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THIS MONTH - INSIDE THE TOUR!

CX

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The Musical Hits The Road

WayBackWhen
Naked Hippies in the mud

Huey Lewis & The News
Taupo Summer Concert

Live Web Streaming
Going Online Made Easy

ROADSKILLS
Adam Lambert
James Bay
Short Stack

GEARBOX REVIEWS: Antari F7 Smaze • RUSH MH6 Wash • Jands HUB XCD

• Audio Technica ATND971 • Penn Elcom RADM-23

CX NEWS: BeezneeZ Daughter Gravely III • Australis Buys Backline Co • Peter Freedman OA

• Lexair collects Elation • CMG AV starts up • ENTECH 2016



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 Photographer: Troy Constable



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**INDUCTIONS**

We just visited five venues for ENTECH-ON-TOUR and did four online inductions. One of the nicer venues, Australian Technology Park, had the most onerous online induction which took considerable time to complete.

At Melbourne Park the WHS regime is harsh, possibly due to the building works underway which caused us extra cost due to poor loadin access. The Induction produced a 'certificate' which was traded for a contractor card that each crew carried. Yet the process on site was poorly managed at the security office.

The flaw there was that while security may monitor their site using CCTV they didn't actually seem to police anything. We had late arriving crew skip the process, and my direct employs and I simply gave our printed 'certificates' to the security guy and walked away minus the contractor card.

Mercifully Adelaide Convention Centre spare us any of this, they either know and trust us or they have a case-by-case WHS system. We don't ask as we don't want anything to change there!

All online inductions follow the same basic theme. All are just a form ticking system to demonstrate the venue is attempting something. None of the venues seem to actually monitor much at all, although ATP did have a safety officer watch over us. But she could not be everywhere.

NEW OLD WAYS

On ENTECH Roadshow we do it the old way – with trucks; loaders, cases and ramps. No forklifts, no scissor lifts, no flown elements. We tour 3 phase, distribution and power cables.

From an empty ballroom at 6am to doors open at 11am takes 5 hours. Each truck takes a dozen loaders 35 minutes to empty. By 8.30am almost all the equipment is in place for the exhibitors, who then set up. Our loaders help them stash the empty cases.

Well before 11am everyone is ready, and we do a quick check to make sure the show is properly dressed. We carry our own registration system, printers and everything we need.

The trucks and drivers from ATS are terrific, nothing is a problem. Our ethos is that nothing is a problem. While this feels normal to me, it is met by disbelief and then awe from the venue staff. They can't accept that we can do what we do, as they are conditioned to the new way of doing things.

The new way is to stuff around forever, and the accepted norm is that any show has a build day. At the end of our show, 30 exhibitors with almost 100 staff pull everything down within an hour. The truck pack is underway. We usually have three trucks loaded and out by 9pm.

We are operating very safely too, with no accidents and only three band-aids used across the 32 show days we've done so far.

It's become a well oiled machine, and I think (without being too hyped I hope) that it takes previous rock and roll road experience to tackle something like this. Least I hope it does, otherwise some of the big traditional tradeshow firms might start to compete with us.

I'd like to see them try.

- Julius

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BeezneeZ Daughter Gravely Ill Public Campaign Raises \$250k

BeezneeZ Microphones couple Ben and Vanessa Sneesby raised almost \$250,000 at presstime to bring their daughter Phelicity back from hospital in the USA to die at home.

It started with a Facebook post from a friend.
“I am asking for your help for dear friends of mine, the Sneesby family. Their daughter Phelicity was born with a congenital heart defect 13 years ago. Her defect was so complex, it brought them all the way from Australia to Columbus, Ohio where they sought treatment from a specialist. Her condition worsened and they returned to Ohio. Her mother, Veronica, has been off work for several months while Phelicity has remained in the cardiac intensive care unit. Her father, Ben, was forced to return home to Australia to continue to work so he can help provide for his family the best he can”, the post read.

Then the Sydney Morning Herald picked up the story at the end of January, to report a fund had raised \$100,000. That day the fund doubled.

The family were waiting at presstime for Phelicity’s condition to stabilize so she could make the long specialized medical flight to their Kyogle home. Her wish is to swim in the backyard pool with her siblings, and die in peace at home.

CX and the audio community wish the Sneesby family Godspeed and peace at this horribly difficult time.



Australis Buys Backline Co AJ Maddah Exits BH Stage Systems

AJ Maddah’s departure from the industry is almost complete. After the collapse of his Soundwave festival, his backline hire company BH Stage Systems was placed on the market.

It has now been purchased by Australis Music Group. Originally known as Billy Hyde Stage Systems, the company has 30 years experience and the biggest collection of vintage equipment like original Vox, Super Reverbs, Hammonds and Leslies, and Fender Rhodes.

Australis say the business brings great synergies.

BH Stage Systems was known as Billy Hyde Stage Systems and when acquired by Maddah for around \$1.8 million the name was changed. At that time the business turned over around \$1 million from its two offices – Sydney and Melbourne.

Maddah briefly became his own biggest customer with Big Day Out and Soundwave festivals. Trouble brewed almost immediately, with rival promoters moving business

to other backline firms. Maddah’s erratic and confrontational management style alienated staff and customers.

In October 2015 Maddah proposed a scheme to underwrite his troubled 2016 Festival, where proceeds of \$600,000 from the sale of BH Stage Systems would be returned to the 2016 Festival company. That company folded soon after, and the 2016 festival was cancelled.

Now Maddah controlled Madjo Enterprises Pty Ltd has sold BH Stage Systems to Australis, which will inject stability and allow the otherwise solid backline hire firm to trade successfully. All staff have been offered continued employment and will remain with the company.

“The staff at Stage Systems are just amazing, incredibly committed and customer focused. I look forward to working with them”, said Trevor Morrow, CEO of Australis Music Group.

“We are very pleased with the opportunity to widen our offer to the market and we believe that our history, know-how and industry talent will add value to an already very strong offer”.

Established in 1973 and headquartered in Sydney, Australis Music Group is one of Australia’s largest independent distributors of musical instruments and Pro Audio equipment brands such as Tannoy, Turbosound, Behringer, Lab.gruppen, Ibanez, Tama, Sabian and many more.

Peter Freedman OA Rode Microphone Pioneer Honoured

RØDE Microphones founder, Peter Freedman, has been appointed a member of the Order of Australia amongst some of Australia's most honored scientists, philanthropists, sporting legends and entertainers.

He was appointed a member of the Order of Australia in the General Division, in recognition for significant service to business, manufacturing and export, and his philanthropic support of cultural events.

The Order of Australia was established by Her Majesty the Queen in February of 1975, as an Australian society of honor for the recognition of achievement or service to the community at large. It is considered to be one of the very highest acknowledgements that Australia can bestow upon an individual.

"To be recognised at the highest level, by the greatest country in the world, and for work within an industry you love, is--for me--the pinnacle of success." Commented Mr Freedman, following the announcements of the award.

"To say I am honored, and so very humbled, is an understatement" he continued.

As a multiple Australian Export Awards winner, Sydney-based RØDE has in recent times been hailed as a leader in the Australian manufacturing sector by many of the country's most senior politicians and leading academics, with its sustainable high-tech approach setting an example for the future of Australian manufacturing. In addition,



[PICTURED]-PETER FREEDMAN OA

the company has been widely acclaimed by leading international associations and institutions for its outstanding innovation within design and manufacturing.

Mr Freedman's involvement in initiatives such as the Innovative Manufacturing Cooperative Research Center (IMCRC), and Microsoft's "JoinedUp Innovation" initiative has seen him regularly invited as presenter and opinion leader to prestigious educational institutions both locally and internationally.

With a passion for the arts and a love for his home city of Sydney, Mr Freedman is a sponsor of the renowned Sydney Festival, and a founding member of the festival's 40th anniversary fund which has been established to nurture Australian musicians and artists.

Outgoing festival director, Lieven Bertels, commented: "I am extremely thrilled with this long-overdue recognition of Peter's work in an industry I've always been passionate about myself. His help towards Sydney Festival has made a huge difference in our 40th anniversary celebrations this year."

Lexair collects Elation Expands footprint to NZ

Lexair Pty Ltd., currently the exclusive master distributor for High End Systems, Green Hippo and TMB in Oceania, has entered into an exclusive distribution agreement with Elation Professional, both for Australia and New Zealand.

Alex Mair, Managing Director of Lexair, commented, "Adding Elation to Lexair's portfolio is strategic for the company. It is the recognition of Lexair's growing brand recognition and fits in the vision to offer our customers in the region a much wider breadth of quality products, offering the 'one stop shop solution' our customers expect in the current market. We are very excited and proud that Elation has chosen us as a long term partner in Oceania and we guarantee that we will present Elation with the regard it deserves!"

Chuck Green, international sales manager at Elation, adds, "We are very pleased to be working with a company of the caliber of Lexair, who are well established and ideally placed to serve the large and growing market in Australia and New Zealand. Lexair will be a key

partner for us as we expand in the region and we are confident they will open up new opportunities for growth while promoting the Elation brand across the region."

Lexair was present at the recent CX/Entech roadshow in Melbourne in early February, where the company presented a selection of Elation's most recent products on the Lexair booth. Chuck Green joined the Lexair staff as well for the roadshow stop in Perth.



CMG AV starts up

NSW Regional co

Most production firms grow organically from a single operator with a plan. CMG AV in Wollongong, south of Sydney, burst onto the scene fully equipped and staffed mid 2015. CX drove down the coast to find out more.

General Manager and Technical Producer Tobi Pinazza gave us the rundown, after we looked over the modern warehouse and office in North Wollongong.

"It's about presentation and quality of the gear. Our brand ideology is design focused, like 'how can we make the gig technically excellent?'" he said.

To this end they have sunk considerable capital into equipment, flagship audio is the first Meyer Leopard line array in Australia. "It's deceptively small sized and deceptively big in volume - like 100db at FOH 60m back!"

They have a fleet of Clay Paky Mythos which leads the lighting inventory. Midas Pro 3 heads the audio mixing component. Barco RLM W8 does the high-end video work. Brightly themed trucks and vans deliver the goods. It all looks and smells new, which is exciting.

CMG AV has five partners, led by Managing Director Aaron Taylor. They all have skin in the game, but crucially they have the deep industry experience and local contacts required to get a start-up running fast. Tobi and some of the team worked in other local production suppliers and after attempting to buy an existing company took the hard decision to strike out on their own.

Several key appointments were made. "Conversations led to hiring John (John Harman, Key Account Manager & Audio Engineer) and Rory (Rory McDonald, Project Coordinator). John is an audio guy from way back, having done plenty of festivals and award-winning experience at the NSW Art Gallery. Rory came from Staging Connections, Sydney - they have massive face to face experience", Tobi explained.

"What led to this project is the maturing of the market and the chance to educate them about things that can be delivered beyond the bare minimum. We say, don't do the same as last year or last show".

"Look at Vivid as a good example, it's just an hour away. People see it and ask us what can we do. So we can show them the Mythos!"

"In the corporate market the conversations have been about more versatile use of spaces, with brighter projection or larger format panels. We could see a greater level of investment was required. After all we have venues with amazing outlooks down here, and ocean views."

"I'm at pains to say nothing is wrong with the (existing) local production suppliers. We're about better outcomes - we need to accelerate the growth of the events, accelerate fundraising if the client is a charity. So we say 'don't regurgitate last year, definitely try to change.'"

"The majority of conversations that are underway are about consolidating relationships with venues, making long term plans with key promoters and event holders."

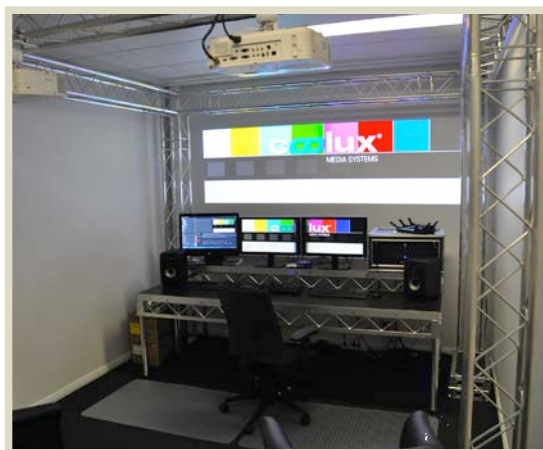
Is sinking all that money and effort terrifying, we ask?

"Absolutely!" says Tobi. It's exhilarating, with challenges, and definitely terrifying!"

Where are the clients coming from?

"In large part from personal relationships."

"There is value in being seen to be across the latest technology".



FROM LEFT - MARK BEDFORD, AARON TAYLOR, TOBI PINAZZA, BEN WRIGHT, STEVE BIERMANN



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MELBOURNE Park - Monday 8th February

Roadshow moved to **Melbourne Park Function Centre** for the first time, although ENTECH had been staged there in its previous form as a multi-day tradeshow. The venue proved popular with most visitors arriving by tram. The show had almost doubled attendance from last year when it was run at MCEC. The expanded audio shootout and lighting demo was run in the Pacific Room, while seminars occupied the Yarra rooms. ENTECH will return to the venue next year on Tuesday Feb 14.



SYDNEY Australian Technology Park - Wednesday 10th February



Another new venue for Roadshow when we arrived at **Australian Technology Park** in Eveleigh. With Channel 7 next door, and the venue having a solid decade it was time to try what was once derided as poorly located. It was anything but, with exactly double attendance from our previous showing at Chatswood Concourse. Sydney is a tough town to run an expo in while the new International Convention Centre is being built. ENTECH returns to ATP on Tuesday 7 February next year.

BRISBANE Convention & Exhibition Centre - Monday 15th February

We returned to where we started from in the sunshine state by running at **Brisbane Convention and Exhibition Centre**. We almost doubled attendance again, with exhibitor staff (and us) loving the Southbank location. The Grand Hall loading dock is less loved, and while BCEC is a great venue we will return to RICC at the Showground next year on Thursday 9th February for some awesome loading and unloading.



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ADELAIDE Convention Centre - Thursday 18th February



Our schedule this year was a little different due to venue availability. Normally we would start at Brisbane, then go south. This time the trucks hit the Bourke road for some cross country miles to Adelaide, where the show returned to our favorite venue anyway, the **Adelaide Convention Centre**. Nothing is a problem at ACC where a 'can-do' attitude and happy staff make our tour day better. We return here on Thursday 15 February.

PERTH Convention & Exhibition Centre - Monday 22nd February

Finally we hit the far west after a three day drive for the trucks. Did we mention how awesome ATS Logistics are? **Perth Convention and Exhibition Centre** was again a new venue for us, and thanks to their thorough event staff we dodged a few bullets by loading in an hour earlier at 5am. The time zone difference does our head in, so it was a LONG day but the slightly increased attendance made it worthwhile. We return to Crown for Tuesday 21 Feb next year.



ENTECH **INSIDE THE TOUR**
SEE MORE ON PAGE 40

New & Note Worthy...

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Robe BMFL WashBeam



The BMFL WashBeam produces a large beam through its wide 180 mm front lens. With a custom light source designed especially for Robe, it produces 300,000 lux at five metres. A rotating gobo wheel with carefully selected gobos provides multiple combinations of in-air animations, and spot-like projections on surfaces. Four fast shutter blades offer individually angled positions within a frame, which itself can rotate through 90 degrees, providing a sharp or soft, precisely repeatable frame for the projected image. Fast movement of the framing system also allows for unique in air beam effects. The frost filter can be added to enhance projections by adding a smooth touch on the beam's edge.

Australian Distributor: ULA Group
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Christie DWU1052-Q & DHD1052-Q



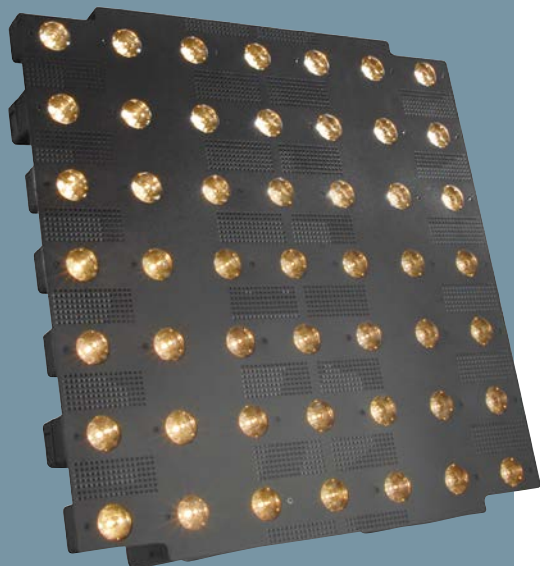
Christie's new Q Series 1DLP projector models offer quiet operation, a built-in automated dual colour, a versatile Lens Suite including 0.38:1 ultra-short throw, edge blending and warping capability, and easy connectivity with 3GSDI and HDBaseT. The DWU1052-Q generates 8,900 ANSI lumens and has a native resolution of 1920 x 1200 (2,304,000 pixels) at 16:10, while the DHD1052-Q produces 8,450 ANSI lumens with a native resolution of 1920 x 1080 (2,073,600 pixels) at 16:9.

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

Chauvet Nexus Aw 7x7

The Nexus Aw 7x7 LED panel wall system is a versatile LED system that projects narrow beams of light, provides warm washes, makes instant audience blinders, and displays text and animated graphics. 49 3 Watt Cree LEDs partnered with a flexible software system generate pixel mapping effects. A smooth dimming curve with a 2800 K colour temperature makes it perfect for live events, broadcast, studio, theatre, and touring applications.

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

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Platinum FLX

The new Platinum FLX is a patent pending design 3-in-1 luminaire which can be utilised as a beam, spot, or wash fixture. Featuring the new Philips MSD Platinum 20R 470W 80CRI lamp, 7,800K, it delivers 23,000 total lumens, a comparable output to 1,200W fixtures. It has a 1.8° to 18° zoom in beam mode and 2.9° to 25° zoom in spot mode, 6° - 42° zoomable wash / frost effect, full CMY colour mixing plus linear CTO colour correction, 10 dichroic colours including UV, CTB, plus white (open), 8 rotating-interchangeable and 6 static-stamped gobos, 6-way linear and 8-facet rotating prisms, and bi-directional animation wash frost effects. Control is via DMX, RDM, KlingNET or Art-NET.

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GLP impression X1

The GLP impression X1 features four high powered, 15 Watt, RGBW LEDs with a narrow fixed beam output that offers continuous pan and tilt motion, in a compact housing. The fixed beam optics are interchangeable between different beam angles from the standard seven degrees. The compact base of the impression X1 houses Neutrik Powercon in and thru connectors for easy daisy chaining of multiple fixtures, whilst the power supply is fully auto sensing from 100-240 V, 50/60 Hz.

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

Hitachi HILF75101

The new Hitachi HILF75101 is a full HD 75 inch LED backlit LCD display. The panel uses integrated infra-red sensors to detect contact with the screen and gives users the unique ability to control their computer by touching the image, supporting up to 10 points of simultaneous touch. The HILF75101 is available with an OPS slot that allows it to be used with an optional built in OPS compliant PC, which eliminates the need for connecting to any external sources.



Australian Distributor: Hitachi Australia Pty Ltd
www.hitachi.com.au or (02) 9888 4100

Electro-Voice ND Series

The ND Series of wired vocal and instrument microphones, consisting of four vocal and four instrument models, are the successor to the N/Dym Series. The series features dent-resistant Memraflex grilles, humbucking coils to guard against line hum, and shock-mounted capsules to minimise handling noise.

The four ND Series dynamic vocal microphones are designed to address three distinct application scenarios,

and are differentiated by polar pattern, capsule voicing and grille shape. Large-diaphragm capsules create full and highly detailed frequency response. The ND Series instrument models consists of three dynamic models and one small-diaphragm condenser model, each optimised for their applications by polar pattern, capsule voicing and mechanical design.

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d&b audiotechnik
DS10 Audio network bridge

The DS10 Audio network bridge from d&b audiotechnik is designed specifically for d&b amplifiers. It provides 16 AES3 output channels via the Dante audio transport protocol through Ethernet, four AES3 input channels and an integrated 5 port network switch. Using the DS10, multiple channels can be sent from the console to the amplifiers using a single network cable. At the amplifiers, the DS10 distributes the audio signals to the AES3 inputs within the d&b amplifiers. The DS10 sends meta data information, such as Dante channel labels and cabling information via the AES3 channel stream to the latest generation of d&b amplifiers for simplified routing and troubleshooting.

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

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VP-558

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Australian Distributor: Kramer Australia
www.krameraustralia.com.au or (07) 3806 4290

Yamaha
SWP1



Yamaha SWP1 series network switches are designed for the pro audio market, offering a balance between IT and pro audio know-how. The SWP1 series makes audio network setup, monitoring, and operation easier and more convenient than ever before. Five models offer three preset VLAN types, dip switch Dante optimisation, external DC input for power supply redundancy, optional optical fiber and network redundancy, and etherCON connectors for reliability.

Australian Distributor: Yamaha Music Australia
au.yamaha.com or (03) 9693 5111

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Andrew Lloyd Webber's perennial stage favourite has been revived and updated by the original creative team, and hit the road across Australia and New Zealand. With PA equipment and staff provided by Norwest Productions, the 35 year old show is sounding fresher than ever. Jason Allen visited the show at Melbourne's Regent Theatre...

The Sound of

CA



Sound Supervisor – Pete Lumley • System Tech – Ricky Gallagher

CATS

On Tour in
Australia and
New Zealand

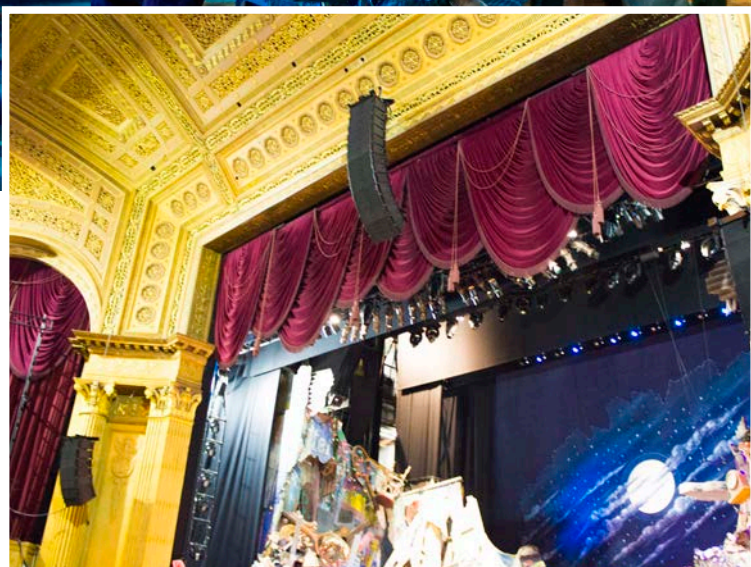


- Head of Sound – Brendon Gardner

CATS IN AUCKLAND – PHOTO CREDIT HAGEN HOPKINS



CATS IN AUCKLAND - PHOTO CREDIT HAGEN HOPKINS



L-Acoustics dVdosc



Amps and processing land

CATS

has proven to be one of the most durable musicals ever created, having the honour of being the fourth longest running show on both Broadway and

The West End. The 2015/2016 Australasian tour started in Auckland in September before heading for a five week run in Sydney and six weeks in Melbourne, from which it moves to Brisbane, Adelaide and then Perth. Touring with the show is Head of Sound Brendon Gardner, system tech Ricky Gallagher, and Carley Gagliardi on radio ops.

The sound design for the tour is by South Korean Ki Young Kim, created for the most recent company to tour the show in Asia. While the creative team have updated some numbers and a character (Rum Tum Tugger is now a hip-hop 'street cat'), the show still looks and feels much as it did in the 80s, though the tech used to deliver it has changed enormously. Point source distributed speakers have been replaced by line arrays, and the enormous analogue Cadac desk at front of house is now an equally impressive, but physically smaller, DiGiCo SD-7.

Out the Front

L-Acoustics dVdosc handles the majority of the coverage, with 16 elements in the centre, and seven left and right. The balcony in Melbourne was covered by eight elements a side of L-Acoustics Kudo. A solid bottom end is provided by four L-Acoustics SB218s and two L-Acoustics dVSubs. The front fill, cleverly hidden in the iconic 'garbage dump' set, is courtesy of eight d&b audiotechnik E3s, with a further 24 units of the same deployed around the auditorium as surrounds. These are supplemented



Above: Macs, Firefaces and submixers

Below left: RF World

Below right: Carley Gagliardi, radio ops



by 10 Quest 401s as under balcony fills. In and out fills are a pair of Meyer Sound UPA1Ps and IPA2Ps, and on stage, the cast monitor on eight L-Acoustics 108Ps.

The main PA is driven by L-Acoustics LA-RAKs, which house 18 LA-8 amps, and processing is done through five Meyer Sound Galileo 616s. 10 d&b audiotechnik EPAC and six D6 amplifiers drive the surrounds and fills. The cast are mic'd with DPA 4061s, to Sennheiser 3732II receivers. At RF world, the signal goes to one of the three 56 channel DiGiRacks on an Optocore backbone, and RF monitoring is carried out with a simple MADI monitor box. Another DiGi Rack is located in the remote bandroom, and the third at the amps and processors under the stage.

Out the Back

"The band placement is one of the unique things about Cats," said Head of Sound Brendon Gardner. "They can't go in the orchestra pit because the cast crawl all over and under the stage. In every venue, you have to find a space that's isolated. It actually makes headroom easier, and you're not getting any spill out of the mics, though the audience can question if the music's actually live, as they can't see the musos in the pit. We're doing an announcement at the top of the show that introduces the conductor and the orchestra to address that."

With the band room in Melbourne at the end of a 150 metre cable run on the fourth floor of the Regent Theatre, the crew are thankful to be touring in the age of fibre optics. Sound supervisor Pete Lumley toured Cats in the 90s, hauling huge copper multicore runs through distant parts of theatres. "I did Cats back when it was a Martin Levan sound design," recalled Pete. "The biggest difference in terms of the design now is that Martin Levan's had point source band speakers in the set behind the cast, and we're using line arrays. Going from point



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Above: Band room



Above: The Ambient Keys set-up



source to line source is night and day. The big difference is that having a big horsepower PA system allows the dynamic to breathe. I love the power of it; when you need something to be big and meaty, it does it well. You can run the Kudo down low so you don't have an issue with bass upstairs. It helps us having a box that can go down to 40Hz to keep that vocal richness right throughout the venue."

with the Band

Of the 120 inputs at Brendon's SD-7, 54 of them emanate from the band. Three keyboard players are responsible for 36 of them – four each generated on-board each synth and eight each from Macs running MOTU's Mach 5 sampling instrument. These output through RME Fireface 800 external soundcards to three Yamaha 01V96 submixers. The band monitor through Aviom A-16II submixers fed from Aviom cards in the DiGiRack.

One of the more interesting features of the orchestra setup is the six Genelec 8030 powered monitors set up in a semi-circle around the conductor, with two condenser mics as overheads. "It's called 'Ambient Keys'," explained Ricky Gallagher. "It's an Andrew Lloyd Webber specification and it's a compulsory part of the production. There's a stereo mix from each synth player going into the monitors immediately in front of them. It adds some atmosphere and 'air' to the direct sound and helps bring the key parts to life."

All Singing, All Dancing

Despite digital cabling, digital recall, and line arrays, there's still one issue in theatre sound that modern technology can't overcome, namely that Cats is an incredibly physical show, and the cast often sweat profusely. "We're doing a lot of sweat management," Ricky continued. "It's a heavy dance show and most of the cast are on stage most of the time. Pete and his partner Shelly have a company that makes latex covers we're using for the radio transmitters.

They're moulded with an antenna cover and a hood that goes over the connector. When you put it on and tuck the connector under, it's pretty well sealed. You then do a weekly maintenance with a rinse and fresh talcum powder. They're a bit more appealing to the cast than the condoms we used to use back in the day!"

"There's a lot of preventative stuff going on with the mics to try and stop sweat getting in, trying to eliminate the problem before it happens," added Brendon. "Carley does a lot of walking around and swabbing people, even if the mics are clear. That's really the show's major challenge; hiding mics on or in skin tight costumes, keeping their packs hidden, and keeping the packs and mics clear of sweat."

The Perfect Mix

Out in the auditorium, the audience is treated to a masterclass in how to mix a musical. In my opinion, I was treated to the finest mix of a musical I've heard in well over a decade. Eschewing the temptation to overuse compression and limiting, Brendon's mix follows the dynamics of the show and lives and breathes with it. The climax of the show's best known song, 'Memory', blows the audience away as star Delta Goodrem hits the big note. It's how musical theatre should be mixed, and is in stark contrast to the fatiguing listening experiences some modern shows have become. "Why would I use compression?" asks Brendon, holding up his fingers, "when I've got these?" It's an old school approach, and it works brilliantly.

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THE
MILL
REPORT

THE HAVES & HAVE-NOTS



THERE'S AN EXTRAORDINARY DISPARITY THAT'S OPENED UP BETWEEN THE MUSICIANS WITH RECORDING BUDGETS AND THOSE WITH BARELY TWO CENTS TO RUB TOGETHER.

WHY THERE ISN'T MORE INVESTMENT IN MUSIC BY AUSTRALIAN RECORD COMPANIES, GOVERNMENT AND PRIVATE ENTERPRISE IS QUITE BEYOND ME. SOME OF THE BEST MUSIC I'VE EVER HEARD IN AUSTRALIA IS CURRENTLY WITHERING ON THE VINE.

RECORD COMPANIES HAVE TURNED INTO BANKS, REQUIRING GUARANTEES AND SURE BETS BEFORE ANY OF THEM MOVE A MUSCLE. YET SOMEHOW I SUSPECT THESE LABEL OWNERS THINK THEY'RE STILL PRETTY COOL... FOR A BUNCH OF BANKERS IN DENIM.

It's almost criminal to think that 99% of bands spend less on their whole album these days than the remaining 1% do on their recording session's catering budget. That's right, some acts provide meals during recording sessions (as well as the occasional narcotic). I guess there's nothing new in this fact, but one thing's for sure, the gap is widening.

I was out seeing a gig in a local Melbourne venue the other night, and in between sets I was out on the street talking to a bunch of friends of mine. They were all smoking – I guess I was too... passively. The night was warm, the air thick with carcinogens.

Anyway, during one of the conversations a very well known musician with decades of performing and recording experience behind him pulled his new solo album out of his pocket.

"I've just finished this actually... all recorded and mixed in my bedroom by yours truly. I was thinking of getting it mastered too but..."

"But?" I blurted out in astonishment. "You *didn't* get it mastered?"

"Yeah, in the end a friend of mine offered to do it for free, otherwise I was just going to use Ozone. The presets get the job done just as well apparently."

If I'd been sitting down I would have fallen off my chair in amazement. Instead, I stumbled into the street.

Here was a guy who's probably recorded in just about every studio in Australia, who's played on every stage in Australia, and worked with countless well-known producers, thinking in some strange way that doing all this work in his bedroom was a good career move.

And to think he was only one helpful friend away from mastering it himself too, with a bunch of promise-laden presets.

BY ANDY STEWART

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

Now while I'm paraphrasing this incident a tad, the essence of the story is accurate... and mind-boggling. What was even more amazing was that I'd just had a similar conversation with another person on the street barely a minute earlier...

'Has everyone gone stark raving mad?' I thought to myself, as I walked back into the pub for the second set. 'Where is the support for the grass roots of this industry, and how can someone with so much experience be so naïve about the production process?'

DEATH BY STUPIDITY

There's something going on here that I loathe and detest, and it has nothing to do with the artists themselves.

The idea that all these musicians, who have collectively made rich men out of certain individuals in this industry, can't get so much as a dollar back from the fat-cats to invest into their new work, is both callous and bereft of all loyalty... and ultimately quite stupid.

In America these types of older musicians become 'legends'. Younger stars and the wider population of that country view their old brigade as cultural treasures, celebrating their achievements at awards ceremonies and in some cases elevating them to almost demigod status. These artists become wealthy men and women, as do the people who support, promote and manage them.

In Australia, our 'legends' are dumped on the roadside like McDonald's wrappers, forgotten even by their own record labels in many cases – companies that are either too narrow-minded and incompetent to understand the financial rewards they've squandered, or in some cases ignorant altogether even of their own business history. It's pathetic.

GREAT ALBUMS, NO SUPPORT

There are great records being made by all sorts of people in this country today – many of them former household names, some of them up-and-comers, and others still with great potential who have no way of capitalising on it.

Perhaps as a culture we're just too busy being cringers; always looking to import things from overseas – music, cars, TVs, microphones, you name it – rather than investing in our own talent. As long as it's from somewhere other than here, right?

It's a pathetic joke I'm tired of trying to ignore. It's our cultural Achilles' heel, and we must do something about it.

But everything seems to be flowing in the opposite direction. Major record labels are too busy running Karaoke shows or writing their own autobiographies – works of fiction most of them – to look at the train wreck they've left behind. And to think they're proud of their achievements. Most of them are nothing more than self-serving con-men with not a shred of decency about them. Worse than that, companies like Apple et al, give quite literally nothing back.

ONWARD & BACKWARD?

There are great musicians, songwriters, engineers and producers all over this country, most of whom do what they do in the face of genuine economic depravity, and with a superannuation nest egg the size of a peanut to look forward to when their hearing or fingers finally give out. Yet still they persist, and in this regard I'm full of admiration for them.

But after so many years of neglect, these older groups of 'working musicians' are struggling to imagine new ways of funding their own projects. Rather than seeking out new

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capital, they're choosing instead to put out inferior (and in some cases downright amateurish) new releases that cost far less. This starts a downward spiral that eventually either kills off the band completely or pushes the fan-base away.

It's understandable of course; to some degree or other these older artists are the product of our throwaway music industry. But frustratingly, other methods of revenue raising do exist – most notably crowdfunding – but most artists choose not to explore these options, primarily out of fear or ignorance.

I would urge anyone reading this who was once in the musical limelight, who now lurks in the shadows by virtue of their age or circumstance, to consider crowdfunding their next album, either wholly or in part.

For many of these artists, there's a small but loyal fan base out there that's hidden behind a wall that has been created mostly by the passing of time. Given the opportunity, many of these older fans would be willing participants in any future recording project by their favourite artist.

Some might pay good money to pop into the studio one night during a future recording session for a meet and greet, or for a front row table at the launch, signed copies of the album... there are just so many ways to get the fan base involved.

The key is to understand that fans would kill for these sorts of experiences. Many older rock stars don't properly appreciate how green the grass appears from the other side of that fence.

It's not exploitation either; it's just economic reality. Nobody gets hurt, everybody wins and pride should play no part.

The time has come for Australian recording artists to look at new ways of funding their recording projects. The record companies disappeared up their own orifices years ago, and their replacements are even worse. But that shouldn't force artists down the slippery slope to mediocrity. That's defeatist thinking, as harsh as that sounds. Time to tap into the fan base and get this party started.

BRICASTI M7M & EXPONENTIAL AUDIO M7 CONTROL PLUG-IN

ONE OF THE GREATEST SOUNDING REVERB UNITS EVER CONSTRUCTED BY MAN IS THE BRICASTI M7 DIGITAL REVERB PROCESSOR.

When it first hit the market almost 10 years ago, the designers of this slick digital hardware unit seemed so resolutely out of step with the marketplace, they looked like a naïve bunch of audio boffins on a short economic rollercoaster ride to oblivion.

'Who would buy an expensive hardware reverb in this day and age?' everyone mocked. Back then people basically didn't care how good the Bricasti sounded. If it was hardware, it was deemed a goner.

But the M7 not only survived, it thrived.

Surrounded in this new landscape dominated by plug-in reverbs and cheap 'classic analogue' knock-offs, the Bricasti M7, somewhat ironically, had almost no rivals. Everyone else had abandoned ship (or was making a B-Line for the lifeboats) and the M7 sounded so good it simply couldn't be ignored.

In 2016 the M7 is by far the best sounding digital reverb processor on the market.

And now a compelling marriage has taken place between Bricasti and software developer Exponential Audio. The latter's new plug-in – the M7 Control – provides comprehensive, seamless manipulation of the M7 or M7M – the latter having no front panel controls – via MIDI from within your favourite DAW, with all the convenience and power this affords you. Not only is this of fantastic benefit to established owners of M7s, it almost halves the price of any new system that might otherwise have included the beautifully constructed M10 remote control.

For the many thousands of customers out there whom I suspect, over the years, might have baulked at the hefty price tag of a Bricasti 'System 1' (which comprises an M7M and its fairly crucial M10 remote - \$7295), there is now a clear pathway to owning (and remote controlling) this fine reverb unit without breaking the bank.

Although it is without doubt a thing of beauty from an audio engineer's perspective, the M10 remote is quite pricy at \$3355. If, however, you're planning on buying a system, the price becomes less significant. (The M10 can remote up to eight hardware units).

But for the vast bulk of users, it's not a case of how many M7s are going in the rack, but how cheaply you can add one of these magnificent, effortless reverbs to your arsenal and control it remotely.

The new Exponential Audio M7 Remote plug-in facilitates this like never before. Offering the 21st century convenience of save and recall control within the plug-in, as well as automation over the dizzying array of sophisticated reverb control parameters, the Exponential Audio controller plug-in turns what was already a marvellous hardware device into an absolute beast.

Unfortunately, space does not allow me to go into detail here about the amazing ease with which a Bricasti M7 reverb can be customised for a mix. Quite simply, it is stunning – its presets alone worth the price of admission. There are also new program banks with the latest Bricasti software that sound more like the Lexicon 480L. These more extroverted reverb presets also sound incredible, providing depth and detail beyond the capacity of any plug-in on the planet.

Most plug-in reverbs make you work hard for your supper; the M7 makes the job effortless. With Exponential Audio on board, the Bricasti M7 has now become the most compelling digital reverb option on the market, bar none.

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TOOLBOX REVIEW





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WayBackWhen Naked Hippie

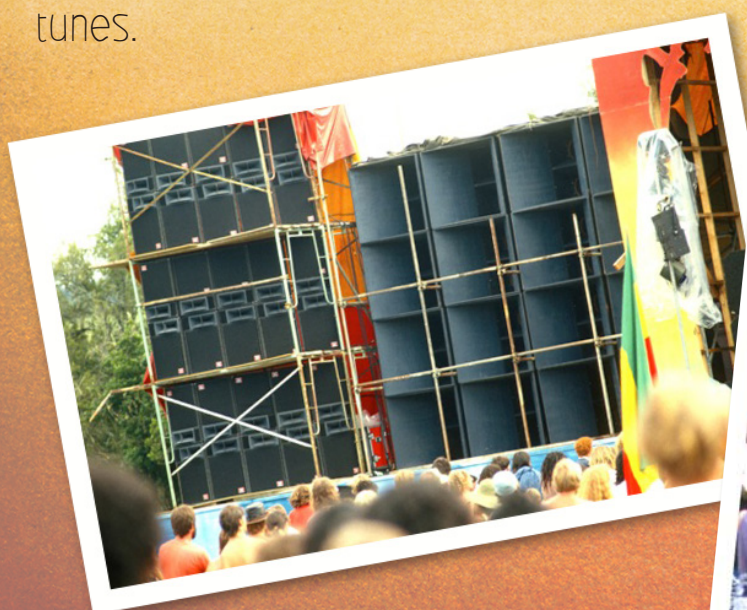
AS those of us connected to social media are bombarded with frizzy mullets due to friends, companies and celebrities jumping on the #WayBackWhen bandwagon, CX Magazine looks back on the halcyon days of festivals. We return to times when health and safety for festival promoters meant providing vegan food outlets. AV equipment might fall on you, rubber shoes could be the only thing between you and an electric shock, inadequate lighting left crew flailing, the lack of sanitary hygiene created new superbugs and the whole experience was akin to spending a few days in a refugee camp but with tunes.

Greg Peacock, founder of Oceania Productions shares his recollections of the Nambassa Festival, Waitawheta Valley, January 1981.

For the youngsters and imports amongst you, Nambassa was the name of a series of hippie festivals held on farms around Waihi at the end of the '70's. The largest in 1979 attracted an estimated 65,000 people and made a profit of \$200,000. The scene of Greg's debut into festival AV provision was a scaled back (read: loss making) affair drawing only 10,000.

In late 1980 Greg Peacock and Oceania Productions were offered the contract for this three-day festival. "I somehow convinced my dear old Mum and my five brothers and sisters that it would be as safe as houses for me to borrow \$250,000 off UDC Finance and use our family holiday house at Waiwera that my parents had purchased in 1959 as security on this loan. I sent this money off to Cerwin-Vega in America to pay for sixty-four double 12" and horn mid-high cabinets, thirty-two double 18" cabinets, a small pile of wedges, sixty Crest and Cerwin-Vega amplifiers plus twenty-five red racks and a few other bits and pieces."

The gear arrived late only two weeks before the festival. "This gave us little time to make the cabling, rack up and wire the twenty amp racks and generally try and figure out how to turn this forty foot container of cardboard boxes into a functioning PA when we really had no idea what a functioning PA was - no YouTube to help us then unfortunately."



EDITORIAL - JENNY BARRETT

S In the Mud

Greg remembers his small five-man team plus most of his family and friends making a fairly good job of the assembly but at a cost, "Paul Jeffery, my business partner, and I only got home every second or third day to wash and change our clothes - we worked literally non-stop."

Two days before the festival, the trucks arrived to collect "the PA". Clueless at the time, Greg's two truck and trailers turned out to be a gravel truck. "Not wanting to scratch our brand new speakers and racks, we did our best to use the cartons the speakers had been shipped in to protect everything but it was pretty hopeless for a tight pack." They were also tip trucks which was to be highly relevant later that day. [Pic of loading trucks]

The next setback was discovering onsite that there was a wooden roof frame over the stage but no tarpaulins to make it waterproof - and it was raining. "The hippie organisers assured us that a van was heading back from somewhere, loaded with the tarps and sorry for the delay."

The wait stretched on until darkness and the ability of the trucks to tip suddenly became a factor. Greg explains, "The head truck driver came to me and said that his boss had called him on the R/T and that due to the now heavy rain, they were deeply concerned about getting their trucks stuck on the farm track into the Main Stage area. His boss had told him we had to unload our gear right now or they would unload it all on the ground for us using the tipping rams."

The team speedily unloaded their brand new PA on to a stage with no roof, in the pouring rain and in complete darkness as there was no power to the stage as yet. "We decided to stack the speakers on top of each other as high as possible in an attempt to keep the lower boxes and racks dry." However, unbeknown to Greg, Paul suffered from night-blindness, fell and was ferried off to Waihi Hospital for stitches to a nasty gash to his chin. Finally unloaded, the trucks departed and

the team headed back to Auckland, "We were cursing the hippies and wondering how our brand new PA would survive a night in heavy rain."

Back on site the next day, Greg was relieved to see blue skies. The morning was spent unstacking the

speakers and leaving them to drain in the sun. "The tarps arrived at lunchtime and with no motors to use back then, we carried the boxes and stacked them up in the scaffolding bays. By midnight that night, we had everything wired up and running and we were surprised to find that it all worked and sounded amazing - well we thought it did."

Greg was particularly impressed with the bass speakers they had designed with their clip-on horn flares - sixty-four 18" drivers.

Greg then drove back to Auckland as he had to sign the finance company documents first thing Friday morning. After signing the paperwork, he got back on the road in his brand new chocolate brown Ford Escort 1600 Sport. "Fifteen minutes from the festival site I fell asleep at the wheel and rolled my car, damaging it to the point that it sold for less than a thousand dollars at the insurance auction a month later. All my clothes, food and bedding were flung out of the car and I now had a buggered neck." Greg watched the Escort being towed away, probably out of the corner of his eye due to said neck injury, and hitch-hiked to the festival site with his few remaining possessions.

At the festival Greg looked after the front of house, "In true hippy fashion it had been built like a giant tree hut six meters in the air so punters could see under it. Luckily a trend that never caught on." Greg recalls having a wonderful time with his new toy. John Mayall, Dizzy Gillespie, Charlie Daniels Band, Sonny Terry and Brownie McGhee made up the international talent in addition to the equally varied local artists. The crew didn't have quite such a good time as one by one they were stricken by dysentery.

After three days of watching the hippies dancing naked in the mud, the bemused, tired and sick crew got the bad news. There was to be no loading crew as the festival was a financial flop due to both the bad weather and scheduling the event at the same time as the Sweetwaters Festival, another hippie festival. "News had spread that no one would be paid, so myself and a couple of walking wounded crew battled all day to get the gear back into two different regular trucks and we went home to ponder just what had hit us and were we actually still alive."

For Oceania Productions the outcome was no income, sixty 12" drivers requiring re-coning and around thirty-five horn diaphragms requiring replacement some months later when the water finally corroded them enough to cause them to fail. For Greg it was a neck injury that has lasted till this day. However, Greg cites Winston Churchill, "Optimism is the ability to go from one disaster to the next with no loss of enthusiasm."

It was a euphoric time and as a result of their supreme efforts at Nambassa, Oceania Productions went on to do their first tour, with Split Enz, and the next three Sweetwater Festivals.



HUEY LEWIS AND THE NEWS TAUPO SUMMER CONCERT

EDITORIAL - JULIUS GRAFTON

PERFECT WEATHER ON A SUMMER SATURDAY IN TAUPO HERALDED THE ANNUAL SUMMER CONCERT. RUN BY DEAN AND AMANDA CALVERT'S GREENSTONE ENTERTAINMENT, THE EVENT HAS AMAZING LOCAL SUPPORT.

Greenstone have been running a summer concert series since 2011, and have expanded to include Queenstown and Matakana. This year's lineup was Melissa Etheridge (solo), classic rock band REO Speedwagon and American Rock Icon Huey Lewis & The News.

Kicking off in front of 16,000 people in Queenstown, the bands then schlepped around for a week before playing for 14,000 in Taupo, and a sellout at Matakana. That gig captured people from Auckland, and being on the Sunday before the Auckland Day holiday, it worked well.

Greenstone have a winning formula, with the show ending at 6pm in each location. This enables out of town folk to get home, and it also pours massive numbers of people into the pubs and restaurants. Which is why the local community and councils are all on board.





CX rolled into town and realized parking a car was no option, since every possible nook was nooked for kilometres. Activating plan B, we checked into our Air BnB out in the foothills and cajoled Niv, the owner, to drive us in.

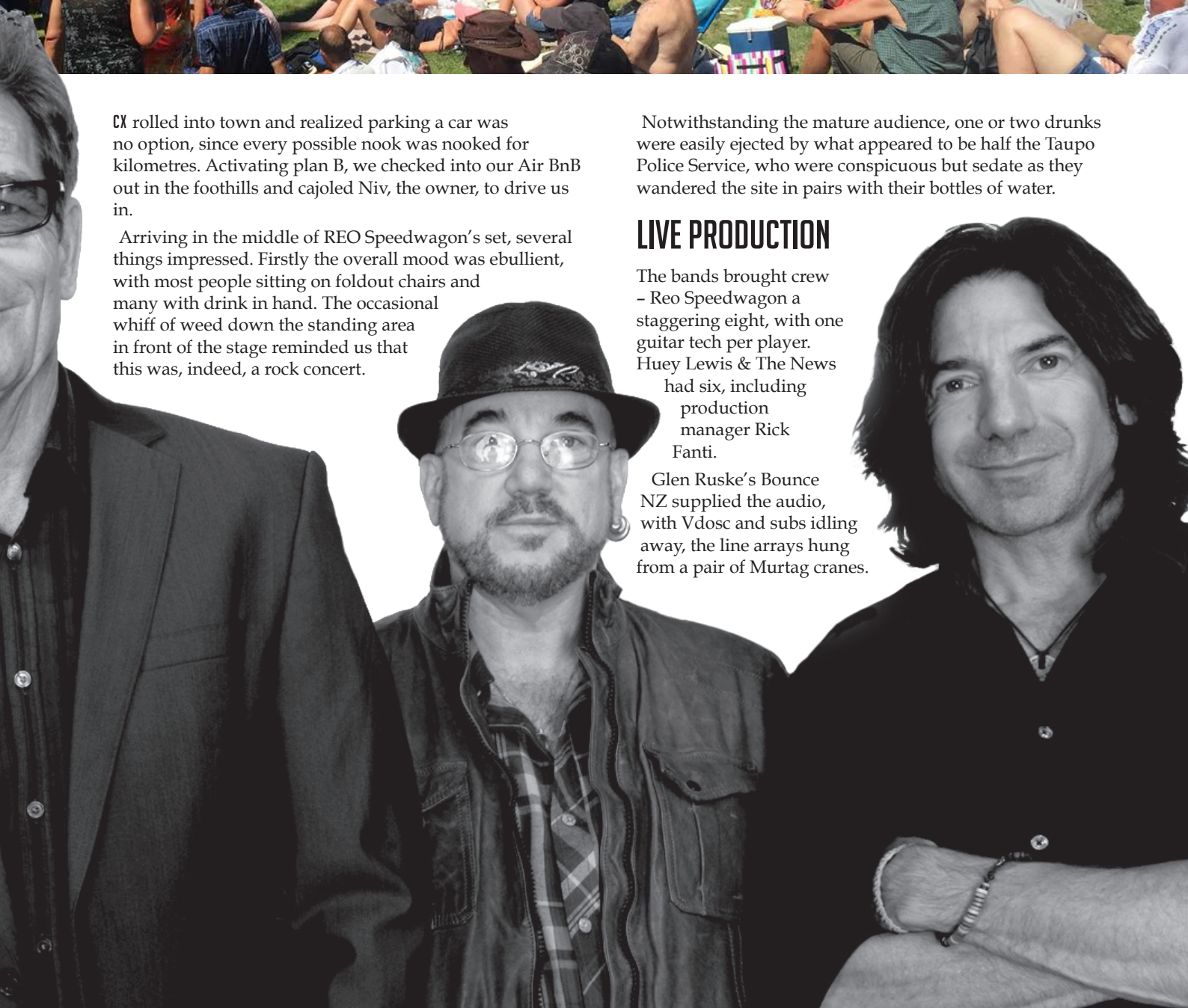
Arriving in the middle of REO Speedwagon's set, several things impressed. Firstly the overall mood was ebullient, with most people sitting on foldout chairs and many with drink in hand. The occasional whiff of weed down the standing area in front of the stage reminded us that this was, indeed, a rock concert.

Notwithstanding the mature audience, one or two drunks were easily ejected by what appeared to be half the Taupo Police Service, who were conspicuous but sedate as they wandered the site in pairs with their bottles of water.

LIVE PRODUCTION

The bands brought crew – Reo Speedwagon a staggering eight, with one guitar tech per player. Huey Lewis & The News had six, including production manager Rick Fanti.

Glen Ruske's Bounce NZ supplied the audio, with Vdosc and subs idling away, the line arrays hung from a pair of Murtag cranes.





HUEY LEWIS HIMSELF



Tech manager Andre Goldsmith from Hangup Entertainment in Christchurch explained that the amphitheater in Taupo needs the top boxes higher than the stage roof hang position, to get sound into the large VIP tent along the top.

Before Murtag came good with the pair of cranes, Bounce would deploy a delay ring of 15" and horn EV boxes, which were still used this year despite the line array having better trim. Bounce system techs were Ben Rentoul and Simon Holdaway.

But this was not a smashingly loud show, indeed Speedwagon were somewhat louder than Huey Lewis. There is a sad backstory, as Jim "Bugsy" / "Oz" Moran who was the band's live sound engineer for 30 years died in December last year.

Bugsy wanted to come to New Zealand so he did - some of his ashes are at Taupo.

Stepping into those large shoes was young sound engineer Matt Wilenchik who probably wasn't born when the band were charting their early hits. Matt told CX he was in the right place at the right time.

THE STAGE

Camel space structure built the stage at Taupo, Slb Inc did the stage down at Queenstown. Being a daytime show, a simple lighting rig of Par 64's on the front truss, and a bunch of LED washes on the back truss were there to fill out any shadows from clouds.

Surprisingly there was no backdrop, just the slightly grubby white PVC stage roof back curtains. These were backlit by the afternoon sun by the time Huey Lewis & The News appeared.

The backline came from Backline NZ in Christchurch.

Once Speedwagon finished their set, they retired to the leafy compound on stage right. Inside this fenced oasis, catering and calmness replaced the massed hoards and the (necessarily evil) queues to the many toilet trailers outside.

A half hour changeover later, Huey Lewis & The News rolled out, a surprisingly good live band with 2 guitars, bass, drums, keys and three brass. Huey plays a mean mouth harp which with baritone sax, characterizes their sound.

For me, Matt mixed the set too quietly. It was somewhat lacking anywhere uphill from the mix tent. Indeed at the VIP area conversations were audible, and it was akin to watching a pre recorded show on the one giant LED screen.

But there were no complaints, just a blanket of happiness from the crowd. Well done everyone!



RICK FANTL
PRODUCTION MGR

MATT WILENCHIK
FOH ENGINEER



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**HUEY LEWIS
AND THE NEWS
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LISTEN HERE

BY ANDY STEWART

CUTTING THROUGH

There are countless musicians, producers, engineers and even punters out there of the opinion that a good song will always 'cut through'. It's an old cliché – that a good song is what first grabs a listener's attention, and nothing, not even bad mixing, could ever prevent a *great* song from connecting with its audience.

But this is rubbish.
In truth, the opposite is true.

Songs and their success are a fragile combination of synchronous events that are easily knocked off balance anywhere along a production's timeline. This untimely, momentum-sapping bump might occur during the recording session, the mixing or mastering stage, or even as a result of a dodgy video. Sometimes the lack of cash to promote a song is ultimately to blame, at other times it's the band's manager – who's sometimes a clown better known for his skills on a unicycle.

Whatever the cause and regardless of when it occurs, one thing's for sure, great songs are *not* the robust, infallible, sure-bets the old cliché would have us believe. To assume they are is naïve thinking so detrimental to your process that it may just stop your next potential hit from ever reaching its audience.

And don't think for a moment that your song is the only one worthy. There are great songs everywhere, it's just that the vast majority lack one or more of the crucial ingredients required to make them a hit.

One of these is the mixing process – that amorphous, deceptively delicate stage where everything is laid bare and a song can either be made or broken.

Far too many artists get this stage of a production terribly wrong. Some try to do it themselves,

ANDY STEWART OWNS AND OPERATES THE MILL IN THE HILLS OF SOUTH GIPPSLAND. HE'S HAPPY TO RESPOND TO ANY PLEAS FOR RECORDING OR MIXING HELP...

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figuring the process to be little more than a few fader moves and compression, failing miserably as a result. Others, having spent their entire budget on the recording phase, get someone to mix it for them as a 'favour' to the band – this rarely works out (or does anyone any favours in the end). Then there are the unlucky ones who actually pay good money for a mix engineer, but *still* get a bad outcome.

THE UNKNOWN 'CLASSICS'

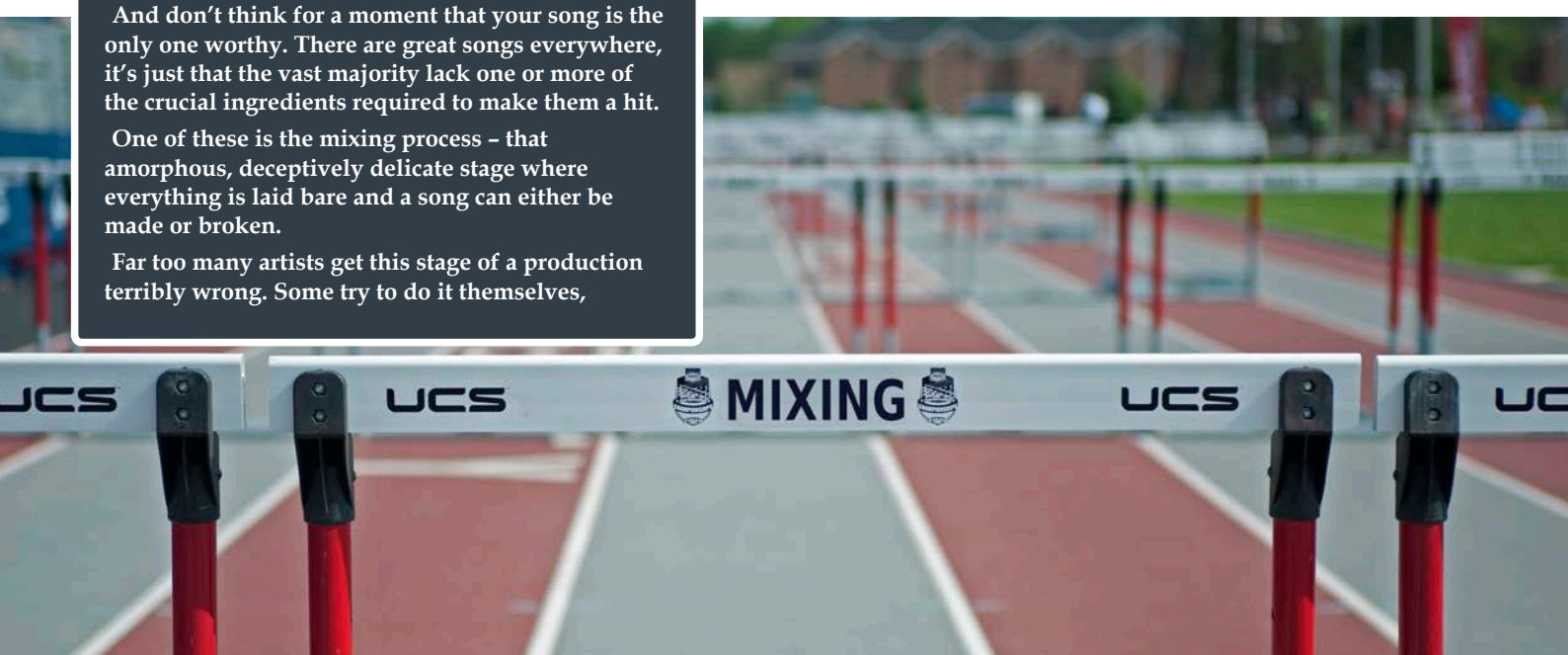
A great song badly mixed can be disastrous. Your potential hit can be turned into an ugly duckling in the same way a terrible paint job can ruin the look of a house. It is almost certainly *not* the case that your great song will survive such ill-treatment and succeed anyway. If you're thinking it might, think again.

Most of the good songs that are mixed badly are the one's you've never heard before, and there are literally millions of them. In the vast majority, these songs never reach a listening or viewing audience because the people in charge of programming television and radio habitually ditch them before they ever see the light of day. There may be other reasons why a song doesn't grab a programmer's ear of course, but you don't want the mixing process to have been one of them (the fewer technical impediments to your song 'making it' the better).

There are far too many artists and bands in Australasia who fail to recognise this simple fact. As a result, most of them spin their wheels in the industry and quickly dissolve back into the general population.

If you want your music to make an impact you have to assume that no-one is listening, and understand that until you get someone's attention – or the attention of someone whose job it is to listen, like a radio DJ – you won't make inroads.

The way to do this is with a great musical product, not just a great song, and that must include decent mixing. Combined with your impressive song, a fantastic mix takes your recording to new artistic heights, making it more compelling to anyone who hears it.



Don't forget you're trying to *reach* people with your music, so if your great song can be made to sound so amazing that a radio programmer gets excited like a prospector who's struck gold, the next thing that happens is that thousands of people will have the same experience via the airwaves. Radio programmers are looking for things to play – things that will make them look like they've got their finger on the pulse. They're not looking for things to ditch, so if you get them excited they will be your ally.

A dull, lifeless or stodgy mix meanwhile will have the opposite effect. People in charge of programming can be quickly turned off by the lack of clarity and detail in a mix before they've even heard the song itself. I would argue that it takes about 15 seconds for someone to decide they like a song, but about 5 for programmers to decide it *sounds* bad. Based on this theory alone, your great song has just tripped on a hurdle before it's even had a chance to prove itself. And now, sadly, it's game over.

HIRING A PRO

When I mix a song for people – and at the risk of blowing my own trumpet here – they often say: “Andy, what did you do? It sounds bloody amazing.”

My answer is always a deflecting statement like:

“Well, a lot of things really... where do I begin to explain my process?”

The point here is that most people – and I really must, without any sense of passing judgement on them, include most musicians in this – don't really understand what it takes to make a great mix.

I've said it a thousand times, but I'll say it again. Mixing is a complex art form that takes years to master. It's not something you can necessarily pull off just because you played on the recording, or because you're sensitive to music, or indeed because you're a great musician.

It is far beyond the scope of this rant to explain what mixing is, or what a good mix engineer does, but suffice it to say, it's not something you should entrust to a friend or band mate if you hold high hopes for your newly recorded single. Just because you like cars or drive them well doesn't mean you know how to build one... leave that to the professionals if you can afford it.

WHO TO CHOOSE?

Let's just for a moment assume you've decided to employ a professional to mix your next single. Once that decision is made, how do you choose the right person for the job?

Like any industry, the audio profession has its experienced masters and its charlatans. Picking the right person from an alphabetical list is therefore fraught. If you go with Aardvark Audio you might just get one of the turkeys, and besides, lists aren't something most good engineers I know ever sign up to anyway.

One of the best ways to find the right person is to ask around amongst friends and colleagues, to see if the same name crops up repeatedly. It might be someone these colleagues have had first-hand experience with, in which case it's probably worth quizzing them about how easy that engineer was to communicate with, did he or she have their own studio, what were the costs, and did the mixes ultimately exceeded expectations? If you also discover, after some simple internet searching, that the individual in question has mixed some of your favourite records, then maybe the planets are aligning.

It's very important that this person feels like they're on your wavelength. If the first phone call to them makes you feel ill at ease, or if their personality seems to clash with yours, maybe you should look elsewhere. If, on the other hand, they seem affable and open-minded about the project then maybe they're worth meeting face to face. A chat over coffee or lunch is often the best way to introduce a new personality to your musical venture, outside the studio walls preferably. If you like them, respect the work they've done with others, can afford them and if your calendars sync then go for it.

If you think your song is great, give it every possible chance of succeeding by making sure the mix is awesome too. There are thousands of great songs out there, don't forget. Don't let yours be one of the ones that fail to capture an audience because the mix is ho-hum. Life's too short.

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Live Web Streaming

Moreland City Council goes Online

Putting together a broadcast quality, multi-camera live event and streaming it reliably in HD to web was, until recently, very much the domain of big budget studios. However, with some technical savvy, research, and good advice, Moreland City Council in Melbourne's inner north have managed to build an affordable, partly automated, high quality system that does just that. Jason Allen went on-site and online to see how it's done.



Control Room

Moreland's Manager of Communications and Customer Service, Marco Bass, is more qualified than most to build a broadcast quality system from the ground-up. As Head of News and Current Affairs for the ABC in Victoria, he helped create and automate the system at ABC News Breakfast, which eventually became the technical operating model for ABC News 24. He'd also consulted to the Supreme Court of Victoria to web stream judgements. "When I arrived at Moreland at the end of 2012, there was an appetite for open government initiatives and the use of video," explained Marco. "There was money allocated for the overhaul of the AV fitout in the council chambers. I put it to management that it was an opportunity, for not very much more money, to create the capacity to web stream."

Moreland's goal was to make their regular council and planning meetings accessible to a much larger audience than could physically attend, and then available for viewing in an archive, as a permanent record of proceedings. "We wanted to make all the processes of council as available as possible to the public," Marco continued. "The council chamber is quite small, and if you have a gallery of more than

30, they spill outside the room. A recording of these meetings is a much more meaningful, real and accurate record of what took place than minutes taken by governance officers. Anyone with a computer or who can go to a library can watch and experience the meeting."

Planning Permission

An entire system to stream events to the web is not something that you can buy off-the-shelf. Image and audio capture, audio and video mixing, switching, transport and streaming are all technologies

supplied by a wide number of different manufacturers, and may or may not integrate well with each other. "I was aware of the new technologies that were becoming available for organisations to stream their own content," Marco expanded. "I understood that media capture was becoming affordable; there are good quality PTZ cameras that will capture a nice image. I knew there were video and audio routers and mixers that were pretty affordable. What I didn't understand was how it would integrate with the IT environment at Moreland, and how we would ultimately connect to the net and choose a streaming service."

That's where Peter Charalambous, Senior IT Infrastructure Officer at Moreland, stepped up. "Trying to find something in the market that was affordable and could do what we wanted was a struggle at the time," Peter reflected. "There's a

Peter Charalambous in the control room



lot of technical things that happen in the background that most people aren't privy to. One of our biggest requirements is that we have to have an isolated recording of all our mics. We have to do a full video and audio mix before it goes out, put a 'defamation delay' on the feed for legal reasons, and watermark it. It's like doing two sets of mixing, so you need two operators."

Public Partnership

Having identified some key products that would form the core of the system, Marco and Peter then approached integrators for their opinions and quotes, and decided on Rutledge AV to carry out the work. "We chose Rutledge AV because of their proven expertise in delivering technical solutions," explained Marco. "Their solution was the simplest and most intuitive. They were creative in their solutions and were using the latest technologies to do it."

"There was an evolution in the project as we worked together to meet Moreland's needs," said Greg Launer, Project Manager at Rutledge AV. "In the council chamber, we implemented an AMX room control system, integrating some existing Extron equipment to handle video and projections



Marco Bass



for presentations. In addition to control panels on the wall, there's wireless iPad control via AMX's app."

Perfect Platform

"For the audio processing and automixing, we utilised BSS Blu DSP," Greg continued. "Three Sony BRC Z330s capture image, and we used a combination of Blackmagic's ATEM Production Studio and HyperDeck for switching, mixing and recording." The last piece of the puzzle was how to stream reliably and affordably to web, and Marco and Peter had discovered Livestream, the US based company that provides an end-to-end streaming solution with hardware, software and a cloud-based content management system.

"The Livestream platform itself is unique in terms of what it can do," said Mark Hall, Business Development Manager at Corsair Solutions, the Australian distributor for Livestream. "It's scalable without any additional cost, so it doesn't matter if you have one, 100 or 100,000 people viewing. Traditionally, content delivery networks charge per hours or users. Once you go above that, you pay more. Livestream doesn't do that. You have

unlimited bandwidth, storage and viewers, and no ads. It also adapts to whatever device connects to it. For example, if you connect with a web browser like Safari, it gives you an http stream. If you connect with an iOS device, it gives you an adaptive multi bitrate stream as needed."

Producing the Production

Peter and Marco began streaming with Livestream Broadcaster, a single piece of hardware that accepted an HDMI input it would then send to web. They have since upgraded to Livestream Studio, which can also handle switching, mixing and graphics. It's tightly integrated with the ATEM Production Studio. "Livestream has been the game changer for Moreland," added Greg Launer of Rutledge AV.



"They're utilising it really well. The quality of the image is better than some alternatives. It's sharper, there's no real delay and it doesn't feel compressed."

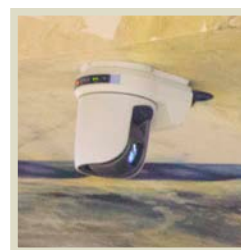
A rack in the council chamber houses the majority of the equipment, and sends a mixed feed to a separate control room where two operators work on the stream to web. "The chamber's rack is on its own network," said Peter Charalambous. "Once the signal leaves the rack, and goes to the control room, it hits our network and we're able to broadcast it. We're recording



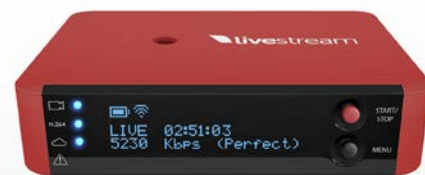
everything in the rack as a clean feed. The feed to the control room is a dirty feed, a combination of all the mics and programme which we produce to the internet, and that's when it becomes IT traffic." "We stream the meetings with a single operator and producer," added Marco Bass. "I knew we couldn't produce it in an entirely automated way. If you look at some organisations that have tried to do that, you end up with a horrible quad screen that fails to produce a watchable programme."

People Power

What kind of advice would Marco and Peter give to other community organisations looking to add web streaming to their capabilities? "Infrastructure," stated Marco. "Any organisation that's thinking about doing this needs to think about what their connection to the internet is." "We had to change our network infrastructure," Peter expanded. "All our network traffic goes to our data centre via dedicated fibre. We have a speed close to 900 megabits per second. We're pumping out HD video and Livestream does the rest."



Above: Sony BRC Z330s
[L] Rutledge AV's Greg Launer



With increased community participation and a broader viewership, has web streaming changed the nature of Moreland Council's meetings? "It has changed the behaviour of the councillors; it's had a civilising influence," Marco observed. "There have been television stations that have been covering the behaviour of councillors that have broadcast material from our recordings on their television news stories. There's an awareness that the material is out there and accessible, and people are watching. Our peak audience of unique viewers is around 250, which is 10 times the number of people who can physically attend. Whichever way you look at it, that's a much higher participation rate than our physical attendance, and it's growing. The accessibility for the public is an important step. The next stage is to allow citizens to Skype their questions in. It makes the organisation more democratic."



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Antari F7 Smaze

Dual mode versatility

BY JIMMY DEN-ODEN

Granted we've only done it a few times, but it seems like every time we review an Antari product here at CX we have a tonne of fun with it. The F7 Smaze might be the best fun yet.

The F7 Smaze is a dual purpose machine which comes built into its own roadcase. It's designed to perform both fog and haze duties in larger venues. Despite its stout appearance and 52.5kg weight, the unit only requires 1650W to operate and, from the time you apply power, it takes six minutes to warm up and be ready to go.

As mentioned, the case forms part of the unit itself, which is quite a clever idea. Removing the front cover reveals the output nozzle and a rather large fan adjacent. The fan can be tilted from vertical through to horizontal and locked in any of nine positions covering this range. Forgotten to tilt the fan out? Not a problem – a large air intake on the base of the unit allows it to operate correctly even when folded in.

The rear cover is split into two sections and hinged – opening the upper section gives access to the PowerCon mains and XLR DMX inputs as well as the control panel, which is a two-line backlit LCD affair. Simple and effective. Opening the lower section of the rear lid allows access to the fluid reservoirs. Fluid consumption is 140ml/min in fog mode, and a miserly 28ml/min in haze mode. I like that there's a notch through which the cables can freely pass, so once the power and DMX is connected you can close both rear lids completely. If you don't want to connect DMX, you can use the unit in standalone mode or instead control it via the included Wireless DMX.

DMX control is a simple business, and requires only three channels. The first chooses between fog and haze mode, the second controls fog/haze volume, and the third fan speed. There's even a self-cleaning feature – once you're done with the machine, activate this mode and it will clean itself then shuts down.





I can't ignore the fact that when you fire it up in anger, the F7 Smaze gets pretty noisy. In all fairness though, it's making a lot of noise because it's making a lot of fog. A 10 second burst in the studio was more than enough to get the point across, and indeed once I opened the door the effect migrated out to the rest of the office. The F7 Smaze does have a limit to how long you can continuously run it, but by the time I reached this I couldn't see a thing for all the fog in the room. I suspect this has been imposed to allow it to operate without using crazy high current. For most users the duty cycle should be more than adequate.

I like the results of using the F7 Smaze. The quality of the haze it produces is good, and I like the way it lingers. This means you don't need to use as much of it. While I don't see a massive distinction between the fog and haze modes, I don't think it really matters. The F7 Smaze is good clean fun, and I was pleasantly surprised to find the price was about half what I expected it to be.

BRAND: ANTARI
 MODEL: F7 SMAZE
 RRP: \$3120.00 INC GST
 PRODUCT INFO: WWW.ANTARI.COM
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RUSH MH6 Wash

good things, small packages

BY JIMMY DEN-ODEN



What a cute little thing the RUSH MH6 is. From the front it looks a bit like a Mac Aura, and a bit like a RUSH PAR 2. It is in fact the case that both these units inspired the design of the MH6 Wash. I think this is a really sensible move on the part of Martin. The Mac Aura lens not only looks great and works well, it's something they've already spent the time developing and refining. Metaphorically speaking, Martin had a pretty good wheel so they didn't need to invest time and money trying to re-invent it.

The motorised lens offers 10 to 60 degree zoom range, which is tight enough to provide convincing beams, and more than wide enough to make use of the full available output of the fixture. The light source is 12x 10W Osram Ostar RGBW LED modules, and while it's not about to set the world on fire, the 2000 lumen output is certainly more than respectable for the very modest size of the fixture.

For the past two weeks I've been staring at the MH6 Wash sitting amidst a row of much bigger discharge based fixtures in the ENTECH lighting shootout. While it certainly doesn't keep up with the big guys, it definitely doesn't disgrace itself in the presence of some much bigger guns. Size and price considered, the MH6 stands up well. It's also a lot quieter than most of the other fixtures. Being a LED source, the fixture doesn't actually generate a lot in the way of heat when it's



BRAND: RUSH BY MARTIN
MODEL: MH6 WASH
RRP: \$3100.00 INC GST
PRODUCT INFO: WWW.MARTIN.COM
DISTRIBUTOR: WWW.SHOWTECH.COM.AU



dark. An on-demand cooling system keeps the LED chipset cool when it's running, and the fixture quiet when it's not. I like that.

Pan range is pretty standard at 540 degrees, while the 200 degree tilt range is a little shorter than common but still perfectly usable. Setup is via a two-line backlit LCD display with four adjacent navigation buttons. It feels a bit cheap, but it gets the job done and once the address is set it doesn't really matter how it feels. Four dimming curve choices plus an electronic "shutter" give plenty of options for dimming looks, while 36 colour presets make for quick looks across many fixtures. Dimming, pan and tilt all feature 16 bit control too, which is an unexpected feature on a fixture at this level. Bonus!

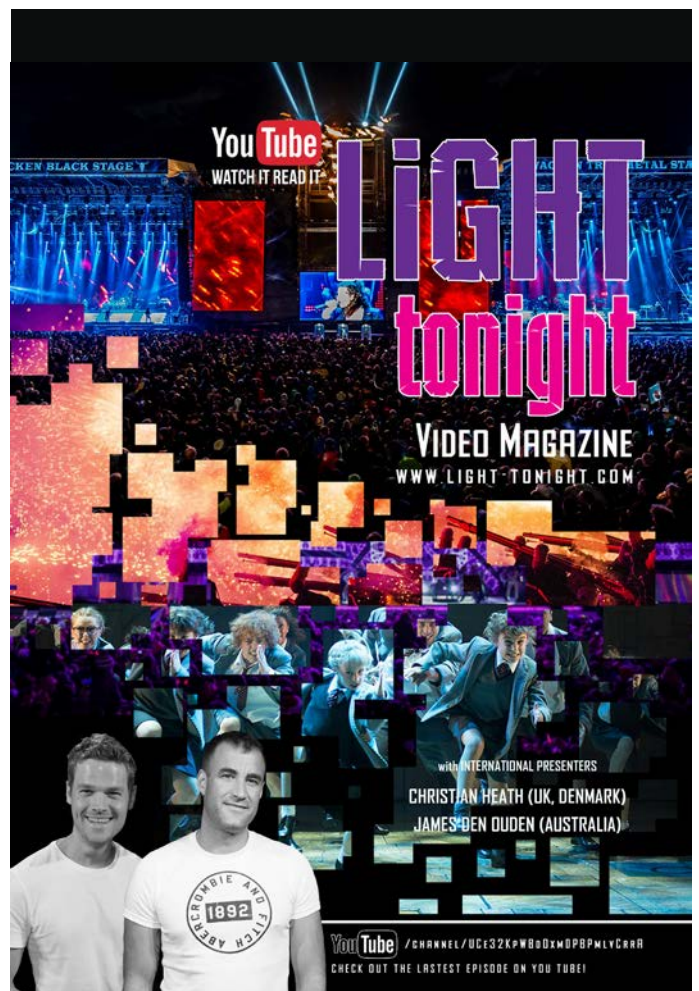
At 7.1kg weight the MH6 is dead easy to handle and rig en masse. PowerCon plus DMX on 3 and 5 pin XLR all with loop throughs make it efficient to patch. 155W power consumption means you can run a stack of MH6 units off a single 10A power feed. Even the price makes it easy to use a lot of these things. MH6 Wash is a competent if compact LED fixture, and comes at a very attractive price indeed.



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Jands HUB XCD

Bright ideas for dimming

BY JIMMY DEN-ODEN

With LED light sources rapidly gaining traction in the lighting market it's only logical that an inherent need for new power distribution and switching solutions will follow. The Jands HUB XCD is designed to address not only this requirement, but also the crossover from conventionally dimmed units to LED sources.

The form factor of HUB XCD is tall and slim, and there's a companion output patch product available in the same design. It's absolutely designed as an installation product, so it's no surprise that the mounting and supply cabling options preclude use of the HUB XCD as a touring box. Mounting is via a heavy duty bracket which attaches to the wall, and then the unit itself hangs on the bracket. The HUB XCD weighs around 35kg so you'll want to make sure the bracket is well attached to a sturdy mounting point!

HUB XCD looks like a dimmer, but it's more than just that. It provides 24x 10A channels, with each of these able to either operate as a dimmer or supply hot power via relay bypass. An additional isolation relay allows each channel to be completely shut down when not in use, removing leakage current entirely. An added benefit of these relays is that they allow the dimming circuit to be bypassed when the channel is at full (this happens only after a set time period), allowing the unit to run cooler.

While each channel has its own 10A RCD, it's important to note that the cumulative total loading per phase must not exceed 63A. So if you load up 6 channels to capacity per phase, you're left with 3A between the remaining two channels on that same phase. This might sound like an odd limitation, but remember for a second that that this is very much a crossover product. If you just want plain dimmers you'd buy something else to start with. I think the 63A per phase ceiling represents a sensible compromise between capacity and cost.

The user interface on the front of the HUB XCD is a combination of pushbuttons and a touch screen with adjacent rotary encoder. The mode in which each channel operates is set and shown by illuminated buttons next to its RCD. Manual control over dimming can be achieved via the touch screen and encoder. Configuration of the unit is performed via the same interface, and a USB port allows for multiple configurations to be stored and recalled, as well as performing firmware updates.

Most if not all users will use the HUB XCD as a dimmer in some way or another. As you'd rightfully expect, external control is available via DMX512 as well as ArtNet. In addition to this, a serial port allows command strings to be input via third party controllers, so the unit can be fully integrated with other control systems. A pair of inputs allows for "cleaning" and "emergency" presets to be recalled via simple contact closure. The actions carried out upon closure of these contacts are defined through the setup menu on the touch screen.

Finally, for times when the venue is not in use, the HUB XCD can be put into sleep mode – in this condition all outputs are fully isolated and power consumption is negligible. When powering up from sleep mode, outputs are progressively turned on to minimise inrush current.

All told the HUB XCD is very much more than just a simple dimmer. With a wealth of control options and some impressive green credentials, I think it's a pretty smart piece of gear.



BRAND: JANDS
MODEL: HUB XCD
RRP: \$6395.00 INC GST
PRODUCT INFO: WWW.JANDS.COM.AU
DISTRIBUTOR: WWW.JANDS.COM.AU



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Audio Technica ATND971

Dante Boundary microphone

BY JIMMY DEN-UDEN



This is the first microphone I've ever seen which not only doesn't have an analogue audio output, but doesn't even have an XLR connector. A few years back we looked at some digital mic technology, but this is legitimately the first Dante enabled mic we've come across.

The ATND971 is a cardioid condenser desktop-style boundary microphone, which in itself is nothing really very revolutionary. Styling-wise it's quite compact at 110mm deep, and it looks pretty good too. A large illuminated capacitive type switch occupies the slanted front panel section. Around the back there's an RJ45 connector which serves both to power the mic and output audio from it.

In the same way we send phantom power over a mic cable, the ATND971 uses Power over Ethernet. This means you need to connect it to a suitable PoE network switch in order to use it – we did our testing with a Cisco SG200-08P, which worked just fine.

Once the mic is connected and powered up, you can route its output to one or more destinations on the Dante network via Dante Controller. It does exactly what you'd expect it to. Three different gain settings are available - +30dB, +40dB and +50dB. There's also an 80Hz low cut filter which can be engaged or bypassed. The front panel mute switch and indicator can be set to momentary on (PTT) or off, or toggle mode. When set to toggle, the power-up state of the switch can also be defined.

These functions are accessed via recessed push-buttons beneath the mic – press the button and look at the corresponding LED colour to determine the setting. Additional to local control, Biamp's Tesira, Bose's ControlSpace Designer and Symetrix's SymNet Composer allow these functions to be remotely controlled through software. In case you're using more than one ATND971, the "identify" function in Dante Controller can be used to make the switch LED flash.

The front panel switch status is available on the Dante network too, which means you can use the switch to trigger



BRAND: AUDIO TECHNICA
MODEL: ATND971
RRP: \$995.00 INC GST
PRODUCT INFO: WWW.AUDIO-TECHNICA.COM
DISTRIBUTOR: WWW.TAG.COM.AU

other actions on other devices – perhaps you need a setup where a PTZ camera moves to a preset position when a mic is activated. This is not only possible with the ATND971, but unlike other solutions it's possible to do it with a single cable to the mic. Very cool.

It's probably worth discussing specifications quickly. The ATND971 operates at a fixed sample rate of 48kHz, and has a frequency response spec of 30Hz-20kHz. Maximum input SPL is 117dB, and I think in the applications where this mic is likely to be found you're unlikely to approach, much less reach, this ceiling. The ATND971 is really more about conferencing setups, in places like boardrooms and convention centres.

The frequency response curve shows a little rise around the 5-10kHz region, and listening to the output of the mic I'd say it's certainly optimised for speech. Two interchangeable elements are available, allowing for omnidirectional or hyper-cardioid operation modes.

Since I am still trying to figure out a way to measure latency through the mic, I didn't do this during testing. Nor could I find a latency figure specified on the website or in the manual, perhaps because it could vary with the number of network hops involved? Anyway I don't expect the latency would be high enough to cause concern even when using the mic for live reinforcement applications.

Let's be honest for a moment here: if the ATND971 didn't have Dante, it would be just another boundary mic, and it would be really boring. But it does have Dante, and that makes it something quite special and unique. A whole world of routing options instantly becomes available, and none of it requires re-cabling or plugging – you just change the routing on a screen. The ATND971 is easy to deploy, it sounds good, and it works the way it's supposed to. I can see a lot of technical staff in a lot of facilities actually finding this a pretty exciting thing.



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When you do your best work in the dark

BY JIMMY DEN-ODEN



Very occasionally here at CX we decide to review something a bit out of the ordinary. Once we reviewed a roadcase, then there was the time we reviewed an inflatable glowing thing called the Airbase. Some of these products are called for more frequently than others. Sometimes we decline to review things on the basis they're just a solution looking for a problem. The RacLite from Penn Elcom is a solution to a very real, and very long standing problem.



BRAND: PENN ELCOM
 MODEL: RAD-M23 RACLITE
 RRP: \$145.00 INC GST
 PRODUCT INFO: WWW.PENN-ELCOM.COM
 DISTRIBUTOR: WWW.PENN-ELCOM.COM

Yes. We're reviewing a rack light. I once worked for a guy who used to buy a lot of cheap gear. The first request we made for rack lights was met with an Ikea bedside lamp which wasn't really suited to the job. When we broke it after one gig, it was eventually replaced with an actual rack mount light with goosenecks and halogen globes, wired in series so when one globe popped the other one stopped working too. It was pretty much the worst. All I wanted was to be able to see what control I was adjusting in the rack. Around this time I began carrying a torch to every gig, and the habit has stuck.

If only the RacLite had been around 15 years ago. It would have solved my problem, it would have lasted, and it would have cost less than the sum of all the cruddy solutions which never worked. How has it taken this long for somebody to get it right?

The RacLite from Penn Elcom is at its core a very simple device. It's a 1mm metal casing with a switch on the front, a DC socket on the back, a universal power supply in the box, and 25x cool white (6500K) LEDs mounted inside. The power switch is illuminated even when the lights are off, so you can find it even in the dark. The casing focuses the light downward along the face of the equipment above which it is mounted in the rack. There's no glare. Penn Elcom has absolutely got it right, which sounds insignificant except that I reckon they're the first people to have ever done it this well.

The spec sheet says the RacLite is IP rated, and while I have my doubts about the claimed IP65 rating, I do think it's probably way more moisture resistant than anything else in your rack is likely to be. It's certainly very tough – while I didn't actually try this I'm fairly certain I could hit this thing with a hammer and it would keep working. A nice touch is the included international power supply with selection of plug adapters, so you can use it most anywhere.

For perhaps the first time in history, the RADM-23 does exactly what a rack light needs to do. Full marks to Penn Elcom for solving a problem which actually needed solving.





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Editorial by Cat Strom

Adam Lambert Photography: Troy Constable

James Bay Photography: David Youdell

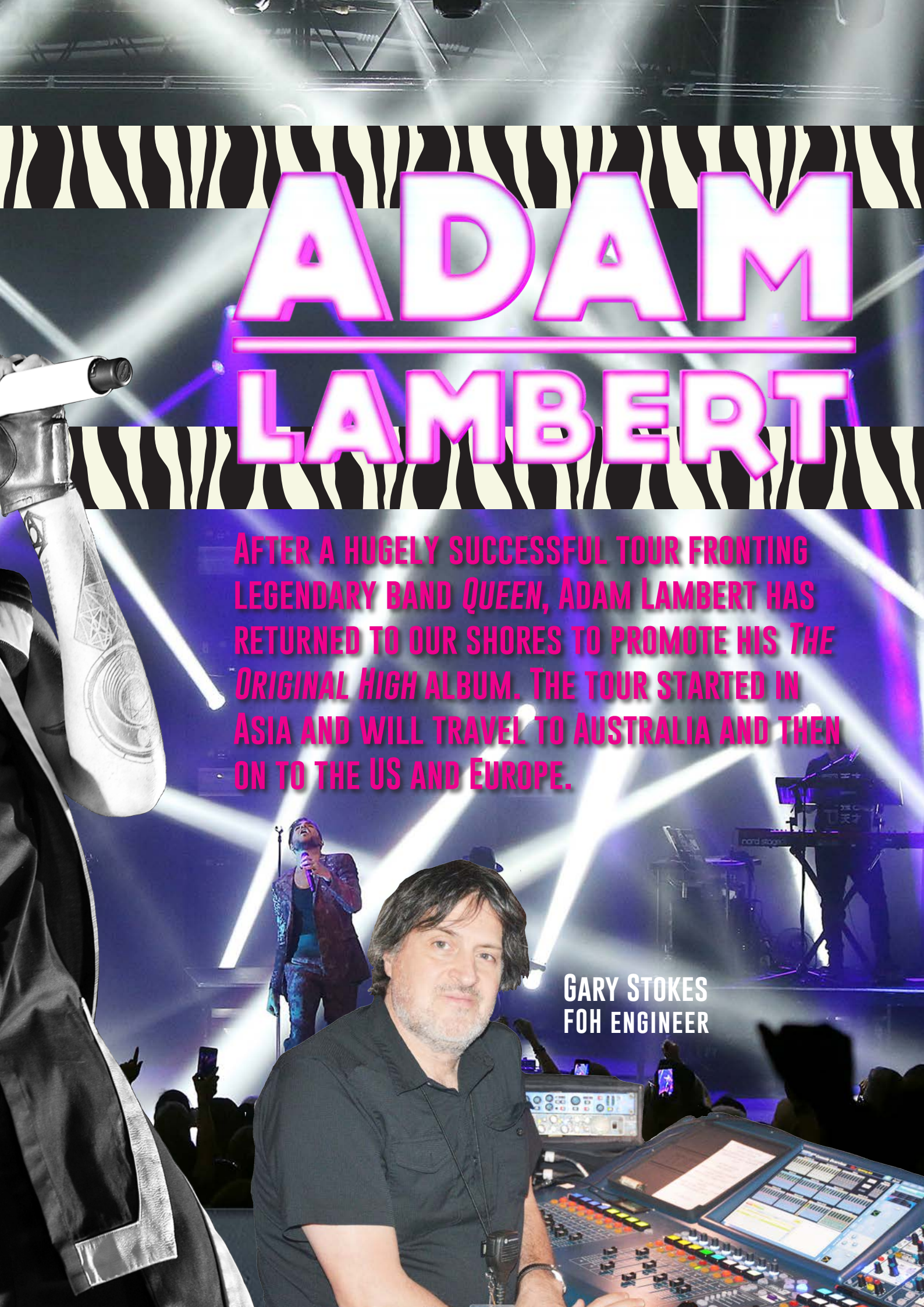
Short Stack Photography: Ashley Mar

Lighting was designed by Tom Sutherland whose biggest challenge was to design a show that would not tour equipment but still maintain high standards of design and production throughout every venue.

Tom chose equipment that was widely available worldwide. The rig is carried by thirty-seven Clay Paky Sharpy and twenty-four GLP impression X4 with fourteen Philips Vari-lite VL3500 Spot, four VL3500 Wash and ten Color Kinetics ColorBlast also added. Eighteen Stormy LED strobes and LED tape add special effect.

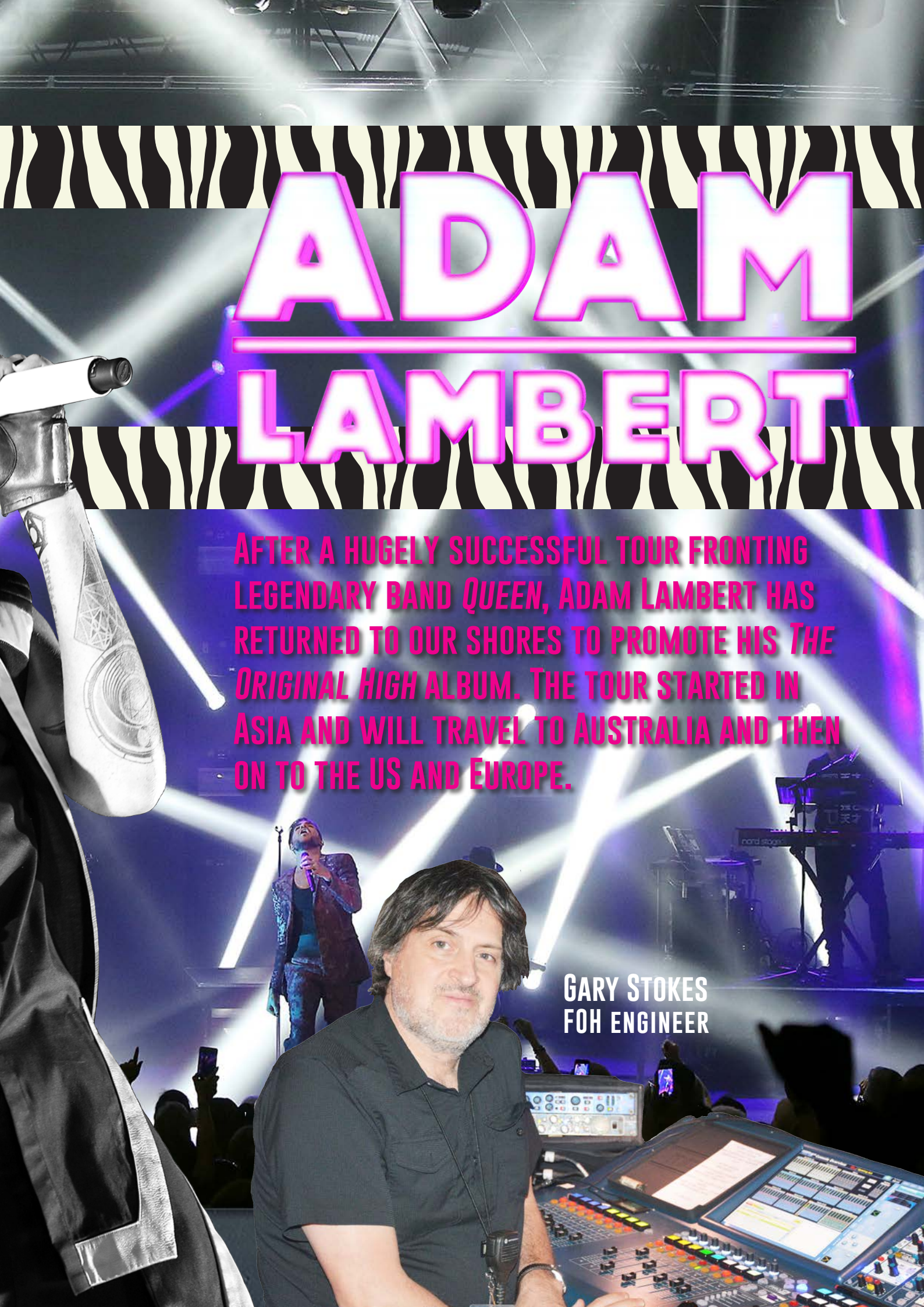
However as expected, none of this gear was available in China with lighting director David 'Gurn' Kaniski having to cope with Chinese 'Sharpys' and basically Chinese knockoffs of everything.





ADAM LAMBERT

AFTER A HUGE SUCCESSFUL TOUR FRONTING LEGENDARY BAND *QUEEN*, ADAM LAMBERT HAS RETURNED TO OUR SHORES TO PROMOTE HIS *THE ORIGINAL HIGH* ALBUM. THE TOUR STARTED IN ASIA AND WILL TRAVEL TO AUSTRALIA AND THEN ON TO THE US AND EUROPE.



GARY STOKES
FOH ENGINEER

"We didn't get anything specified on any of those shows which was a challenge to find the correct functions and libraries," said David. "The Sharpy aren't used for the first part of the show and then when we do use them, they have a frost and we gradually work our way into a Sharpy look. Tom has managed to get all the looks you can out of a Sharpy."

"This is the first time I've used the Stormy and I like it, but I have found a few quirky things with them; the challenge was copying them over to other Chinese copies or even an Atomic with a scroller, just because they are so versatile at low intensities whereas an Atomic is not. A Stormy can obviously hold their duration for a long moment of time so you can use them more as eye-candy. Trying to translate that into an Atomic is not easy, you really have to go right into the cue and create something to try mimic that cue. With the Sharpy knockoffs you can come fairly close although a lot of things like the strobe rates and gobos don't translate. The colours on the Stormy are nice and it's good to not have to worry about 'thermaling' out an Atomic."

The show is based on three sections, section one being a showcase of the new album, section two where the tempo drops and we see a more closed down look and then section three which highlights some of the Lambert classics.

"Each section needed its own special unique feel to it and it was essential that this was portrayed in the design and followed the tempo of the show," Tom revealed. "The design uses a mixture of both video and lighting elements to create different feels and aesthetics throughout the show."

The lighting design has a colosseum feel to it, there are four sections of video upstage which are broken up with a truss in-between, the trusses then continue either side of the stage stepping out slightly to help widen the space. There are then five raked trusses in the air which help open the space out further.

"You get a real sense of depth and scale with the design but it can be easily closed in for section two of the show," explained Tom. "It was important for me to design a show that would reflect the power and scale of Lambert's voice but also show intimacy and connection with the audience."

Tom's lighting is best described as BIG and one of the challenges for David was trying to squeeze it in to some of the venues on the tour.

"Adam wanted something big and tall which some of the theatres are not," he said. "Consequently we have encountered some rigging and weight issues, but we work around them. At The Enmore we basically had to break the video system in half and do ground support on the lower half, and rest the top half on top because we were overweight. Same with the lighting which we had

to manipulate a bit, by taking some of the vertically hung fixtures and placing them on the floor."

David is a Hog man using a Hog 4 console, and with limited programming time he needed a console he was fast and comfortable on.

When Adam Lambert toured with Queen last year Gary Stokes was looking after monitors, mixing concert sound for an audience of one! Now mixing FOH, he has the difficult task of trying to reproduce Adam's last album which was heavily reproduced with many non-traditional sound sources and treated vocals.

"It's hard to recreate live with typical live sound gear so we rely on backing tracks for weird sound effects and strange sounds," commented Gary. "There's a little bit of playback that goes on and part of the challenge is mixing the playback elements with the live band elements."

Gary was mixing on a Midas Pro 2 console stating that he believes they work better than most other digital consoles and suit his methodology.

"To me, they sound more like a good analogue console and the way the EQ and internal compressors respond feels more like an analogue," he said. "I believe I get closer to the best of both worlds with the Midas Pro 2. It's not quite the analogue domain but it's a lot smaller and lighter than some of the analogue consoles."

Gary carries a tc electronics reverb and delay as he finds it more user-friendly than the consoles internal equivalent and he prefers not to have to page to internal stuff on the console in the middle of a show.

"With Adam there's a little bit more reliance on reverb and delay in the show which needs to be less pre-programmed and have more immediate changes show to show, depending on what the room is like," explained Gary. "It's a bit unusual but it definitely helps for Adam."



DAVID 'GURN' KANISKI LIGHTING DIRECTOR



"Most engineers would like that but with Adam I prefer a livelier house with a little more reverberation that gets back onstage as that seems to make him more comfortable," he explained. "I have to be more aggressive using the digital reverbs to create a sense of space but if I'm doing that for the audience, he's not really getting that back at him. Acoustic reverb is much better with Adam than all digitally created reverbs."

Adam had his own ideas when it came to microphone choice and several of them were tried including vintage microphones, modern capsules in vintage microphones and even a microphone that lights up from the inside. In the end, wired and wireless Telefunken mics were chosen.

"We had them on the Queen tour and they work very well for his vocals," Gary said. "I'm a big fan of the good quality modern dynamic mics like the new Heil and Telefunken mics. Some of the newer dynamic mics are a revelation for me as I'm a fan of condensers typically, having used them for many years. I find the newer dynamics have a wider frequency response, tighter pattern and they're a lot more usable than they used to be."

Shure PSM1000 wireless monitors were used with a variety of in-ear models including JH Audio model. Monitor engineer Dave Retson had his work cut out for him as Adam is a very challenging artist, fussy about the sound onstage and in his in-ears.

"He likes it to change quite a bit depending on what the music he's singing against is, where he's singing in his register, how loud or how soft he is singing - there's a lot of change in what he requires which makes it a busy night for the monitor engineer," added Gary.

Gary uses internal delays for all the other instrumentation and Adam's vocal as well as onboard reverbs for all the instrumentation.

"The Midas has really good dynamic EQ and has a phase alignment tool, in fact it has a lot of things internally that are a little unusual in the digital domain and help out a lot," added Gary. "I pretty much have all the effects slots used up and I use them all."

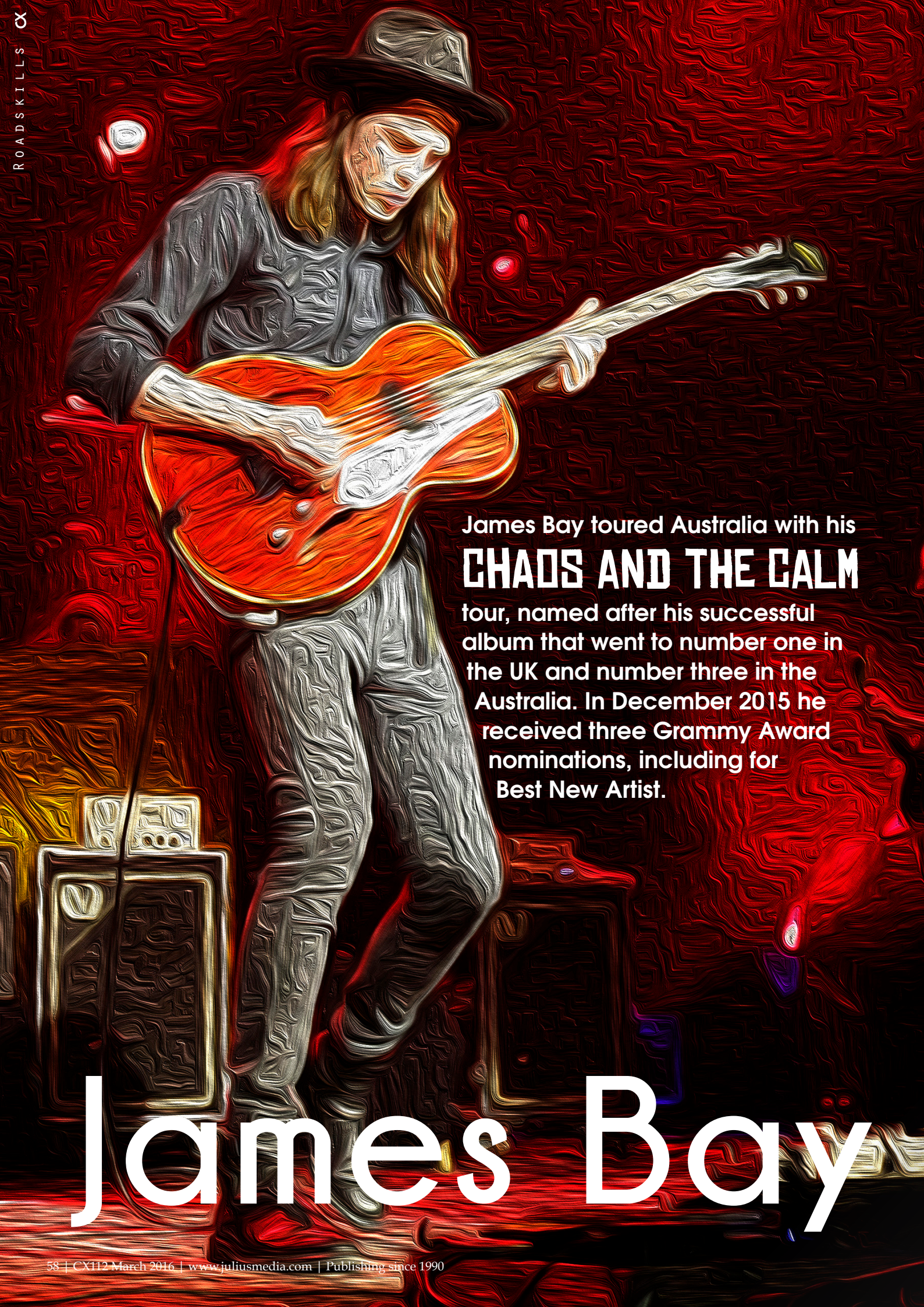
As Adam is a very dynamic singer, often pulling out his in-ears to listen to the house, Gary has to be particularly sensitive to what is happening in real time on the stage. The gig at The Enmore was a full house with a boisterous crowd resulting in a dead room, according to Gary.



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James Bay toured Australia with his
CHAOS AND THE CALM

tour, named after his successful album that went to number one in the UK and number three in the Australia. In December 2015 he received three Grammy Award nominations, including for Best New Artist.

James Bay



The extremely affable Liam Tully has been alongside James as his star has risen, having previously been Vance Joy's lighting designer in Europe. On this tour he was pleased to have Simmo (the best tech in Australia according to Liam) as his crew chief and Chameleon supplying the lighting.

Lighting Designer - Liam Tully





The show in the UK utilized a lot of tungsten light with Kinesys running pantographs however the show needed to be trimmed down for Australia.

"Basically I've just removed the larger items so it's really now a rock show with every fixture, apart from the molefays, a moving fixture," explained Liam. "It's big, bold looks with large gobo looks and a lot of sweeps into the audience. There's a lot of strobe and a lot of backlight as well, in fact nearly everything is done from the back. There is front light in the show including follow spots, but everything is lit from behind."

In the air there are twenty Martin MAC Vipers with ten MAC Auras for wash and six Atomic strobes. On the floor are eight more MAC Vipers and twenty-two Ayrton MagicBlades as a back wall of light.

"The Viper is a really versatile fixture but the main reason I chose it is because I can get it worldwide," commented Liam. "Also, I know there's always good support from Martin. I love the Auras, especially the Aura XB, but I'm not going to lie - I much prefer the Clay Paky B-EYE. However, you can fit six Auras in a case as opposed to only two B-EYES so when you're limited to truck space that's important."

The Ayrton MagicBlades are run in full channel mode with Liam running effects and a little bit of pixel mapping through them.

"To be honest, this tour has been really easy as I've done this show before on different continents so I just sent Chameleon a plan with a patch, turned up on the first day, plugged my USB in and the show just worked!" said Liam. "Chameleon are one of the best companies in the world, in my opinion. Simmo has just made this show work and he's a great technician."

For control Liam tours a MA Lighting OnPC command wing as back up or main console if he can't get a grandMA2 light, which he could in Australia.

"I've tried most consoles and had experience of most consoles having problems," added Liam. "The grandMA2 just works for me. Any console can make the show look the same but I just want a console that I can trust and I really trust the MA. Plus it works for me as I can tailor the work surface to how I want and you can get them worldwide."

The Perth gig was disrupted by a massive downpour which resulted in Liam losing his all-important back truss of lights for the entire show.

"We used Frontier in Perth and they were amazing," said Liam. "Every light got wet so we made the call to turn them off before they all died. But we made the show work. We had the owner of Frontier - Jared Hawke - as one of my techs and he was great."

Liam is very impressed by the professionalism and competency of Chameleon and Frontier stressing that it's the technicians who make the show happen.

"Really I couldn't care less about the kit - it's the people who make the show work," he remarked.

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FOH SCOTT MULLANE



FOH was Scott Mullane of Aisle 6 who has mixed the band for several years - except of course when they split up for a while. He mainly used in-house gear except at Sydney's Metro where he hired in an Avid Venue Profile console as that is the console every other venue on the tour happened to have.

"It was just more efficient to keep them all the same," he said. "I'm not a fussy prima donna when it comes to gear and use in-house wherever



possible for budget reasons. The Metro had a Nexo Alpha system which I generally like, but The Metro's old analogue system is in various states of disrepair so you never know what is going to function the way it should. The PA is not fantastic for that room, the way it covers the room is not ideal but you can still mix on it."

Whilst Scott specified a Profile console his actual favourite is an Allen & Heath dLive but that was not practical for this tour as there are very few in the country at present.

"The Profile does a solid job, it's easy to use and everyone knows how to use it," he added. "The band wanted to tour a 'mini street festival' kind of vibe so we have quite a few support acts and the Profile is easy for other engineers to jump on."



Scott commented that mixing for Short Stack can be summed up in one word: LOUD. This is the opposite to his preferred quiet mix which he uses for his other main act Marina Prior.

"I do like quieter, more detailed mixing but given the SPL level of screaming fans it's impractical with this band," he said. "The PA would just disappear into the mix of screaming fans so unfortunately I had to learn some techniques to get above that without feeling like I'm hammering nails into people's skulls!"

Scott learnt to tame the top end whilst keeping the vocal present and out front. For the lead vocal, he takes the input channel and splits it into two channels, compressing and EQing each channel separately.

"That way I can drive the vocal the way I want to through the PA," he explained. "Pretty much any show I'm on I have a palette of eight effects that I throw on the board, I may not use them all but they're there for me to grab at any time if I think they're appropriate for the room, band or style of music."

With Short Stack, Scott uses a very short plate on the snare and toms using the Profile's D-Verb. For main reverbs he uses the standard Profile Re-Vibe reverb; on main vocals he has a secondary longer plate as well as a medium and a long hall.

"It's tricky to find a good chorus on the Profile in fact I've been struggling for years to find one," he said. "The best chorus that I've found is to actually use the modulation on the reverb and turn the reverb pre-delay and decay all the way down. Then I'll have a slightly de-tuned pitch pan left and right for a short vocal double. I'll also have a slap delay and a standard tap delay. Unfortunately you will not see loads of cool plug-ins with me, I like to keep things very simple and the music benefits greatly."

Scott has a certain combination of microphones that he tours with Short Stack including Shure Beta 91 for inside kick, and Sennheiser E902 dynamic for the outside kick.

"The Sennheiser leads the way with the Shure Beta 91 down around 6db in the blend between the two," he added. "I find the Sennheiser has a really nice punch to it and that's pretty critical to Bradie's (drummer) style. I use the Beta 91 more for the subs."

An Audio-Technica ATM650 is used for snare top and a Sennheiser E904 for snare under. For hats and overheads, Scott uses Audio-Technica ATM450's which are small side address condensers that position well and are placed under the cymbals as they are quite high.

For guitars, Scott uses a Sennheiser E906 for lead guitar and an SM57, but for guitarist Shaun's Vox AC30 he uses an Audio-Technica ATM250DE, a dual diaphragm microphone made for kick drums.

"However, I don't like it on kick drums; it has a dynamic and condenser capsule in the one housing so I can put just the one mic on the guitar cab - it's like dual micing the cab but with one microphone which is efficient and works really well."

Vocals are all Shure Beta 58's that Scott picks up in each venue. The exception is Shaun's lead vocal which is a Sennheiser e945 in a wireless EW500 kit.

The bass player and lead singer also use Sennheiser EW300 IEMs with Ultimate ears whilst the other two band members use the in-house monitors and pick up in-house monitor engineers on tour.

"The band are rock'n'roll at heart so they're not super fussy about their in-ear mix as long as they can hear themselves," remarked Scott.





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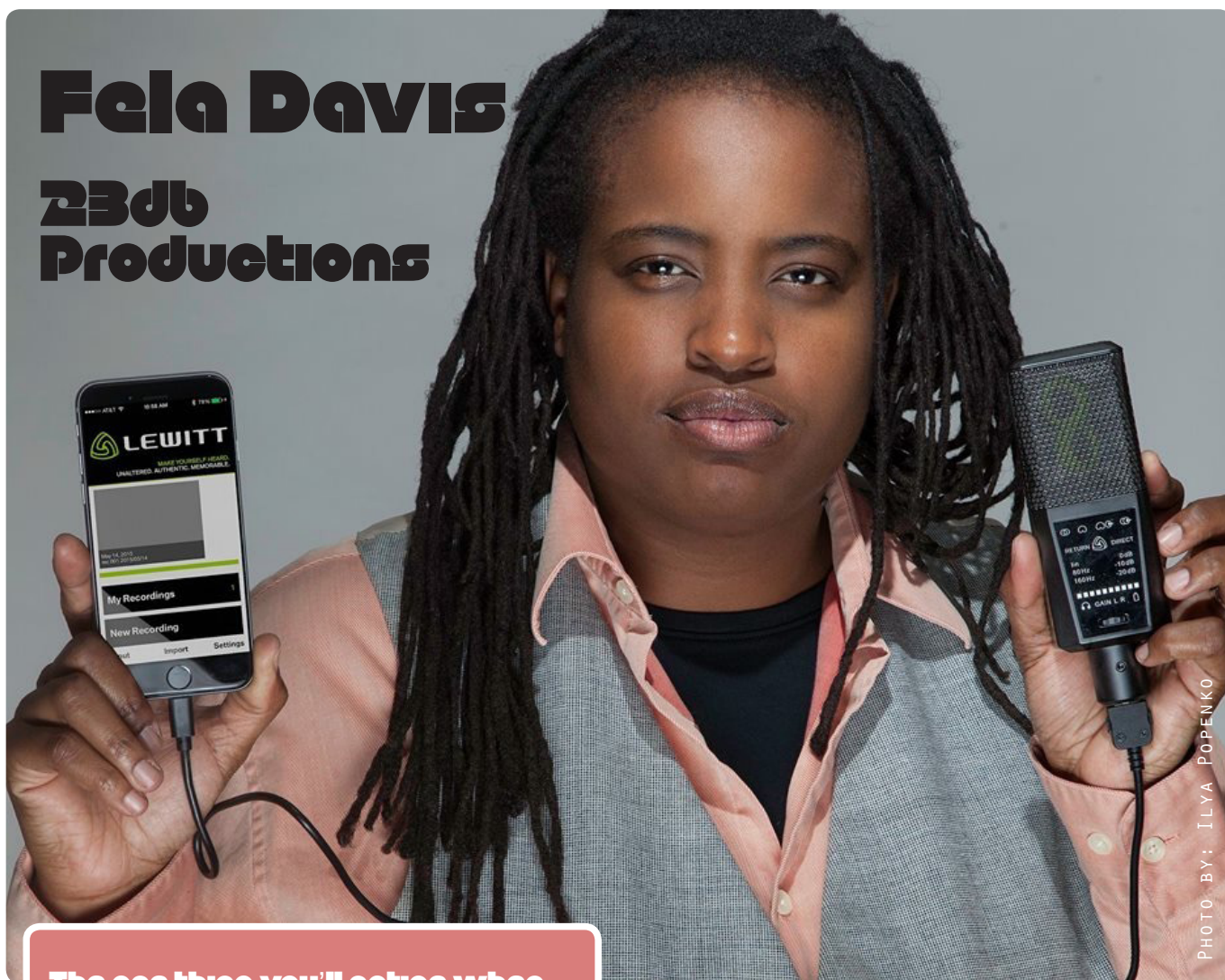
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Fela Davis

23db Productions



The one thing you'll notice when you start talking to Fela is the attitude. Great attitude! It pours out of her and runs through her veins.

Only by having a great attitude will you get through a nightmare gig, like the first gig Fela ever did, a 10 hour load out for a 3 day music festival in Columbia, SC. It had been raining all weekend but stopped just at the load out and the ground was just red mud. The load started at 11 pm and ended at 9 am the next day. Fela says the staging was the worst part because of the mud and the smell was horrible. The porta-loos were full and the muddy ground included lots of alcohol. Both the gear and Fela were covered in mud and she seriously wasn't sure if live production was for her after that gig, but, her great attitude has pushed her through and today she is co-owner of 23db Productions, a project studio based in Union City NJ where they mix, master and record everything except a live drum kit and can offer online

mixing and mastering, and she is FOH engineer for 5-time Grammy award winning jazz artist Christian McBride and Grammy nominated Ottmar Liebert.

Fela's path into music and sound started at a young age. She grew up in a small town called Cheraw, SC. and music of all genres was a part of daily life. After taking a career placement test, audio engineering was a suggestion which intrigued her because it sounded like fun and she could do her two favourite things - music and technology! Full Sail University offered an associate degree in Audio Production and after visiting the campus - she was hooked!

After graduation, Fela moved back home (due to a lack of money and work) but it was at a time when most of South Carolina's production work slowed down. During that period she worked in a couple of manufacturing plants which only served to strengthen her determination to make the audio engineering work! By spring she had a variety of jobs - as a stagehand/spotlight operator at the House of Blues and local theatres, a camera operator for a local news station, and board operator for sports radio.

This was great to get a feel for different production work but after a couple of years, being a live sound engineer full time was her goal so she moved to South Florida where she landed a stagehand gig at a club called Revolution. Fela immediately started training with the house monitor engineers and started mixing monitors after the first two months. She built up her

BY TONI VENDITTI

experience by doing monitors for acts like Reel Big Fish, KRS One and Method Man. Later, she branched out and mixed front of house for Arturo Sandoval's Jazz Club, Parker Playhouse and other sound companies throughout Miami and Ft. Lauderdale for another four years. Fela says those gigs were great because she gained so much experience mixing many different genres of music and events including Johnny Lang, Black Moon, Louis C.K., Chuck Mangione, Ron Carter and many more. While she was doing well there as an engineer, she wasn't getting the tours or larger shows as most of those engineers came from LA or New York so she decided it was time to move and chose New York. She got a job at Clair Broadcast where she gained extensive knowledge of in-ear monitors and wireless microphones while prepping gear for television shows like Good Morning America Summer Series, The Colbert Report and The Macy's Thanksgiving Day Parade. She also began as FOH engineer for Christian McBride and started 23db Productions.

23db Productions is a mix of everything Fela, and her partner, Denis Orynbekov, have done in production. They mix live shows and record, mix and master with a video element. These can be viewed on 23db Productions website <http://www.23dbproductions.com>. Fela owned microphones and Denis had recording equipment so they began offering multitrack recordings of live shows. The first recording they did was Australian guitarist Paul Winn's "Live from DROM NYC" CD/DVD. They then decided to multitrack record the upcoming Asia tour for Christian McBride. Fela purchased a Lewitt microphones drum kit set and met with a rep at an AES convention about their idea and Lewitt agreed to provide all the microphones for the China show! She recalls it was a wonderful experience working with them and hearing all of their microphones together and to be able to get that amazing band on a multitrack recording, and mixing and mastering with video was an exciting time for them. It was so successful that they started to hear from new pro audio product companies asking them to create videos or reviews of their products. They get to work with some incredible musicians and audio entrepreneurs when doing this and the best part is that they get to keep all the gear after they shoot! They recently upgraded to a Logic 10 for multitrack recording to a laptop and use this for recording the product reviews and live shows. They use a range of Lewitt microphones in the studio as well as Mikttek, Telefunken, Audix, Rode, Sterling Audioc and Sennheiser e935 and for monitors they use Yamaha powered monitors, Eclipse Speakers and Focal Spirit headphones with Rev33 True Sound.

Fela has always recorded her shows. At first she used it as a tool to get better at engineering by listening to the two track mixes. Later, she started making money when she offered it to the bands she mixed. When she worked at a lot of small clubs, she would sell the Zoom H4 recordings from the desk at \$20 a CD and found that she ended up making more this way than what the club paid her for the night. Being a huge believer in social media, she noticed a few years ago that certain well known audio engineers had LinkedIn and websites with pictures and up to date information about themselves. She surmised that to get to that level, she had to do what they were doing! She started a YouTube channel and added live mixes and after about 8 months she was contacted by Christian McBride. A week later he came to her gig in Brooklyn and by the end of the set, she was hired to mix his 17 piece big band! Since then Fela has ensured that social media is updated and everything worked on at 23db Productions is posted!

Fela has great advice for anyone starting out. "Start where you are at! If you want to be an audio engineer start looking at the amazing video content that is available online. Many major audio products have well known engineers who give great tips and advice on mixing for free on their websites."

She says that great work and attitude never gets overlooked, even when you think nobody's looking. The gear part can be taught but not having a can-do attitude will sink you really quickly or you'll find yourself not moving up the audio ranks. Recognise a weak spot and tend to it.

Great audio engineers constantly think of what they can do to make their mixes and workspaces better. They bring or make sure the best equipment is available for the gig and have a great attitude which makes a really long day bearable for everyone.

23db Productions have a new video web series "The Art of Music Tech". They've featured guitarist Paul Pesco, Christian McBride and jazz drummer Carl Allen and interview well-known engineers, producers and musicians about studio experiences and the gear that they use. Check it out at:

<http://www.23dbproductions.com/#!/the-art-of-music-tech/c1ayw>

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BIZ TALK

Issue 112 Volume 3
March 2016

with Julius Grafton

Mind The Gap? Profits short, suppliers taxed

A while back we wrote of the arrogance at supermarket group Coles, fined \$11.2 million in December 2014 (including legal costs) for gouging suppliers. Coles had come up with a program called 'Active Retail Collaboration' (ARC) where 200 smaller suppliers were hit with demands for money via 'rebates' or payments beyond what was agreed.

The court found this was basically extortion (our interpretation of the judgment), and threw the book at the giant corporation. (CX's retinue of retained lawyers can expect angry letters from the conglomerate sometime about now).

Amazingly Woolworths followed up with a program called 'Mind The Gap' in December 2014, demanding \$60 million from 821 suppliers. Not surprisingly the corporate regulator, Australian Competition and Consumer Commission (ACCC) have now taken them to court.

So what fuels this 'big swinging dick' behavior? How on earth can Woolworths do almost exactly what Coles were being caned for, in the exact same month that the Coles court case was awaiting judgment? The case was public knowledge well ahead of the 'Mind The Gap' scam.

While the Woolworths case has some way to go at presstime, we can only theorize. Woolworths may well be found to have operated within the law, after great argument about the nuances of what they did and how they did it. (CX can't and doesn't say here they are guilty of anything other than immoral behavior).

We can say that usually, faced with a conspiracy or a screwup, the latter usually applies. It is vaguely possible that the imbeciles in mahogany row at Woolworths were drinking the cool aid. They maybe were just not aware that their arch nemesis was being flogged in court at the very time they dredged up their 'Mind the Gap' extortion scheme.

They say the scheme was 'consistent with the ordinary nature of retailer and supplier relationships'. The ACCC begs to differ, and now it has had the taste of success against Coles, it has a fighting chance of scoring some dosh from Woolies.

Woolies buyers called the suppliers and worked off a script, demanding they make payments within 4 days. If they did, they were seen to be 'supporting' Woolies. If they didn't, the implication was some of their stuff may be 'de-ranged'. Indeed the calls themselves could be seen to be deranged.

Naturally some of them squealed, emboldened by the fresh Coles matter, where the ACCC used its powers to extract all the info it needed.

The ACCC needs to prove that Woolies behavior has gone beyond industry norms. If the ACCC loses the case, the door will be open for this kind of conduct across all lines of business in Australia.

CX hopes Woolies win the case. Then we will call all our subscribers and advertisers and give them four days to pay us more money, or face losing our 'support'. We will call the scheme 'New Porsche for Steve', or 'Trip to Paris'. Suggestions are very welcome!

Can you imagine the reaction?

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Vale C Tick Welcome RCM

C Tick is no more. It is replaced by RCM. The overall purpose of the new regime is to streamline the electrical safety process and it will do just that. In the short term though, it will take some investment by distributors and manufacturers (and anyone who directly imports goods covered by this regime) to set themselves up. That investment will be both in time and money.

ACETA is your industry body, working to protect and further the interest of everyone who works in our profession.

Web site: www.aceta.org.au

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RCM is finally here: Are you exposed?

Outline of the new system

The new system incorporates:

- RCM and ERAC
- EESS (electrical safety requirements)
- EMC, RF, EMR and telecommunications

Key elements

- It's an enhancement of existing systems rather than a brand new system.
- It's managed by ERAC.
- It's a registration system which integrates the existing ACMA and electrical safety labelling processes. All importers and manufacturers need to complete registrations for both their company and specific products on a website which is publically available.
- It's not a self-declaration system, like the CE system in Europe or FCC in the US. You need to have proof of compliance. The CE compliance process may mean it is possible to obtain European test reports which are relevant here, to save you having to re-test gear. This is less likely to be the case for FCC testing reports.
- It improves traceability of who imports gear into Australia. In that regard it levels the playing field for grey vs authorised importers. This becomes crystal clear through the three national databases in the ERAC system, which are publically accessible. These are for:
 - Companies (ie distributors, manufacturers, anyone who imports directly for resale)
 - Approved devices
 - Product registrations

Where to find out more – simply

This is a very simplistic overview of a complex system. To help the industry understand the changes and how to manage the new system, late last year ACETA ran online training about RCM and this is now available as a recording.

This training is in two parts:

1. A webinar that provides an overview of the new regime. This webinar is free to everyone. It can be found on the ACETA website. Hit the green button on the home page, that says RCM information. If you haven't already watched it, may I strongly recommend that you do? Even if at the end of the hour it hasn't told you anything you didn't know then at least you can rest at ease.

2. Three further detailed webinars, which go through the various elements, step by step. These are free to members and \$210 for non members. **To get access to these webinars please email to sara.hood@aceta.org.au or call on 03 9507 8133.**

To blow our own trumpet for a moment: this type of support is what an industry body is designed for. ACETA alerted the industry to the need for change and provided the information needed to help them make it happen. Feedback from those who have watched the webinars is that they have saved not just money, but also time.

What happens if you don't comply?

Ultimately big fines will apply. The reality is that the ACMA's first response will be to require you to undertake a remediation program to become compliant. Typically this will mean a timetable for action and a non-negotiable deadline. It's important to note, though, that whilst it is unlikely the ACMA will go straight to the fines, if your non-compliance causes injury or death you can expect there to be significant sanction.

Reducing the cost for our industry

ACETA is now in discussion with the ACMA about the cost of this compliance. It's clear that for those who manufacture or import low volume, high value goods the ROI is out of balance. The ACMA has said they understand this, and that it is not their intention to constrain business or make it more expensive to manufacture or operate in Australia. The ACMA will be inviting ACETA to join some consultative groups to

address this. This may sound convoluted and slow, but it's how this type of government activity works and it will put us in the heart of the process to advocate for our industry's needs. To make this very clear, ACETA is not advocating that our industry should be able to reduce safety. ACETA advocates very strongly for safety. The issue is that this particular new regime is costly and there needs to be a way to reduce that cost and still achieve the safety outcomes.

For more information

ACMA <http://www.acma.gov.au/theACMA/acma---single-compliance-mark-rcm-fact-sheet>

ACETA <http://www.aceta.org.au/aceta-forum.html>

ERAC http://www.erac.gov.au/index.php?option=com_content&view=article&id=128&Itemid=576

Sign up for the ACETA email newsletters. These cover news from across the industry, including updates on RCM.



Ian Harvey
Executive Officer ACETA

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Are you concerned about your mate's mental health?

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

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www.entertainmentassist.org.au

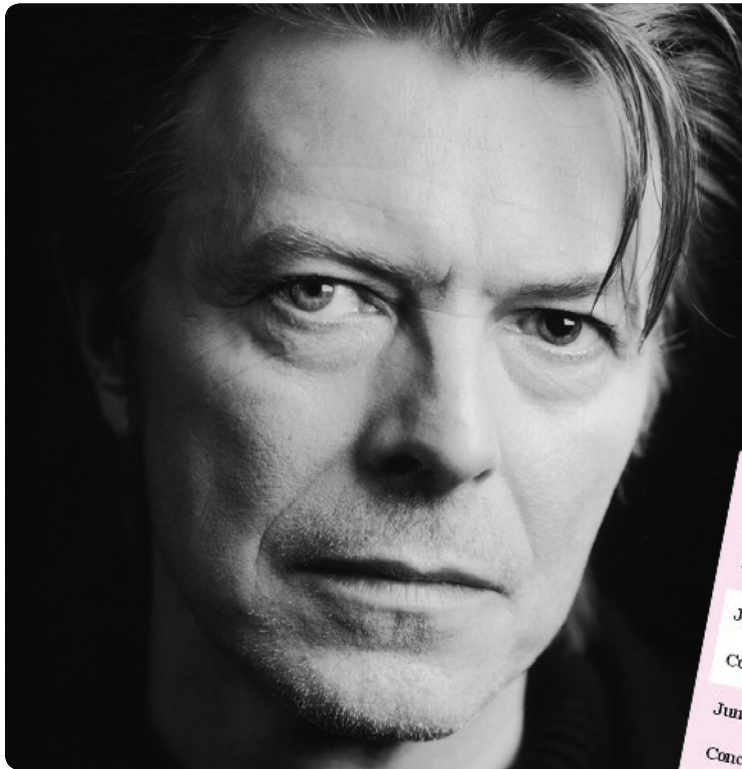
Supporting the mental health of Australian entertainment industry workers

¹Passion, Pride, Pitfalls Dec 2014

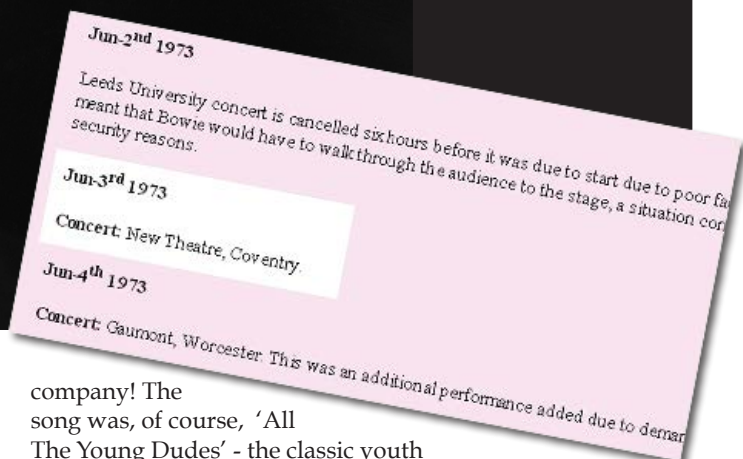


David Bowie: The Man Who Fell to Earth

a.k.a The Thin White Duke, Ziggy Stardust, Aladdin Sane



I was truly stunned when I heard on the TV news that David Bowie had died. No-one expects anyone to live forever, but when someone as iconic and both culturally and musically significant as David Bowie suddenly dies, it really is the end of an era.



I worked for his record company throughout the 70's; I never knew him personally of course, but as I was a record rep his work played a large part in my weekly finances!

Originally David Jones, he changed his name to avoid confusion with Davy Jones from the Monkees! Seems unbelievable now that anyone would ever have mistaken the leader of the Spiders from Mars for a Monkee. Still, as they say, who knew?

His management company MainMan, owned by record producer Tony de Fries (no relation, despite my number plate!) had just signed him to the record company with the release of the album "The Rise and Fall of Ziggy Stardust and the Spiders from Mars".

It took a lot of work to get the album off the ground here. The re-release of his earlier albums at the same time was handy, and showed that he was a substantial artist and not a flash in the pan. Luckily with a lot of continued pushing he eventually got some chart action and long term sales. But it wasn't easy - for mainstream success in those days he really needed a hit single.

And then he got one. Or rather he wrote one, but then gave it to some friends of his who were in a band called Mott the Hoople. Who? you may ask. Well, so did we at Bowie's record

company! The song was, of course, 'All The Young Dudes' - the classic youth anthem mega-hit still played today!

Jeez, did the tish hit the fan internally at the record company! From the International Managing Director at Head Office in New York, to lowly record reps like me, everyone was gutted. "WTF?" we all said. The general feeling was that we had been working so hard to get some of Bowie's album tracks released as singles, and then he goes and gives away this ultra commercial song with hit written all over it to a relatively unknown band who were friends of his - and, more to the point, on a different label!

There's nothing record execs hate more than one of their artists giving a free hit to an artist on an opposition label. All that potential profit...gone!

Apparently he had first offered his song "Suffragette City" to Mott The Hoople to use, but was told that they were about to break up over money problems and debts. Shocked at this, Bowie told them not to do anything and come over to his manager's office. There he played them the new song "All The Young Dudes" on acoustic guitar and offered it to them. They leapt at it, recorded it on their Bowie-produced album of the same name and released it as the single on 28 July 1972.

Curiously there were two versions of the song. The first has the lyric "Wendy stealing clothes from Marks & Sparks" which was the version used in Australia and the rest of the world.

"Marks & Sparks" is slang for the famous British store called Marks and Spencer, but wasn't used in the UK because the BBC had very strict anti-advertising rules. So in order to get radio airplay in the UK, the other version changed the line to "Wendy stealing clothes from unlocked cars".

With the enforced disappearance of the UK's famous pirate Radio Stations* on ships moored outside the 3 mile limit, the only airplay possible in Britain was on one of the BBC's stations.

Giving away songs to friends was common in those days. Another example would be John Phillips from the Mama's and Papa's giving away the blockbuster song "If you're going to San Francisco (wear some flowers in your hair)" to Scott McKenzie (a friend from his folk music days) when the Mama's and Papa's were desperately looking for a new hit single. As just the performer, not the writer, Scott McKenzie probably saw very little royalties, but John Phillips (and now his estate) would most certainly have!

Choosing a new single turned out to be the least of the M's and P's problems, since they broke up pretty soon afterwards, with Scott McKenzie joining the long list of one hit wonders.

But I digress. On holiday in the UK in 1973, I saw advertisements for the Aladdin Sane tour, and rang the UK office to bag a couple of free tickets for me and my first ex-wife (v1.0 in software terms!)

They had some available for people just like us, and on June 23rd we were whizzing up the motorway to see the show at the New Theatre, Coventry.

Management were working him hard - 2 shows a night, at 6 o'clock and 8.30pm. No support act as far as I can remember; just find your seat and whammo, the show started! I grabbed tickets for the 8.30 show, judging that the band would be nicely warmed up by then.

The sound for the show was excellent, but for the life of me I can't remember anything about the system. But online I found the excellent site www.5years.com, which covers the whole Ziggy Stardust era of Bowie's career. And that's the one all us baby-boomer Bowie tragics want to know about.

Luckily Bowie's sound guy Robin Mayhew was paying attention that night (and every night!), and takes up the story:

**See the movie 'The Boat That Rocked' for a sanitised version of what went on.*

"The usual configuration consisted of sixteen 1x15" full-range reflex cabinets (20hz to as high as they'd go) - eight 1x10" (200hz to as high as they'd go) and sixteen 075 tweeters (5Khz upward). All drivers were JBL. Sometimes at larger venues such as the Rainbow, Finsbury Park and Hammersmith Odeon, twenty-four 1x15"s would be used. The amplifiers were Turner A500s and A300s and the total output of the standard sixteen cabinet rig would be no more than 3,500KW.

"The system looked immaculate with all the speaker cabinets matching and covered in black vinyl with aluminium strips round the edges and this also suited the theatrical nature of the shows. The first mixer consisted of 12 channels only but was soon upgraded to 24. Believe it or not the echo facility was a Watkins Copy Cat tape-loop machine and that was the only sound-effect we used."

The complete interview is on the 5years site, and is well worth reading for anyone interested in the minutiae of early concert sound.

The lighting was especially good; one scene that has stuck with me for the last 40-odd years was during the Song 'Space

Oddity'. Complete darkness except for a spotlight on Ziggy and a couple on a giant mirror-ball overhead that slowly rotated, giving a starry effect throughout the theatre.

The encore was a fast and furious version of 'Suffragette City', with Mick Ronson and the band showing just how good a tight 3-piece band can be. It was a suitable end to the evening, and we all went home happy.

One thing that surprised me was the way Bowie's surname was pronounced. At work we had pronounced Bowie with a flattened O, as in 'bow and arrow'. But in the UK at that time people pronounced Bowie as in 'bow wow the dog's barking'.

Ah, right; now naming his son Zowie Bowie makes more alliterative rhyming sense! Not to Zowie himself though. He is now known as Duncan Jones. With a name like that he must be a great guy!

I've often felt that celebrities should be banned from naming their kids until they reach 21, when they can choose a name for themselves, not Zowie, North, Lourdes, Apple, Cruz, Dweezil or Moon Unit (all true!).

The night after I heard David Bowie had died, I decided I'd remember him by digging out his albums and playing them. Great stuff. On vinyl, of course, and all first release English pressings, naturally!

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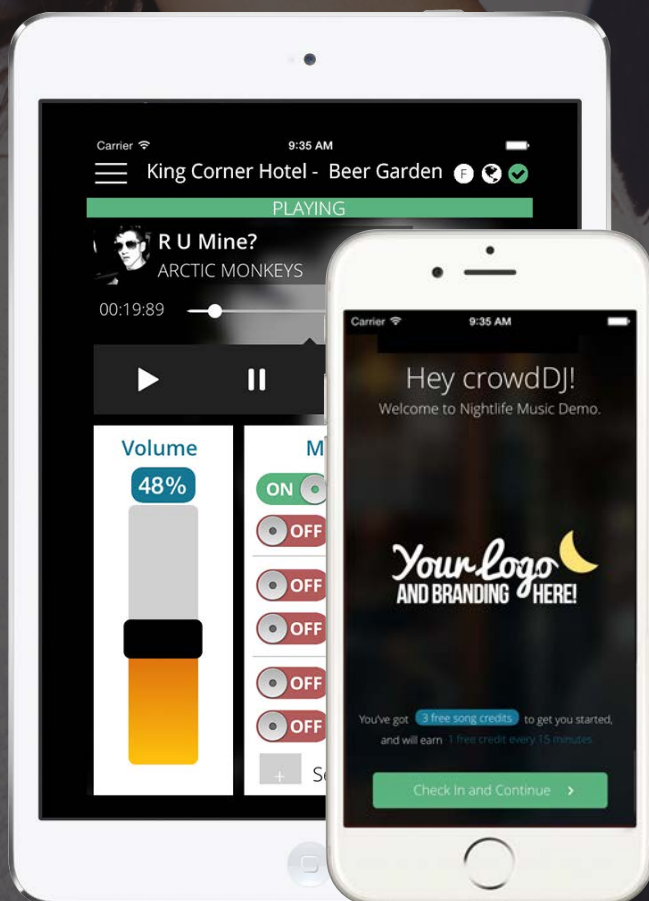
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