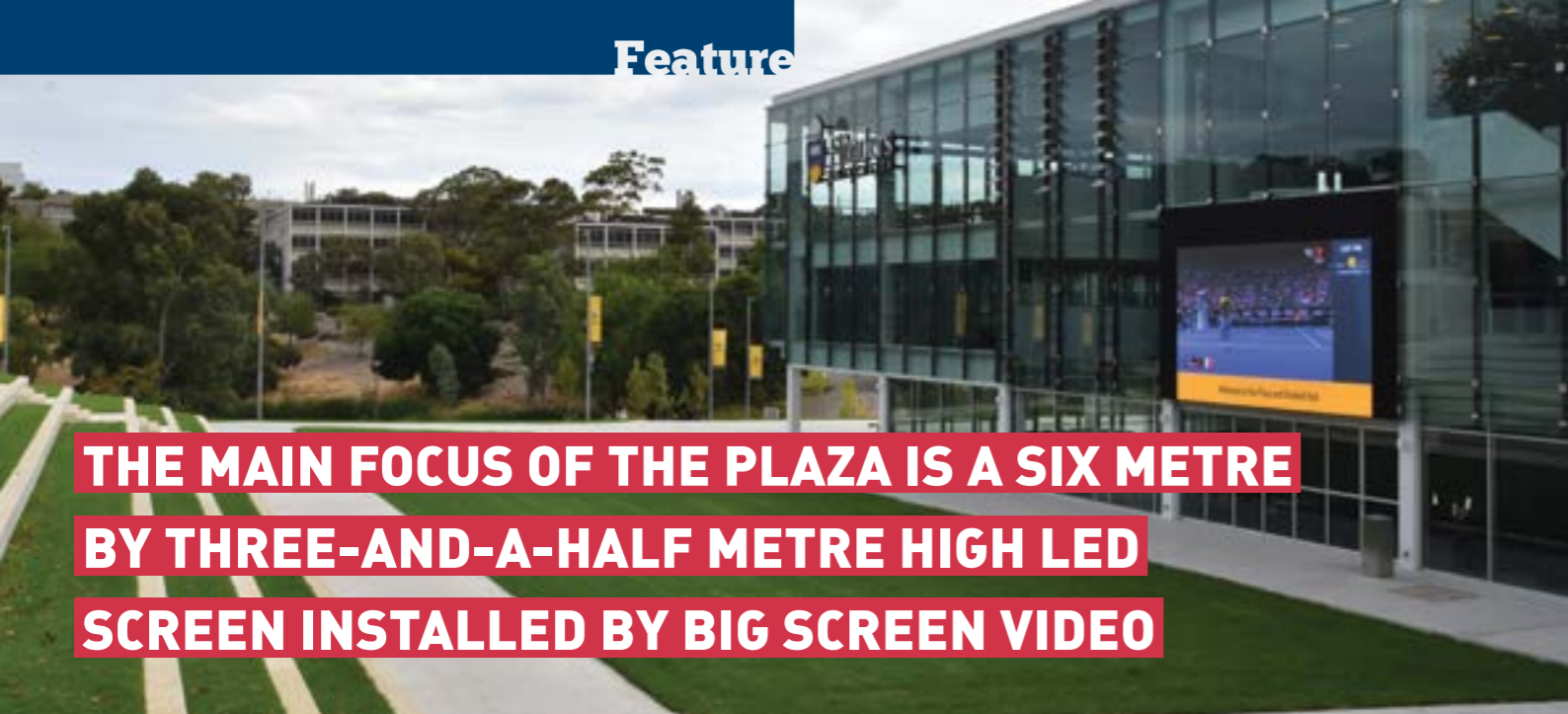


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THE MAIN FOCUS OF THE PLAZA IS A SIX METRE BY THREE-AND-A-HALF METRE HIGH LED SCREEN INSTALLED BY BIG SCREEN VIDEO

The Big Picture

The main focus of the Plaza is a six metre by three-and-a-half metre high LED screen installed by Big Screen Video. "We provided some pre-tender advice to the team led by Mott MacDonald in terms of what we thought would be the right thing to put in," said Brett Delaney, General Manager at Big Screen Video. "The key point was resolution; making sure the pixel pitch was right for the screen and there were enough vertical lines of resolution. Viewing distance was also a factor as it's a reasonably tight space compared to a footy field. We also had to look at viewing angles and brightness, which led us to recommend a SMD product as opposed to DIP. Our recommendation was a full outdoor, 6.25mm pixel pitch SMD product at 5,500 nits brightness or more, which, after we won the tender, is what we installed. It's a 15.42:9 aspect ratio, 960 pixels x 560 pixels, 12 panels wide by seven panels high, with each panel 500mm by 500mm. We consulted with builder Lendlease and SA Structural, who built the frame. The University were fastidious about the screen sitting flush with glass work, and we're happy to say that the final install is seamless; it looks like it grew there!"

As the main contractor for the Plaza, Big Screen Video subcontracted local installer AV Integration to handle the audio system, control

and cabling infrastructure. "The big issue with the choice of PA was space," said Mike Rodda, Director at AV Integration. "The Nexo GEO M6 was one of the only products on the market that could fit next to the screen and still hit the performance specification. It's nine elements a side supplemented by four 15" subs, powered by Nexo NX amps and it sounds great. We also fitted out a control room in another building on the other side of the Plaza with a PTZ camera installed to monitor the stage. When external production comes in, they can connect to the system from two bollards in the Plaza. They've got lockable stainless steel cabinets that house custom-fabricated wall plates. Audio and video come to the control room then to FOH, with audio distributed via Dante. There's foldback points on stage

plus a mobile foldback rack, as well as a digital mixer and digital vision switcher. We used Crestron control via iPad, with different levels of control available on different iPads."

Connecting in the Hub

Inside the Hub, Programmed Electrical Technologies were contracted for the AV fitout. "We worked on all of the meeting rooms, the function space, multimedia room, student bar, restaurants, and the digital signage," said Andy Harris, Senior Project Manager at PET. "There's some really interesting tech in there, including a 98" NEC interactive screen and 7.2 surround sound system in the multimedia room. There are around 10 different types of system using similar, but not identical,



JOHN DYSON



KEY POINT
- resolution -



RONEEL SINGH



MIKE RODDA



ANDY HARRIS



BRETT DELANEY



DONI BRUNO

equipment across the spaces. These include University standards like Crestron and Extron, BiAmp Tesira, and Shure ULX-D radio mics. The Multimedia room has a Denon Pro AVR-X7200A 4K Ultra HD 9.2 Channel integrated network AV receiver, which is domestic, but one of only units on market that will do true 4K."

"One of the other more interesting devices were the media players that went into the restaurant and student bar," continued Andy. "They're Autonomic Controls MMS-2A Mirage Media Servers. WSP found them, and they're in the original spec. The GUI streams audio from web, and a variety of other media. They're pretty involved in terms of what they can do. You can programme in your own streaming stations from a touch panel. In the restaurant and bar there's a variety

of screens, projectors and four audio zones, so audio doesn't always follow video in that space. One of the great things about the MMS-2A is that there was an extensive Crestron module written by the manufacturer already."

Plugged-In Students

With the ultimate aim of the Hub and Plaza being greater student engagement and presence on campus, how has the project measured up? "In three years, I've never seen so many students on campus," reported Doni Bruno "The collaboration and work spaces are always at 90% capacity. We were here on Easter Thursday at 6 PM and there was still 70% utilisation, which is great for a long weekend. There's been exceptional uptake."

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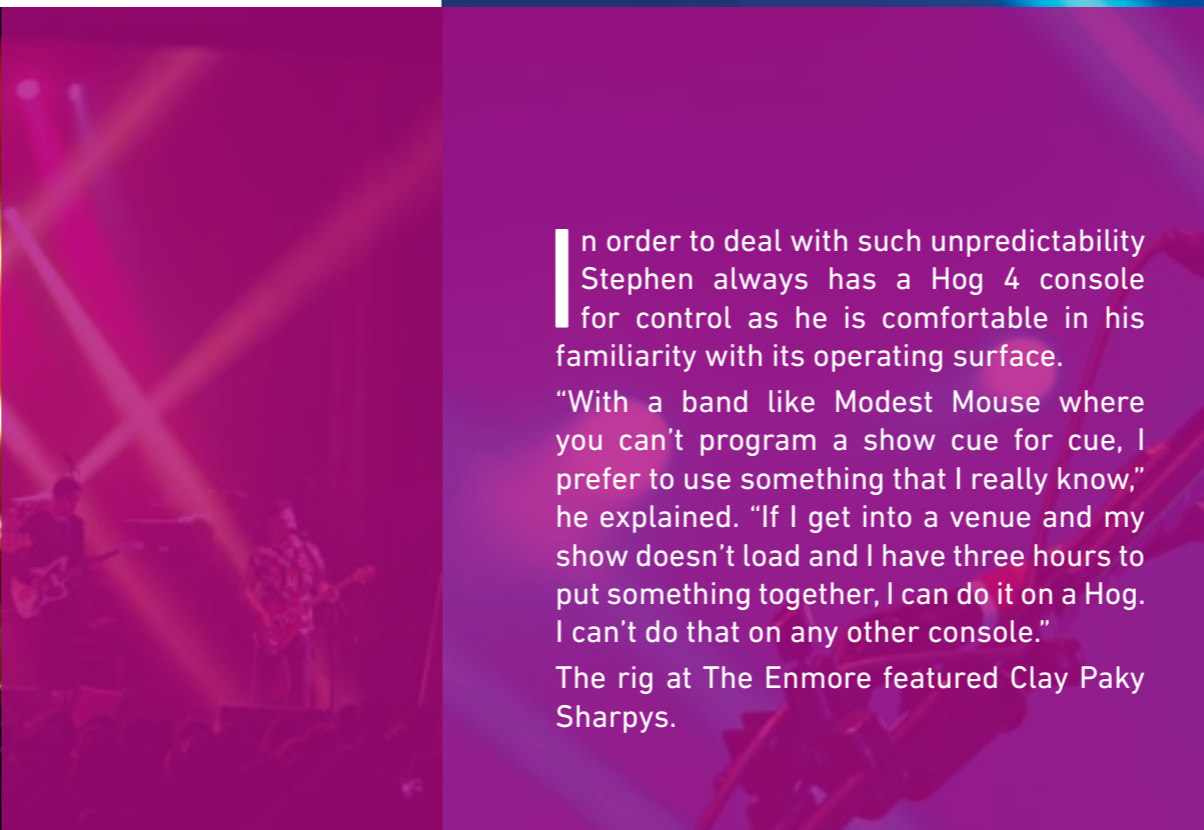
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In order to deal with such unpredictability Stephen always has a Hog 4 console for control as he is comfortable in his familiarity with its operating surface.

"With a band like Modest Mouse where you can't program a show cue for cue, I prefer to use something that I really know," he explained. "If I get into a venue and my show doesn't load and I have three hours to put something together, I can do it on a Hog. I can't do that on any other console."

The rig at The Enmore featured Clay Paky Sharpys.

Modest Mouse

By Cat Strom

American indie act Modest Mouse played Sydney's Enmore Theatre as a side show to their Bluesfest appearance. Stephen Yates has been their lighting designer, programmer, and operator for nine years and is basically an official one man lighting crew on the road. "The whole Modest Mouse camp is very DIY," he said. "I also worked for City and Color but had to give them up as the tours clashed. However, the older I get, the less I want to be on the road!!"

The Australian sojourn was fairly cruisy with only four shows in two weeks. Stephen remarked that Bluesfest was fantastic and really well run.

"We ended the tour there and certainly went out on a high note," he added. "We didn't ship over any gear or lighting this time, renting locally from Chameleon. The show at The Enmore was a partial design of what I tour with when we can bring our own gear out. In Australia, I just went with what was available."

The stage is very busy with ten musicians and when it goes off the rails, it goes off hard according to Stephen. "However when everything is going well it's really on," he said. "You never know what you're going to get thrown at you with this band. It's a different set list every single night. Not once in their career have they played the same set list two nights in a row. Half the time you get a set list before the show and you throw it away because they don't stick to it anyway. It keeps you on your toes but luckily, as I've worked for them for so long, I can usually tell what they're about to do. I can tell which song is coming up by which guitar Isaac is picking up or which position a band member may be in. Having said that, occasionally they throw a curve ball at you and it can throw your entire night off!"



We ended the tour there and certainly went out on a high note



Modest Mouse's music is best described as all over the place.

"They're bight and fast, and if this was 1993 and I was back doing raves, I would have loved the Sharpys. For live rock'n'roll it's a one trick pony. Usually I use the Robe Pointes which are great and my all-time favourite fixture.

When I found out I had Sharpys instead of Pointes, I didn't kick up a fuss I just made it work. Light the band up and hit the hits. It's all very well having the right tools but if you don't have them, you just make do."

Also in the rig were Martin MAC700 Washes and MAC Auras, the latter being a fixture that Stephen is crazy about. He cites the super-tight to super-wide zoom as a favourite feature as well as how light and easy they are to rig, an important factor as Stephen is usually looking after all things lighting by himself.

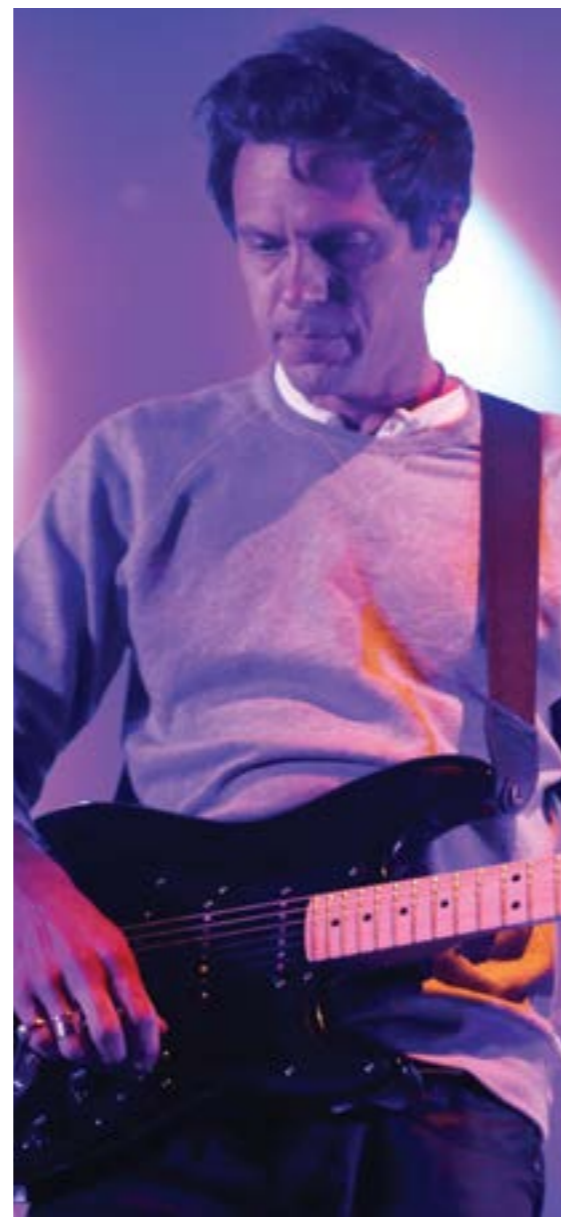
"I like the Aura effect too, but I've noticed they're already beginning to be outdated," he said. "It happens

so fast now. I'm already seeing fixtures that supersede them and for our next US tour I am going to be using MAC Quantums."

Modest Mouse's music is best described as all over the place and a lighting designer may be tempted to try keep up with it but according to Stephen, it's best to hold back.

"I keep it simple and bold," he revealed. "I don't use a shit load of colours, in fact I don't want to see any more than three colours onstage tops and neither does Isaac, the lead guy. I try to get it a bit trippy and psychedelic without being too overpowering. The music itself carries the band and they could do it without me although I like to think that I add something to it!"

Photos by David Youdell



I keep it simple and bold

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A consummate performer

BRYAN ADAMS

BY CAT STROM

Is touring somewhere in the world over 100 days of every year. Generally the pattern is two weeks on, two weeks off and has been for many years. Canada's most successful singer ever has been making musical history for more than three decades and has gathered more than 65 million album sales, 21 top ten hits and seven number one singles, topping the charts in more than 40 countries around the world in the process.

In March he arrived in Australia with his GET UP Tour and in addition to arena performances, Bryan also played a series of *A Day on the Green* events with special guests Baby Animals and The Superjesus. This GET UP Tour only started in January and includes a few new songs from his latest album. Generally the tours get redesigned and renamed every eighteen months to two years.

Bryan's lighting has been designed for many years by the lauded Willie Williams (of U2 fame) and on the GET UP Tour it's quite pared back, letting the video and of course, the artist shine.

"It's all about Bryan and less about me," said Ewan McRobb, lighting director and operator for the tour. "Some lighting designers make a show more about what they can do but this is all about Bryan."

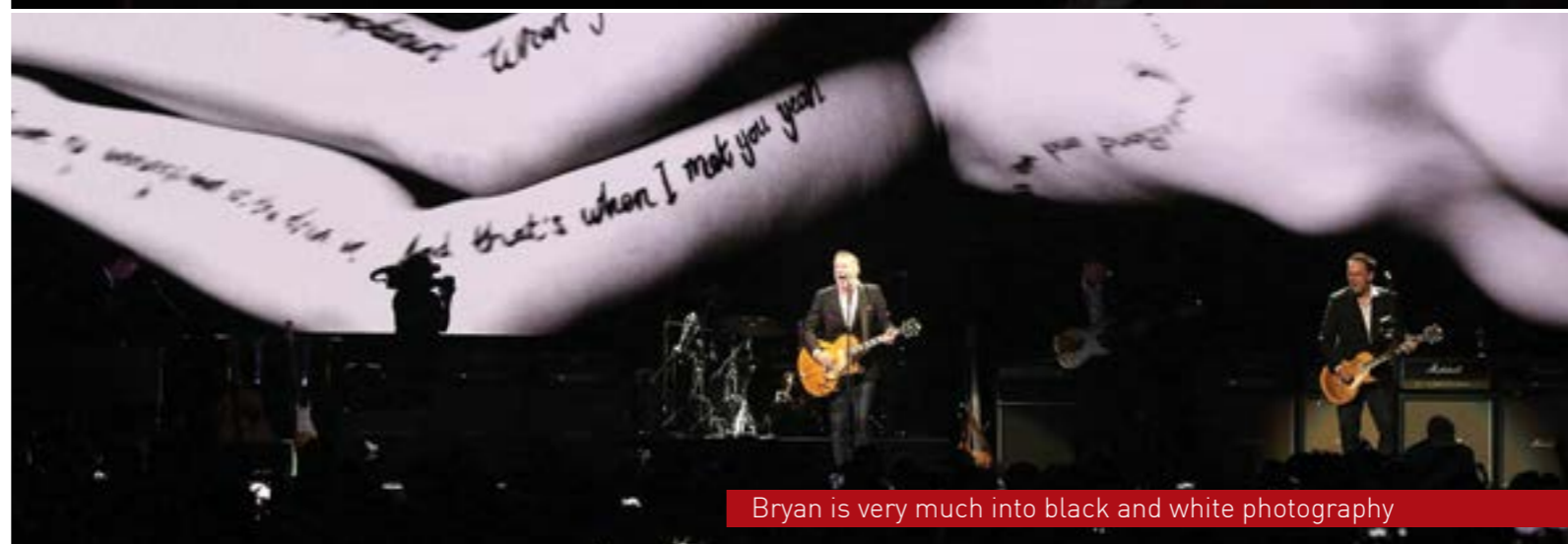
Bryan favours a large screen upstage providing much of the material himself as he is an avid photographer and film maker.

"Bryan is very much into black and white photography which relates more and more into the lighting as well," added Ewan. "In fact his last tour, which was celebrating the 30th anniversary of the *Reckless* album, was designed specifically black and white for the first half of the show moving slowly into colour after that."

Willie's design for this tour features the essentials such as big blinder looks, but is not all about effects and being flashy. It's all about Bryan and his music, and the lighting does not overpower that.

"It's nice to get the big looks in here and there but it's more about the music," confirmed Ewan. "The screen is a bit smaller than usual over here although I'm not sure why."

Lighting fixtures were mostly PRG BestBoys with GLP Volkslicht and Clay Paky Sharpy Washes replacing



“The strobes are old school Martin Atomics with scrollers as Willie is a big fan of Xenon and the look is pretty powerful”

the Martin MAC Auras they usually have in the rig. Blinders and strobes were in fair abundance.

"The strobes are old school Martin Atomics with scrollers as Willie is a big fan of Xenon and the look is pretty powerful," said Ewan. "We have been asked to try move into this century but it is a different look not easily recreated by LEDs. Unfortunately the Atomics don't always look the same every day so we have to keep working on them as they are quite an old fixture now."

The air conditioning at Allphones arena was super efficient resulting in a lack of haze for beam effects.

For control Ewan used a MA Lighting MA2 console which he describes as rock solid.

"You know it will always work and that you can get it anywhere in the world. I switched to MA from a Chamsys which I really liked to program and they had some very good ideas,



sometimes I wish that MA could have a look into some of them. However the MA2 does some amazing things especially the ability to update on the fly mid show, so much better than other consoles out there."

Jody Perpick has been Bryan's FOH guy for thirty-two years and once worked for Crowded House. In the song Summer of '69, which has become one of Bryan Adams' most famous songs, the lyric "Jimmy quit, Jody got married" directly refers to Perpick. On tour as PA System Tech is Jody's son Cole, who Jody refers to as his babysitter. The PA was supplied by Eighth Day Sound, a company that Cole likes to deal with.

"They have offices all over the world and do a really great job at making sure the gear all gets sent out exactly the same wherever it's needed," he said. "We knew that in Australia everything would be put together the same way, the amplifiers would be configured the same way and we'd have really good consistency."

At the Sydney Allphones gig the PA was a d&b J-Series system comprising of 18 J boxes for the main hang, 6 J-Subs flown per side, 12 J boxes for side hang and for a sub array on the ground there were three B22 subs, d&b's newly released sub, per side.



"We set up the B22 subs as a left / right based on the way the staging was made at Allphones," commented Cole. "The way that a sub array normally would work would be to space them out evenly across the front of the stage which is what we did for the outdoor shows. We got a little bit more creative where you can fill in the holes and it's more evenly distributed. The older way of setting up subs was just a left / right set up like the way speakers are flown but you end up with fingers that you walk through where you have a buildup of low end energy. Then you walk out of it and it seems like there's no low energy because they are cancelling each other out. If you change where you place the subs across the front of the stage instead of just left and right, you end up with a smoother dispersion pattern. We didn't get to do a full sub array in Sydney due to the stage so we used a bit of time delay on the subs to fix that and ended up with a good result."

Jody mixes on a compact Avid VENUE S3L system which he has used ever since it was released on

the market, in fact he was the first tour FOH person to do so.

"Jody likes that it's really compact although some people are skeptical about the size of it," remarked Cole. "Once you figure out how to move around on it, it has really good work flow and sounds really nice. He uses a Dolby Lake Processor and we do all of our main EQ from that. There's not too much going on out at FOH. The only plugins used are those that come standard with the Avid console - standard reverbs, compressors and such."

Rob Nevalainen has been Bryan Adams' monitor man for seventeen years, forming quite a partnership with Jody Perpick. He's also the founder of British Columbia-based Gearforce, one of Canada's premier rental and audio production companies.

Rob mixed on the new Avid VENUE S6L having been part of the development team for the past five years. Released last December, the console boasts unprecedented processing capabilities with over 300 processing channels.



Jody Perpick and Cole Perpick



Ewan McRobb

Avid VENUE S6L
-over 300 processing channels-

Photos by Troy Constable

"It's a fantastic sounding console," commented Rob. "I've had a lot of input into the user interface and it's really intuitive. It's the most powerful live production console available today. It has really high channel counts running at 96K and you can use up to 200 plugins on it."

With Bryan, Rob doesn't use many plugins, just McDSP and a few of the stock Avid plugins. Rob states that the reason he doesn't use many plugins is that the console sounds extremely good and he doesn't feel he needs to do much processing outside of what comes built in to the channel processing.

Rob describes mixing for Bryan as spontaneous as his shows are organic and not very preplanned.

"Things can happen at any given time so you have to be very aware of what's going on," he added. "It's a very live show in that way, it's not a canned show or cue to cue for audio. Its five guys onstage and basically anything can happen at any time."

Everyone on stage was using Shure PSM 1000 IEM's with Westone ES2 custom-fit, dual-driver, stereo in-ear monitors.

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IT'S ALL ABOUT APPROACHING THE SONGS AS A SONG

"It's all about approaching the songs as a song," Joseph explained. "The tempo of the song is important and trying to get enough space with all these instruments. There are songs at the start that are straight up guitar

Joseph Pearce and Craig Gordon from JPJ

and bass and that's great. Then there are others that also have horn sections and keys and many different styles of drumming and it's a challenge to have it all come out of the PA so it's not a wall of sound."

Everyone onstage uses Sennheiser 2000 IEM systems with a drum sub added for the drummer and a few wedges for the horn players.

"As for microphones, they're pretty standard - we have most of the brands that start with the letter 'S'!" Joseph remarked. "As soon as you go into less than common gear, I get alarm bells going off in my head. With the 'S' microphones you know what they are going to sound like and that they are unlikely to break. We do have



Photos by Bronwen Capel

some ribbon Royers on the guitar amps, which is not common but is something we've always done and those mics do sound better than the Shure 57's for certain tones.

"Every show is recorded with a DiGiGrid DLI which is pretty convenient as it means I can listen to Tom's vocal in the room and he doesn't have to sound check. Although the band do sound check it's not an exhaustive one, so having the recordings is really handy to listen and check the balance levels."

After the Australian tour, the show travels to Asia and then Europe.



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Line arrays deal with the problem of combining multiple speaker elements by sending a very narrow wedge of high frequency from each box with minimal overlap. We learned back in the 1980's that overlapping high frequency horns creates lobes and lumps. Until the line array in 2000, we put up with this, reasoning that different sound in every seat in the house was just the price of progress. Having a cluster of speaker boxes, each loaded with a high frequency horn throwing 90 degrees wide and 40 degrees high meant painting a mosaic of overlapping highs. It was an invisible acoustic chaotic mess.

Since then designers have managed to get some line array designs (not all) offering up sensational pattern control and uniformity. But the single best way to deliver sound is point source, where there is just one source - not many. Even better would be a co-axial speaker where the high frequency horn is nested in the middle of the woofer. Tannoy excel at this. Enter the HK Audio Linerar 5 line, said to be the loudest speaker in its class. We can't verify that part, except to say they do indeed go loud. But what they do best is throw high frequency further, using a

unique waveguide horn assembly (called a Multicell Transformer) that has different lengths.

Why is this, you ask? Because it has a 'stacked' pattern, where it does a neat 60 degree wide throw but the top angle is just 5 degrees above the centreline, and the bottom 25 under. This also results in the centre of the throw being 3 degrees below horizontal.

Specifically you want all the high frequency to spray your audience and avoid shooting over their heads to reflect off the back wall. Traditional high frequency horns in point source boxes usually have a fixed pattern like 90 x 45 degrees, or 60 x 30 degrees.

We heard these on ENTECH Roadshow in February and scheduled a follow up in our studio here at Chatswood. The cases arrived and we set the system up.

The LTSA weighs just under 25kg which is remarkable given it is a birch ply box that comes with amplification and processing out the back. It's a 680mm tall trapezoidal box with a pole hole down below and provision for accessory rigging mountings.

The control panel has a simple rotary switch for modes - no screen to read. You tell the processor if you're using single cluster, head stack or head stack / cluster combinations. This shows that the system can be expanded to four top boxes per side, with corresponding numbers of subs to fill out the bottom end.

The spec says the LTSA delivers 115Hz to 14kHz at minus 3dB, which is probably honest. The minus 10 spec is 110Hz to 20kHz. It does this with three eight inch drivers, and one compression driver behind that amazing Multicell thing.

The amplifier delivers 650 watts to the woofers and 350 watts to the horn.

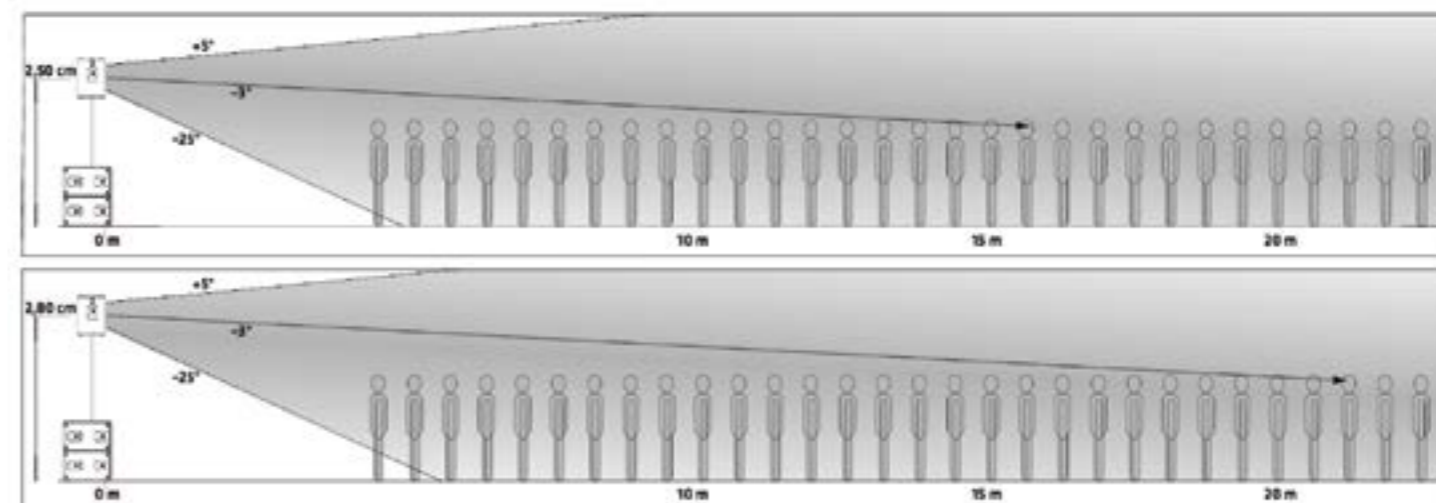
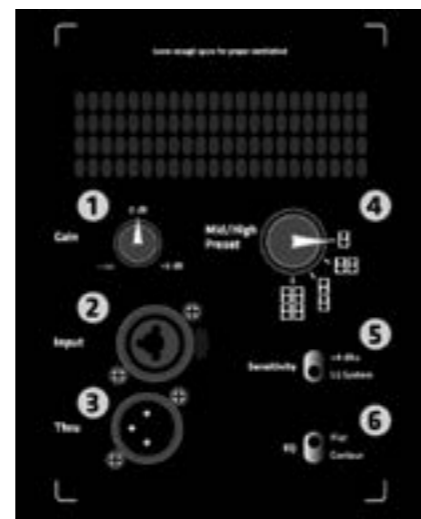
Down below, the 4000A sub does the business with a bandpass loaded 18" driver. It weighs 59kg and the internal amp does 1,200 watts.

In summary this is a niche product for a specific sized venue where a line array is not desired or required. It goes loud, and it is simple to configure.

We like that!



Manufacturer: HK Audio
Product: Linear 5 LTSA and Sub 4000A
Web: www.hkaudio.com
Distributor: www.cmi.com.au
Street Price: Top box \$2,900, Sub \$4,200



ROBE VIVA

EASY GOING

By Jimmy Den-Ouden

Viva is a little different from what I've come to expect from Robe. Whereas recent releases such as BMFL and Pointe have been jam packed with features, Viva demonstrates a more simple approach to things.

The fixture employs a 270W white LED source, with a rated life expectancy of 20,000 hours. That's about 3.14 years of continuous use, or 9.42 years assuming 8 hours use per day, every day. This is considerably lower than the 50,000 hour average we've come to regard as typical, but with the LED product life cycle as short as it is; chances are many LED fixtures will be replaced before their rated lifespan elapses. So as far as Viva goes, I'm okay with the 20,000 hour life.

Keeping to the short-form theme, there's no CMY colour

system inside Viva, instead colour is provided by dual 6 position (plus open) dichroic colour wheels. The first wheel includes saturated colours while the second uses replaceable "Slot&Lock" filters, supplied in various pastels as default. The wheels are both indexable so allow for split colour beams, and continuous rotation is also provided. Similarly the three facet prism allows for continuous rotation in either direction as well as static operation.

The Viva includes two gobo wheels. The first of these is a 7 position rotating

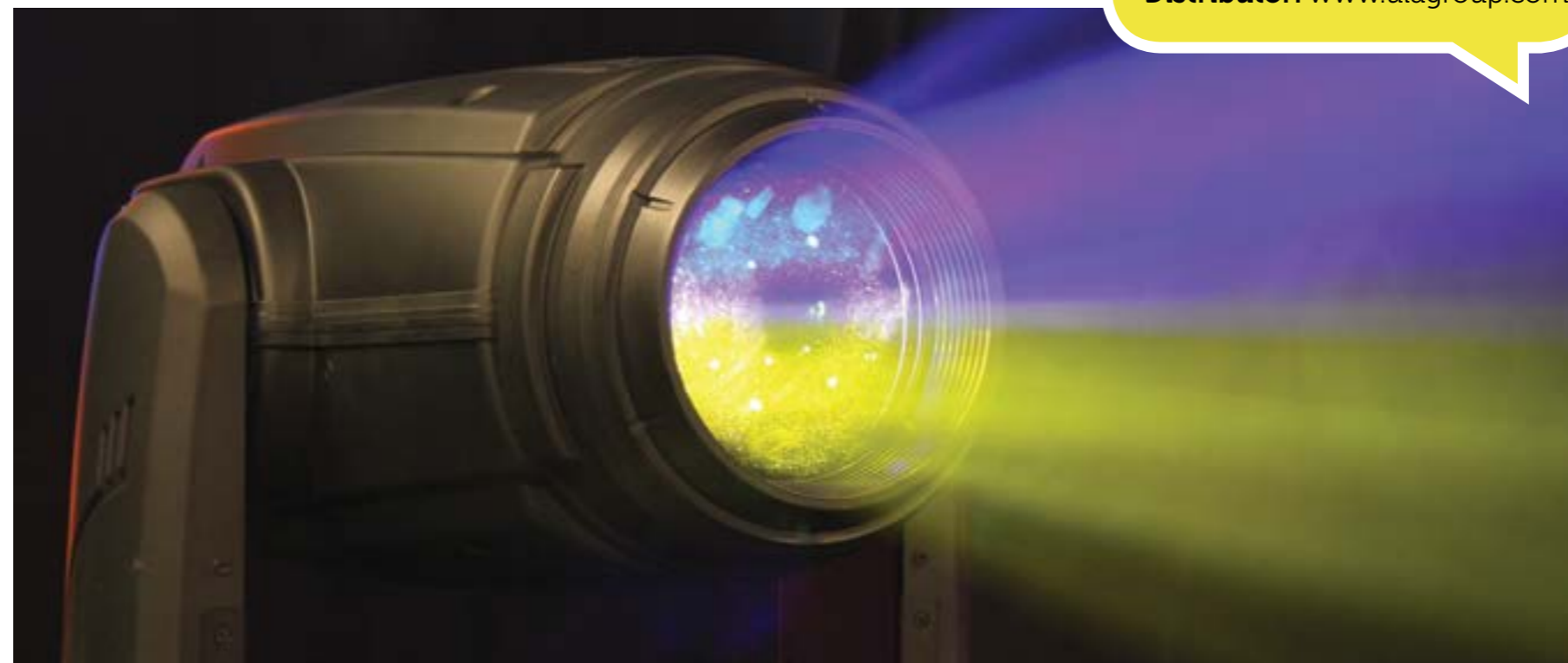
wheel using replaceable "Slot&Lock" glass gobos. Both the wheel and individual gobos can be rotated and indexed. The second is a stamped wheel with 9 positions plus open. The stamped wheel seems to be becoming more popular, with the obvious advantage that gobos on these wheels will always match up from fixture to fixture.

Additional beam effects include motorised zoom and focus, as well as 20 degree variable frost, shutter and an iris supporting pulse effects at up to 3Hz. Pan and tilt ranges are typical at 540 and 270 degrees respectively. Lock to lock pan takes a little over two seconds, while full range tilt happens in a shade over one second. A slightly surprising inclusion was the

An RNS2 touch screen provides easy control and setup of the fixture, and with a built-in standalone operation mode, you can even use the Viva without a console connected.

Robe EMS motion stabilizer system, a feature we've only previously seen at the top end of the Robe product spectrum. 16 bit control options are available for all parameters except frost, and the Viva uses either 30 or 23 DMX control channels.


Finally full connectivity options are provided with 3 and 5 pin XLR for DMX, plus Ethernet port for Art-Net, MA Net, MA Net 2, and sACN, as well as optional Wireless CRMX.



Brand: Robe
Model: Viva
RRP: \$9990.00 inc GST.
Product Info: www.robe.cz
Distributor: www.ulagroup.com

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SHURE KSM8

Dualdyne dynamic

By Jimmy Den-Ouden

It's pretty well impossible to ignore the impact the Shure company has had on the landscape of microphones worldwide. The SM58 is undoubtedly one of the most recognizable tools of the audio trade, widely known for its predictable performance, astounding robustness and affordable price. But like every other dynamic mic out there, the SM58 is susceptible to proximity effect. This commonly manifests as an increase in low frequency occurring as the mic gets closer to the sound source. Many mics use a presence boost in the upper mid region (4-5kHz) to compensate for the increase in low end.

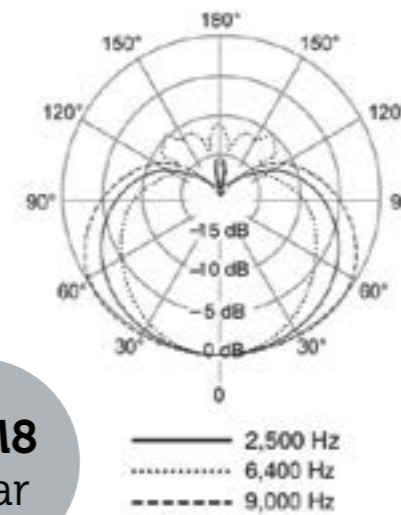
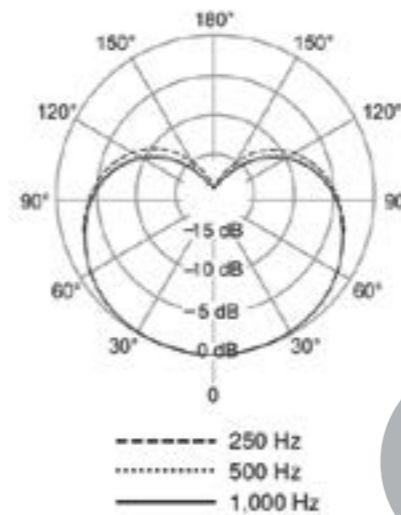
Proximity effect can be a real pain some days, especially when vocalists work further off mic than we'd like them to. In such instances, proximity effect causes an undesirable "thinning" of the sound. If your vocalist works at a consistent distance from the mic you can compensate with mic choice or EQ, but reality is most singers move on and off mic. This is where the KSM8 comes into play.

The KSM8 is a dual diaphragm dynamic microphone. The manual explains it like this: "The KSM8 Dualdyne™ Cartridge utilizes a reversed side entry airflow system. Sound enters the microphone via the side entry inlets and passes through the rear second diaphragm before striking the front diaphragm. By using the second diaphragm in the resistance network low frequencies are partially blocked from entering the cartridge resulting in a natural, low-end response with controlled proximity

effect and no loss in clarity."

It might sound a little bit like marketing speak, but if you know a bit about the physics of how mics work, then you'll probably understand that it actually makes very good sense. In a nutshell, the KSM8 is designed to provide consistent frequency response across varied distance. Because it doesn't need to compensate for proximity effect, high frequency response is quite neutral. These factors combined mean the mic works just as well 6 inches from the singer as right in front of them. At least this is the theory.

Since I'm a fan of physics and the KSM8 uses some wonderful physics, I had to try it out. I did an AB comparison between the KSM8 and an SM58, and indeed it works exactly as explained above. Because the HF response is quite flat, the KSM8 sounds detailed without being over-hyped. It just sounds natural, and it remains so across varied distance.



KSM8 Polar

So what's the downside?

Yes there is a change in level, but the tonality remains consistent.

I figured it would be pattern control, and more specifically off-axis rejection. What the mic picks up from behind itself largely defines how well it will work with monitors, and how much gain before feedback is achievable. The KSM8 rather shines in this regard. If you thought a 58 was pretty workable, compare the off-axis response with the KSM8 and it's virtually complete rear "null".

No, for me the problem with the KSM8 certainly isn't pattern control. It's handling noise, which I put on par with the SM58. This



is by no means unreasonable, and it's certainly lower than many other mics exhibit. It's just higher than I expected it to be for a mic in this price bracket. Perhaps it's a function of the dual diaphragm, after all the laws of physics are pretty immutable and every advantage comes at a cost of some kind. I like what the KSM8 does well enough to ignore this one tiny imperfection.

Looks wise, the styling is very retro even before you take the mic out of its included hard case. The KSM8 is available in black, or a brushed nickel finish in case you want the mic to make a statement before you even approach it. Construction is typical of Shure and feels absolutely bulletproof. I like it a lot.

Brand: Shure
Model: KSM8
RRP: \$949.00 inc GST
Product Info: www.shure.com
Distributor: www.jands.com.au

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LUXUL WIRELESS CONTROLLER SYSTEM

AC1900 Dual Band wifi

By Julius Grafton

More than ever we need to find wireless distribution solutions for our data networks, as the AV department and the IT department merge into that one big world of Information Communication Technology (ICT).

We had a look at Luxul's 'out of the box' solution kit, the AC1900, which would work great for high end residential and smaller commercial spaces - like a lot of AV venues. Rather than a Frankenstein rig of bits, this one is off the shelf.

You get one XWC-1000 wireless controller, two extremely powerful XAP-1510 access points, and two power-over-ethernet injectors.

To set it all up you jump into the wizard, type in the auto default address and get going. We configured it off a Mac, inside of ten minutes.

This is handy: you can set up two networks, one a private network with secure password, and one guest network. It operates at either 2.4 GHz or 5GHz, and with up to 16 access points for light commercial installations.

While Luxul have online tutorials and good

documentation, you need to be better than me to configure this rig. My colleague Jason Allen did it for me, he has better than average networking knowledge having done various courses.

The access points are low profile white plastic boxes and at first glance don't have indicator lights - but there are three (green for power, and a blue for each band of 2.4 GHz and 5GHz) hidden under the skin and once powered they are obvious.

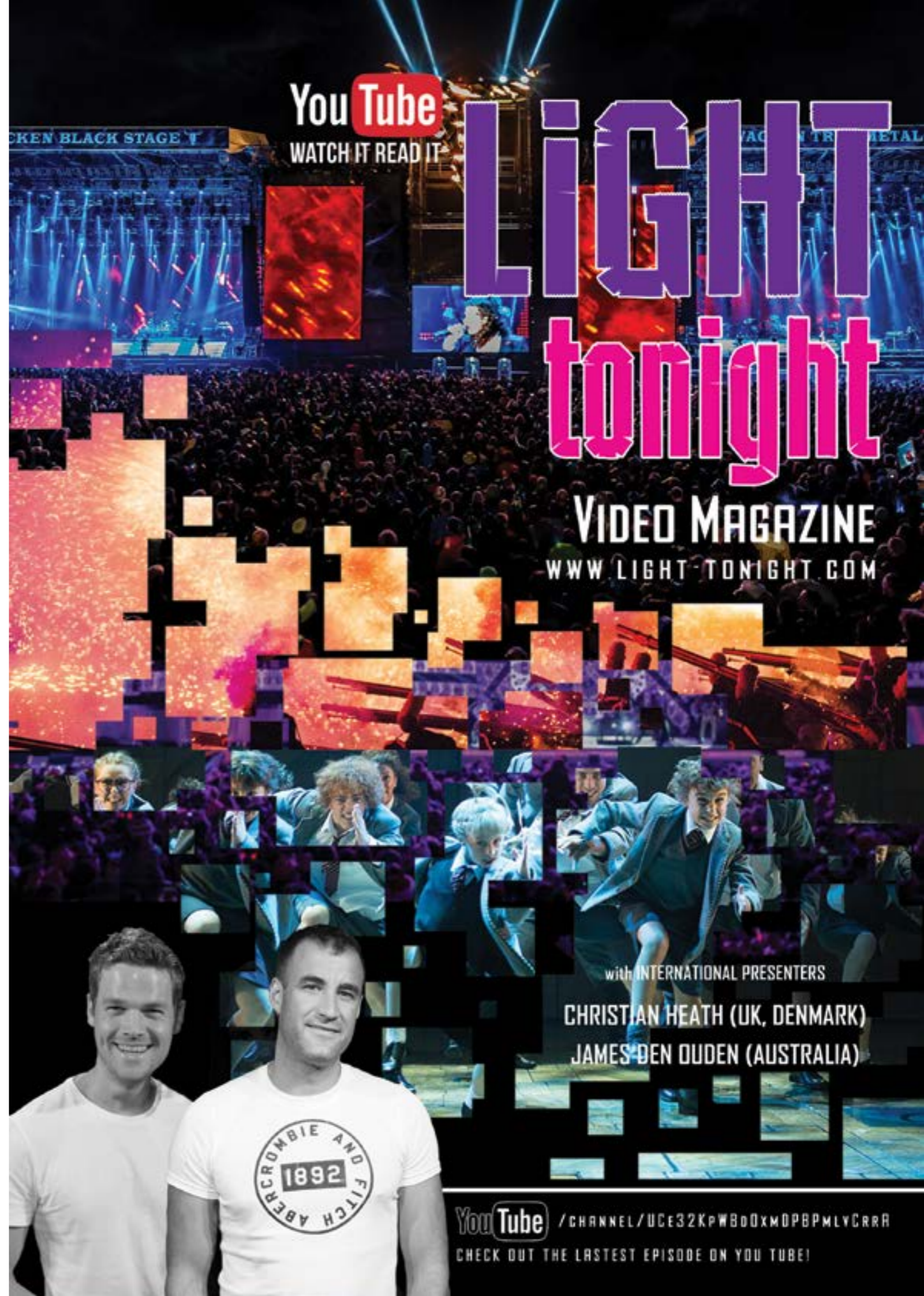
Unobtrusive access points like these are preferred, we've seen some clunky looking units in all kinds of buildings.

Luxul's hardware is commercial grade and made to last.

Before you finalise the positions for the access points you'd do well to test for coverage, so that roaming clients can always see signal from two overlapping units. Luxul recommend using the heat mapper at www.ekahau.com to test this. We were unable to test how well our roaming unit would switch Access points, but Luxul claim this is a strength of their system.

Luxul's
made
to last

Manufacturer: Luxul
Product: AC1900 Dual Band wifi
Web: www.luxul.com
Distributor: www.avation.com.au
Price: \$2,150



The Common Man's Spectrum Analysis with RF Explorer

By Simon Byrne



Getting wireless microphones to work reliably is getting more challenging and will continue to be so.

The simple fact of the matter is that productions demand more and more channels of a spectrum resource that is increasingly becoming incredibly crowded. Our thirst for mobile internet needs spectrum, lots of it. If we look to the developments in the US and Europe, it is clear that available spectrum will get more scarce.

Politics of spectrum allocation aside, a battle in my view that the production industry is unlikely to win, we as audio professionals need to have the tools and skills to reliably deliver wireless audio in this increasingly hostile environment.

Operators need to have a full understanding of the RF environment that we work in. To help with this, the major wireless manufacturers have excellent scanning and coordination capabilities in most of their upper end equipment so we have the ability to do a spectrum scan, but they are usually slow and tie up a receiver channel.

The solution is a stand alone RF spectrum analyser which gives you the ability to conduct close to real time scans during setup, rehearsals and show. This gives you a picture of the landscape that you are operating within.

The RF Explorer is a handheld spectrum analyser that comes in various configurations. It is affordable...really affordable, starting at about \$225 for an entry level model which covers 240 Mhz to 960 Mhz which easily covers the range that most of us are interested in. Several other models are available, giving the user the ability to scan right up to 6 Ghz as well as some 2/5 Ghz wifi diagnostics.

It has an internal battery charged via USB, a 128 by 64 pixel mono screen, an antenna connection with an antenna (or 2 depending on model) and all functions are controlled by 7 push buttons on the front.

As a standalone unit it is quite limited, mainly because of the low resolution LCD screen. It is hard to get really useful information out of it for this reason.

However, the RF Explorer really starts to excel when connected to your laptop with one of the cheap or even free analysis programs. I'm aware of 4 different software solutions that are tightly integrated with the RF Explorer. There are even some options for users of Android based phones which I won't go into here.

There is RF Explorer's own quite usable software (free), Touchstone (free) and Touchstone PRO (\$49 USD), ClearWaves (\$295 USD) and for Mac users, Vantage (\$99 USD).

Each piece of software has different features so it is a case of finding what works for you, however, they all fundamentally do the same thing. They give you a close to real time depiction of the RF environment that you are operating within.

Best practice is to insert the RF Explorer into your receiver's antenna system somehow. Many receivers have a loop output or hopefully you have a spare output on your RF splitter. That way, you can visualise the signal that your wireless receivers are seeing. Then simply connect the RF Explorer via USB to your laptop and launch your scanning software.



» Vantage has a monitoring mode which lets you quickly see if your wireless is on and operating properly



So, what questions can you answer with your spectrum analyser? Heaps.

- » What is the RF noise floor in my venue? The greater the noise, the less range you are going to get out of your microphones.
- » Am I getting full RF strength from this microphone? Most problems with microphones are related to the antenna connection to the transmitter. You can easily compare your suspect unit with a known working unit.
- » How much loss am I getting through that RF cable? All cables have loss but you can quickly determine whether or not it is within acceptable parameters.
- » Am I getting signal from the wireless in nearby rooms? In major convention centres, there is going to be wireless used in other rooms. This may, or may not be a problem but you will easily be able to tell.
- » Can I use the old aerial from my now illegal receiver in the 700 Mhz range? Sometimes the loss from slightly wrong antennas is well within acceptable limits.
- » If I move my antennas, can I lower the noise floor from that LED screen? A lot of (cheaper and larger) LED screens are wideband noise generators. The bigger the screen, the bigger the potential problem. Quite often moving your receiver's directional antennas so that they are not picking up the screen as much, but are picking up the talent well, can mitigate this.
- » Can I get away with running my wireless indoors within this venue even though I am squarely in a local TV channel frequency? Quite often the answer is yes provided you are operating indoors with a low power transmitter (10mw).
- » That TV news crew that just walked in: is their wireless gear going to cause problems? You will quickly spot any new transmitters giving the time to deal with any issues that may arise.

Apart from greatly increasing your capacity to plan your RF and fault finding, the ability to monitor your wireless throughout the show gives you piece of mind that things are operating as planned and you can spot problems early.

For example, I've done multi day shows where a nearby TV Station started test broadcasting on the 3rd day and it was not in the local database. It should not have been there. This reduced the usable range of my microphones in that block and I wouldn't have known unless I was monitoring the spectrum before walk-in and could take steps to reallocate channels to my backup frequencies outside that block.

There are certainly more capable and expensive RF Scanners out there, however the RF Explorer combined with some software is very workable for most users.

RF Explorer

<http://j3.rf-explorer.com> Price depends on model. Starts at about **\$225USD**

RF Explorer for Window - Free

<http://j3.rf-explorer.com/downloads>

Vantage for Mac - \$99USD

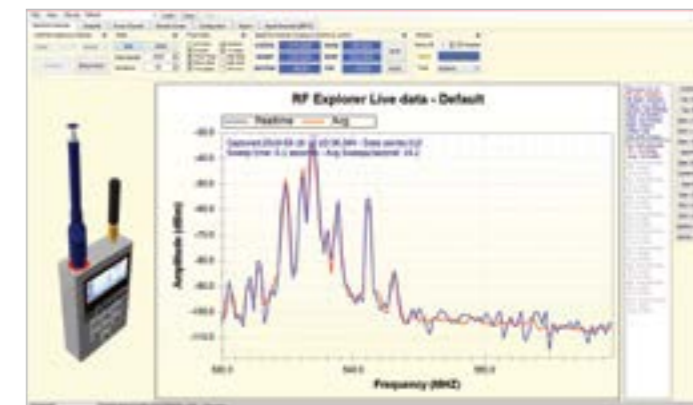
<http://www.rfvenue.com/vantage>

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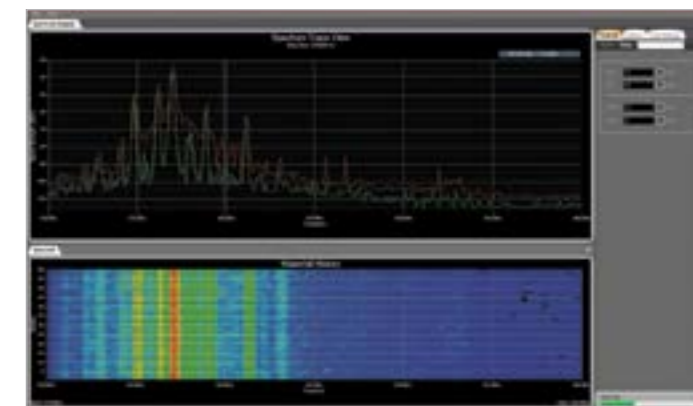
<http://nutsaboutnets.com/white-space-finder>

Touchstone Free and Touchstone PRO \$49USD

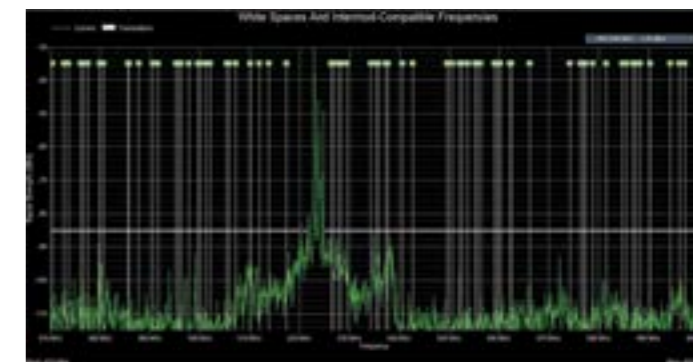
<http://nutsaboutnets.com/touchstone>



» RF Explorer's own software is feature rich



» Touchstone has both Spectrum and Waterfall view on a single screen



» Clear Waves features comprehensive channel monitoring as well as intermodulation Analysis and Frequency Coordination

▶ FROM PAGE 23

sub-zero temperatures in there most of the time. I used to turn on one of those crazy gas powered heaters – you know the ones that both look and sound like a rocket taking off – between takes, just to stop Paul’s fingers from falling off as he played.)

But as a live venue, that sort of room response is a nightmare for all but the barest of solo performances. Certainly once a drumkit is part of the musical equation, all bets are off. With a band playing at even modest levels, reverb times of over three seconds can turn any amplified signal into an incoherent mess in short order.

What the membrane absorbers at Archie’s Creek Hall have been designed to do is not only shorten the reverb time substantially – the hall’s RT60 is now around 1.2 seconds – they take a great deal of energy out of the room quickly.

What this means, in practical terms, is that when you speak at a table at one end of the hall, your conversation doesn’t rattle around in the space at the other, and vice versa. The walls in close proximity to you take much of the sound energy out of the room before your voice has had a chance to reach the other end of the space.

This also has the dramatic effect of making your own voice, and the voice of those in close proximity to you, much clearer. This stops you feeling compelled to yell at the person you’re conversing with just to be heard. When this phenomenon is reduced all over the room the noise floor drops dramatically and everything becomes clearer. The chaotic din is removed from the equation and order is restored to the universe.

REVERB TANKS

That’s the aim of the hall’s acoustic treatment in a nutshell: to reduce a sound’s capacity to ring on long after it occurred.

It’s a problem common to countless venues, restaurants and halls everywhere you go. No-one likes the phenomenon, yet there’s hardly a single business owner who does anything about it. It drives me nuts. If only every venue could put this sort of absorption up on its walls; things would sound far more relaxed and articulate.

If I become Prime Minister in the next few years – we go through them so quickly my turn can’t be far off – I will make it a requirement of all public spaces that they be scrutinised for good sound. ←←The Perfect Audio Bill→→ I’ll call it... bound to win at least a few votes from readers of this magazine at least.

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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LISTEN HERE THE PRODUCER/ENGINEER

By Andy
Stewart

The roles

of producer and engineer have blurred so much in recent years that the line between them now barely exists. What was once a clearly defined demarcation between two people who often possessed quite different skills, is now – in the vast majority of situations – occupied by a single individual. Whether you lament this evolutionary merger or not, there's no denying it – the landscape of modern record production has changed irrevocably.

When I woke up the other morning to the sad news that famed Beatle producer Sir George Martin had died, I fell silent. I wasn't shocked – he was 91 after all and had lived a long and extraordinary life. But like so many that morning, the news of his passing drew me inward as I contemplated a life well lived.

George Martin's legacy has embedded itself into the DNA of virtually every musician, producer, engineer and music lover on the planet, and his passing marks the end of an era.

Arguably the most famous and recognisable record producer of all time, to this day George Martin embodies the iconic image of what the role of producer is perceived to be. He seemed sophisticated, confident, wise, experienced and professional. His slightly aloof demeanour, his suits and neat appearance gave him the look of a friendly authority figure, which stood him in stark contrast against the outlandish getups of his artists, the Beatles.

But he was also known to be a very 'hands off' kind of individual when it came to the recording process. The engineering side of things was not his bag, nor did anyone expect that of him. He was, by all accounts, fairly averse to the idea of getting his hands dirty in that way. That was the job of 'his engineers'.

But nowadays this demarcation seems quaint in the extreme. The very idea that a producer might not deign to move a mic, or work the studio to develop sonic textures and flavours seems ludicrous in a modern context. To lack these types of skills or impulses in the 21st century is like calling yourself a surfer when you can't stand up.

What this means for up and coming engineers and producers both now and in the future, is that the roles of both are effectively now merged, and

the studio workload is therefore more intense than ever before.

Though there is still scope, and in some rare cases money, for music to be produced with the help of two individuals – call them a producer and engineer if you like – in most cases one person now performs every task required of a record's production. This might include jobs like song-writing (or co-writing), recording, arranging, editing, mixing, financing, performing, making tea and in some cases even mastering.

Nowadays, if you want to climb the carpeted, beer stained totem pole to audio industry nirvana, the skills and effort required are not insubstantial. Not only are you required to possess all the abilities listed above at a minimum, you're also now expected to own (or at least carry with you) a recording studio of some sort for the musicians to perform in.

In other words, modern day studio professionals are typically producers, engineers, studio owners and musicians

all rolled into one

Economic reality has been the driver of this (thanks mainly to the collapse in investment by record companies into bands and solos artists). And on any given workday, these studio pros will have to perform various tasks in and around any or all of these roles. It's no mean feat at times, particularly when there's a big band in the studio requiring a complex recording setup. In these sorts of high-pressure situations there might be issues or questions relating to tasks as diverse as miking options, technical faults with gear, multiple headphone setups, song arrangement disagreements, decisions about the best takes, where the toilet paper is kept, how to turn the coffee machine on, why there's a buzz in the bass amp, how to access the studio's wireless internet, why you don't have any Neumanns, why you don't have any tape machines,

why you have so much outboard gear, why there's no outboard gear, why the lights can't be dimmed... the list of questions is almost endless.

The point here is that, while none of these tasks are particularly hard in isolation. What makes the role of producer/engineer/studio owner complex and therefore potentially stressful, is that when all of these tasks are coming at you at once, it can be difficult to know which ones to prioritise.

I've seen the best engineers in the business make a total train wreck of recording sessions because they weren't capable of working under this kind of sustained pressure. Too many questions about how the last take 'felt' or why we need a click track just sent them over the edge.

I've seen producers walk out of a control room in disgust because they couldn't understand why ProTools refused their key commands, or the console's automation was stubbornly resisting their futile efforts to work it without looking foolish.

The key to being good in the modern day role of producer/engineer/studio owner is to be cool in the face of just about any drama, and competent across a wide range of technical, musical and emotional tasks. When you're overloaded with requests by band members, swimming in a sea of recording chains and headphone sends, expected to have one eye on every aspect of every channel of the recording process whilst simultaneously having a relaxed and easygoing conversation with the drummer about why you need to put water in the espresso machine (not just air), you need to be able to remain calm and know your stuff.

Like a good console, you need headroom to cope with the pounding you receive. And one of the best coping mechanisms is a solid knowledge base. Confidence in your own abilities is crucial to your ability to cope under pressure. But knowledge only gets you so far.

You can be the best ProTools operator in the business, but if you grow irritable and terse the moment you're distracted from your work, people will quickly grow anxious around you. In a studio that's a recipe for

disaster. You can pull great sounding mixes, but if you're rude to people, tell racist jokes or act inappropriately they'll run a mile. If you lie to people about your skills and then under pressure reveal them to be lacking, you'll look like the amateur that perhaps you are.

The point I'm trying to make here is that the best producer/engineer/studio owners (I've gotta find a better word for them) working today not only know a lot of stuff about all things technical, they're often multi-instrumentalists, great listeners, good conversationalists and songwriters, and have a friendly vibe about them that makes them easy to interact with. Gone are the days where an engineer could get away with being a rude, monosyllabic oaf. Gone also are the days where producers like George Martin could swan about in the studio without lifting a finger. Everyone needs to be across everything they can possibly get to grips with these days, and where there's a blind spot in your capacity, that's where more work needs to be done. Oh, and there's just one more thing. After you've invested in that small mountain of gear, gotten extra piano lessons, leant yet another DAW, updated your studio's décor and taken up meditation, you'll need to cut your prices too. If you think you're going to make your fortune in the audio industry, it might also pay to see a psychiatrist. They'll set you straight.

But, one thing's for sure, making records is inspiring and rewarding in ways most other jobs never are. So if you think it's time to get out of the game and finally get a real job, just check out the classifieds... it's scary what jobs some people sign up for.

Enjoy your work, and count yourself lucky. Happy recording!

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

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Biggest Bank

LOWEST ETHICS



By Julius Grafton

Do ethical problems grow in relation to the size of a company? CommBank (Commonwealth Bank of Australia) may claim this, as their insurance arm was outed last month for harsh and unconscionable conduct denying payments to terminally ill policy holders.

Let's have a quick look at Australia's largest bank and its ethics.

CX first took notice well before the Bank West scandal, which consumed our former (late) lawyer Ross McGlynn. Ross acted for many small business owners and farmers who had their loans and mortgages foreclosed by the bank after valuations were downgraded.

Our interaction with CommBank ended when a mortgage settlement they handled for us contained a 'mistake' in their favour for well over \$1,000. The way they explained it and brushed us off led us to suspect the organization was not interested in our business.

Back to Ross McGlynn. Ross fought and usually won, as case after case crawled through the courts. Evidence emerged that CommBank were foreclosing on Bank West clients after it had bought the bank from HBOS for 80% of its value in the GFC.

Cunningly CommBank had inserted a poison pill into the BankWest deal where any BankWest loan that defaulted later on would come off the tail end payments. So it set about making a large number of apparently performing loans fail. So it could pay less.

While this was underway CommBank's financial planning division were rorting investors. Between 2006 and 2010 its financial planning arm was out of control. Eventually the bank were hauled before a senate committee and held to account for thousands of bad deals dished up.

Current CEO Ian Narev made groveling apologies. Agreeing that some planners at the bank's Commonwealth Financial

Planning (CFP) and Financial Wisdom (FWL) businesses had breached customers' trust. Bad financial planners gave misleading information, committed fraud, and in some cases forged customer signatures. Many customers were wiped out, some killed themselves.

"They failed in their primary obligation — to act in the best interests of our customers," Narev told News Limited. The bank started to pay compensation. Very slowly.

Now its insurance arm CommInsure has had its turn by denying claims on disability and death insurance to people who had become disabled, and people who had become terminally ill.

CommInsure's chief medical officer blew the whistle by contacting the board to advise the firm had ethical, cultural and potentially legal failings within the life insurance business. He set about copying various emails to document these, and in return the bank fired him for breaching its email policy.

CommInsure even denied a payout to a CommBank staffer — Jayne Bradley — who was diagnosed with multiple sclerosis while working at the bank. She claims she was bullied and harassed by the bank until it decided to 'ill health retire' her. Its own insurer CommInsure then refused to pay her claim and eventually offered a small settlement.

Ian Narev again issued groveling apologies for CommInsure's sins. The pattern is established — Australia's biggest bank will do anything to maximize profit, including turning a blind eye to unethical and potentially illegal activities.

It will sack whistle blowers. It will filibuster when cornered. It will go low and slow on settlements. And its boss will make meaningless apologies.

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Industry Women

With
Toni Venditti

Claudia Engelhart
Sound Engineer, Tour Manager
Interpreter!

Working at New York's iconic CBGB's with Hilly Kristal was an eye-opener for Claudia Engelhart. Hilly would scare the shit out of people if you got in his face but actually he was a total puppy dog in real life. A groundbreaker in everything he did, he was always around and super supportive of his crew. One of the head engineer's and the lighting person were also women and Claudia felt he was proud to have women in his crew. Her shift was audition night where bands tryout to get a gig at CBGB's, and she would mix 7 bands a night – it was a marathon and steep learning curve so she became pretty quick with only 20-30 mins for each band! Claudia said she could do anything there and it wouldn't matter, so she would try different things in her mix building her experience immensely. Claudia feels really lucky to have been able to cut her teeth in a room like that. She never really focused on who would be playing and who she would get to work with. Reflecting on that part of her life, Claudia says that CBGB's was a stepping stone for her and she may have been too young to realise how important it was - to the music industry and to her personally.

But it didn't start for Claudia at CBGB's – it goes way back to being born into a family of professional musicians. Being raised in that environment, she always considered herself to be a musician as well, and as a kid she took formal music lessons – piano, cello, and singing – from the age of

9 years old until she finished high school. She played in the orchestra a little, but found she really wasn't interested in performance, she just loved the sound of the instrument, the cello in particular, (which she studied for 10 Years) and how it felt to play.

At the age of 10 her dad, Pete Engelhart (whose hand crafted metal percussion is world-renowned for unique sounds and artistry), met and became close friends with the Brazilian Percussionist, Airtó Moreira, and when the band came to town they would always stay at Claudia's house. In fact her Dad was a magnet for musos from the Jazz/Brazilian/Mexican music world and pretty much any band that toured would always end up at Claudia's for a party or a bed! She has always thought there was something romantic about being on the road and hanging out with everyone and going to the clubs to hear them play. She knew that this would be what she would do for a living – go on tour!

The Keystone Korner was an important jazz club in San Francisco and was home for Claudia and her family. Her parents would always take them to see whoever was playing and she grew up on a steady diet of all the great jazz artists including acts such as George Benson, Grover Washington, Bill Evans, Stan Getz, McCoy Tyner, Art Blakey and Miles Davis. The Keystone was an all-ages gig and a main stop for jazz groups touring the west coast. Her parents were friends with the owner, Todd Barkan, so they usually got in for free and if the shows were full, they would sit in the sound-booth with Milton Jefferies, Keystone's soundman.

After she graduated she traveled to Brazil for a year. It was a total fluke that during that trip she ended up spending a month living at the house of two of Brazil's top live-sound engineers. They had recorded every live concert they had done on reel-to-reel tapes and it was all of the bands she had grown up hearing. She thought these guys were so cool and subconsciously were such a huge influence on her that when she got home she had a "lightbulb" moment and decided sound was the career for her.

The first person she spoke to about doing this was Milton Jefferies, who became her teacher and gave Claudia her first gig - Monday nights at the Keystone. She didn't know anything, but he seemed to trust her and gave her the best advice which she still lives by to this day: "just move slowly, take your time and record everything".



A constant on tour is Claudia's mic kit

When Keystone shut down she moved to New York, where her sister lived. A couple of weeks later, Airtó Moreira played in New York and introduced her to a recording artist who immediately gave her a job. She was pretty thrilled as he didn't know her but it was a chance to get some experience in a studio, which she found she didn't like.

In 1984 Claudia began working at Sounds of Brazil which was a huge turning point. Her touring career started here with many of the acts that passed through booking her for tours. In 1989 she moved over to The Knitting Factory a venue which showcased improvised and original compositions by some of the most influential musicians coming out of NYC and it was here she met and eventually worked full time for guitarist Bill Frisell. She has since recorded two live albums for Frisell, "East/West", and "Bill Frisell Live" and has mixed and recorded just about all of his live concerts over the past 26 years, resulting in a "Live Download Series", of concert recordings available on Frisell's website.

Claudia speaks 5 languages and it was after a tour finished in Brazil that she fell into an interpreting gig with Miles Davis. She happened to be at the setup of the first gig and saw that the local and touring crew were having trouble understanding each other so she helped out and ended up touring as the interpreter. The best part was the contacts she made with the crew who were all the top soundguys in America. When they returned to the USA, they would often send gigs Claudia's way.

Claudia does everything but play when she's on the road. Tour managing isn't something she has pursued, it just kind of happened along the way because there was nobody else to do it. The bands she works with tour the world and don't have the budget for more than one person so she decided to do whatever it took to make things easy for the band so they could just play (although it feels like she's on call 24 hrs. a day).

A constant on tour is Claudia's mic kit. She has an array of great mics that she will select from depending on the tour and instruments used. She can rely on the mic as a point of reference no matter what the system sounds like and starts from there. Claudia calls herself a professional listener, rather than a technician. Listening and communication are her strengths - translating what the band is playing and being true to the music and the artist.

These days she can be picky about who she'll work with. Doing so many jobs, she doesn't need the extra stress of attitude. It's a bonus when she gets on a tour that has a crew and tour manager - it's like a vacation for her.

Bill Frisell is her main gig but she has also toured extensively with many other renowned artists, such as Herbie Hancock, Lou Reed, Grover Washington Jr., Marianne Faithfull, Airtó Moreira and has done special projects with people like Elvis Costello, Bettye Lavette, Billy Bragg, Buddy Miller, Rickie Lee Jones, Van Dyke Parks, Lauden Wainwright III and many others.

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Important News and a **Response** to Several Topical Issues

ACMA support this approach. In this environment we hope those who have no regard for lawful and ethical behaviour are exposed, and experience appropriate justice, as they have no regard for the well-being of our industry or the wider community.

It is apparent that significant facts concerning RCM and product compliance are not understood by many industry participants resulting in confusion, inaction and unnecessary expenditure. This includes little or no understanding of the risk classification of specific products and technologies; 'are they actually categorised as low, medium or high risk'. If the risk category is not understood then the required test regime is certainly not. Many products do not require additional testing some can be tested in-house and documented accordingly, in other words in many instances an independent test house is not required. In confronting the present industry product compliance landscape, ACETA will shortly issue a concise guide document as a benefit to bona fide members, which defines typical entertainment technology products in their actual risk category along with the specific test and documentation requirement, this should clear the way for members.

AN IMPORTANT PRODUCT COMPLIANCE NOTE

ACETA and the ACMA have begun discussing the process of self-regulation for ACETA and its bona fide members. Self-regulation would revolve around ACETA's Industry Guidelines as approved by ACMA, and form part of the accreditation that comes with membership.

ACETA recently placed on the agenda, the notion of presenting an annual Industry Convention, an initiative that has elicited significant interest. Other Industry Associations have communicated similar aspirations, and it may be that we join forces with one or more related industries to present together and share resources. Whilst the over-arching sentiment is the need for general development, many have identified

issues relating to leadership as a major concern moving forward. For ACETA, the fact remains, interest and encouragement does not necessarily indicate commitment and buy-in, therefore in the not-too-distant-future the ACETA data base will receive an e-mailed questionnaire aimed at establishing the reality and whether or not you want this.

ACETA membership is on the increase with three new applications received in the last month and a number of others indicating intent. With your interest and contribution we will grow and deliver, join and have a say in the future of your industry, it's easy but unrewarding to do nothing....

All the best

Frank Hinton
President - ACETA

By the time you read this, ACETA may be in the process or just completed the conduct of its Annual General Meeting (AGM), where it reports the year's activities to its membership along with the presentation of plans for the future, all of which will be reported in the next issue. This month we have some good news, will take the opportunity to correct some product compliance misconceptions and develop further a recent initiative.

First of all we are delighted to announce the appointment of a new ACETA management team, Stockdale A.C.S, an organisation that brings a wealth of diverse administrative experience to our association. This initiative also brings with it a new ACETA Headquarters and communication details, they are below. All other information (web site, FaceBook etc.) remains the same and we look forward to an exciting new era of development and service to members. With regard to the now active RCM legislation and product compliance, there

are a number of misconceptions and erroneous information doing the rounds that require address. We have received requests to report supposed non-compliant companies to ACMA. In the first instance ACETA has no right or power to engage in policing or reporting of such matters, secondly one does need to possess conclusive facts before considering any action which can severely damage an innocent party. Like any industry association, it is ACETA's role and responsibility to encourage lawful and ethical behaviour and by virtue of the process, marginalise those who don't. In addition ACETA will not compromise or undermine its very existence by engaging in activity that could see it subject to manipulation, exploitation or even litigation. Working collaboratively with government, it is ACETA's intent to see the real and perceived punitive aspects of non-compliance eliminated for those with compliant intent, encouraging them to achieve the desirable outcome,

New Address: ACETA c/- Stockdale A.C.S. 3/6 Atherton Road, Oakleigh VIC 3166

New Phone: (03) 9254 1033

ACETA Project Officer: Emily Dittman (emily@stockdaleacs.com.au)

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Passion, Pride, Pitfalls Dec 2014

DUNCAN

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JOBBED From the CX Archive, a Classic Fry!

Where would bands be without country gigs? An opportunity to see the countryside, with first class accommodation and be feted by appreciative audiences ... NOT!

The reality was miles and miles of boring roads going nowhere, always running late, vehicles breaking down, sleeping in the car to save money, and playing to people who really were only there for the beer! No wonder that I gravitated to the production side of things and let some other poor bastard work out what on earth to play to keep the audience from throwing something.

Unlike the Blues Brothers, there was no chicken wire to be seen.

My first country gig was in the town of Jerilderie in NSW. A friend of the band came from there and had put our name forward when the locals were looking for a band to play at a Bachelors and Spinsters ball or something similar.

So, we bundled everything into two cars, and headed off bush.

I've never been back to Jerilderie since, but I can certainly remember the gig. I remember the amazing red/orange colour of the dirt along the road and I also remember the bass player's car disappearing in a cloud of smoke in front of us.

It was a Simca Aronde, a quirky European import of dubious looks and even more dubious reliability.

You know how some cars are destined to be classics, and eagerly sought after by collectors?

Well this wasn't one of those. It was a piece of shit! And what's more, it was a piece of shit with a rooted engine.

So, we unpacked it and put everything into the other car, a Standard Six owned by the singer's mother. It too was an as-yet-undiscovered classic, and likely to remain so for the foreseeable future!

The singer was fond of saying that the car had been designed by Pininfarina, the Italian exotic car designer, but in all honesty if he had actually done so then he was having a really off day! Still, at that moment, it had a very large point in its favour - it would go.

Somehow we managed to squeeze everything into it. Drums - by pulling a skin off each drum we fitted them all inside each other, and they travelled up front in the passenger's laps. In went the bass amp, guitar amp, a 2 column PA from Macleans (we had lashed out and got the \$5 super system with 3 mics, instead of the \$4 one we normally rented). And miraculously, we even managed to squeeze the four of us in! Even though one person had to travel lying flat on top of the bass amp, nose jammed up against the roof.

It was an interesting trip, to say the least.

We had to take turns lying on the bass bin, as such a travelling position became rather claustrophobic after a while.

Still, we eventually got to Jerilderie. Our friend was there to welcome us with open arms, and who introduced us as a really big band from Melbourne. So, since we were running late after the car swap, we set up straight away and the gig got underway.

We played our normal sets, the ones that we'd play at Melbourne gigs, and the audience seemed quite happy despite the material being real mod stuff.

During the night some of the local lads came up to us and said how much they liked the band. Thanks, we replied.

That wasn't all, though. They shuffled about a bit, and then one of them stepped forward. It seemed the boys had a request.

"Can youse play 'Release Me'?" he asked.

We were aghast. Us, The Rave, a cool hip mod band (or so we fancied) with Union Jack shirts, boots and paisley flares, a down-under combination of The Who and the Small Faces with a bit of Otis Redding thrown in for some soul, play something like Release Me, the first hit for Engelbert Humperdinck?

Back in Melbourne you'd never get into The Catcher or the Thumpin' Tum if word got out that you even vaguely knew the chords for that song.

So we turned to the guy and said no mate, can't play it.

He looked rather unimpressed with this and went back to his cohorts. We could hear them all muttering as he said no, they say they can't play it. We could hear them all muttering as black looks were flashed in our direction.

He came back over to us. "We've been talking about it," he grunted. "Either youse play Release Me or we'll job yerz" and he waved a meaty fist in our faces.

We were unfamiliar with the verb to be jobbed, but we got the distinct impression that it wouldn't be anything that we'd be able to walk away from with all our teeth!

So that is how four ultra hip young mods came to be up on stage warbling away the most appalling cover version of Release Me imaginable. Not through liking the song, or believing that we could do a better job than old Engelbert, but simply to save ourselves from being jobbed, whatever that might have turned out to be!

Of course, that wasn't the end of the matter.

At the end of the bracket they came over to us and said "Jeez, that was real grouse. Can you play it again? By the time the night was over we played it about five times!

(Dunc is away on his annual Frankfurt trip. This was first published in 1994)

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