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# CX

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# THE BUSINESS ISSUE

> SOUND MASKING 101  
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Sydney Turns  
Off the Lights  
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Charity Ride

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Gospel Tour

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Published by Juliusmedia Group Pty Ltd ACN 134170460  
under licence from CX Network Pty Ltd ACN 153165167.  
Locked Bag 30, Epping NSW 1710 Australia  
Phone: +61 2 408 498 180  
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Editor: Jason Allen

Publisher: Julius Grafton

Business development and sales: Steve James

Layout: mark wood design – Mark Underwood & Alisha Hill

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# Vale Greg Weaver

by Neale Mace

*We were all shocked and saddened to hear of the passing of Greg Weaver at the weekend, for he was surely one of the most popular guys on the touring circuit. Neale Mace, Managing Director at EI Productions, knew Greg for close to 20 years and considered him both a colleague and good friend. Neale penned this fitting tribute:*

There are many, many people who knew Greg Weaver in our industry and you can tell how well-known, respected, and liked he was by the outpouring on Facebook as the sad news of his untimely passing spread.

I can't pretend to know all about Greg, but I have known him both professionally and personally for 19 years.

I can pinpoint the day I first met Greg – Nov 24th 2000 at Heatwave Festival (Gosford) where he was looking after The Whitlams – on that day we started a professional relationship and friendship that I cherished for all of that time.

Greg Weaver was a no-bullshit Tour Manager, Production Manager, FOH guy, band wrangler, mother hen to bands on tour, computer tech boffin on tour, and an all-round gentleman and great guy.

Always affable and easy to get on with, he

was a guy for whom problems were only solutions waiting to happen.

Sometimes Greg would call with tour / show problems that needed sorting and I can remember lots of times where he'd say "we have 48hrs to solve this – it's plenty of time, here's my possible solution". More often than not, his solution was the best one.

Often touring with acts such as The Whitlams and Paul Kelly, to name a couple of the many local and international acts he's done as TM/PM/FOH op, he always made it look easy and having him on-board always made touring a pleasure.

Plus he was always into the music of the acts he was mixing, not that many except the core touring crew might notice. He'd be tapping away at a delay time, shutting his eyes while he accented a solo and his left / right finger point as he panned a guitar solo part – these were things I always remember.

His FOH mixing capabilities were exceptional and you always knew that if Greg was behind the desk at any given show or festival that mix quality was not going to be one of the issues.

But it wasn't just his mixing prowess that made him stand out. Anybody in this

business knows the amount of work and mental strain involved in getting a band on the road for a tour – the star, the musicians, the backline, the rehearsals, the transport, the accom, the production, the touring crew, the local crew, the merch, the venues and all the last minute issues – Greg would handle this all with what seemed to me to be a calm sense of control. No issue was too small to be ignored and no issue was too big to handle.

Not only all this, but he'd always be tour mentor to the support acts and their crew and make their experience as good for them as possible, no matter how green they were.

Oh... and his on-tour ISP / computer hardware / software tech support for all the band and crew was the stuff of legend.

The Australian production industry will still roll along, 'coz we all know "The Show Must Go On" – but there will be a large hole in it left by The Dream Weaver that I doubt will ever be filled.

Wherever you are Greg – I hope you're having The Best Gig Ever.

*Neale Mace, Managing Director, EI Productions*





# DIVERSIFIED ACQUIRES RUTLEDGE AV, LAUNCHES INTO AUSTRALIAN MARKET

Diversified, a leading global technology solutions provider, announced the acquisition of Rutledge AV. As a top integrator in Australia, Rutledge AV's robust client-base and track record of exemplary service enables Diversified to provide local support to clients and the confidence to deliver the standards they're known for in the Americas, EMEA and APAC.

"I'm very excited for this endeavour, expanding our capabilities into the Australian market and being a true global technology partner for our clients," said Fred D'Alessandro, Diversified founder and CEO. "The Rutledge team and everything they've built is a testament to their strengths as an organisation and the synergy of our cultures, always a key deciding factor, promises continued growth and opportunity."

Founded from humble beginnings in 1979 by Michael and Sandy Rutledge, Rutledge AV has grown into Australia's largest AV integration specialist with offices across seven states and territories and over 350 AV professionals. "I'm delighted to have found the perfect home for what has been my life's work," said Michael Rutledge. "Sandy and I look forward to seeing the company continue to thrive as part of the Diversified family."

Kevin Collins, Diversified's President commented, "Welcoming Rutledge into the Diversified family is a huge milestone that I am proud to be part of. Much of our strategic international growth has led us to this point, where we now have established entities in almost all continents across the globe. Most importantly, we've gotten here through partnering with highly skilled organizations that share our values and passion for next generation technology solutions."

Andrew Morrice, Rutledge AV's CEO adds, "We are very excited to be part of Diversified. The merger was a logical choice with numerous similarities between our businesses

and Diversified's innovative approach to the technology services industry. We can't wait to start working together as one team."

Rutledge AV will operate as a wholly-owned subsidiary of Diversified, continuing to be a trusted partner to its clients while introducing Diversified's portfolio of offerings and adding incremental value for their organisations.

Andrew Morrice and team will lead Diversified's expansion into Australia, helping establish the company's operations in the region.



## The Rutledge Dynasty Continues...

by Julius Grafton

The sale of Rutledge AV to giant USA integrator Diversified is no surprise, given Michael and Sandy Rutledge have been driving the operation since 1979. That's a lot of soldering!

I always admired these people. When industry issues arise one of them is on the phone; enquiring minds caring about the future. Michael's roots lie in the fertile road crew era of the 1970s where we all pushed so many boundaries to get things done and learned everything the hard way. Of that cadre, and I am proudly one, those of us that didn't cook

our minds with drugs have gone on to do so much. The industry landscape has former road crew rising tall – there's a gig tale a'plenty at a Rutledge Christmas party!

They are decent people.

With 350 people spread all over, RAV is as big as it gets in this little country.

Knowing the Rutledges, the sale to Diversified will not result in some overblown suits wrecking the shop. The often repeated invasion of the 'masters of the universe' where some suited goose (probably with a CV that includes a senior role at something like, say, Telstra) comes in, talks crap, fires all the well-paid brains and embarks on a strategy of 'growth through acquisition' and looks lovingly at their own reflection on the porcelain as they snort it all. That will not happen while there is a Rutledge anywhere near.

Doing mass audio visual integration in Australia is tough – working against differing jurisdiction laws and standards, dealing with builders who put the AV fit out last, getting endless software and firmware updates in harmony, staying in front of the savage exponential tech curve that just keeps on rolling. Developers hiring builders who set themselves up to phoenix the job to avoid paying some contractors – and the AV guys are the final ones on site, so they are far closer to the implosion than the concrete.

Dodgy everything stops with an AV integrator. If the systems don't work as advertised they have to make good. If a manufacturer sends a bad batch, the integrator has to go back in, unbolt it all, and replace it – and then fight tooth and nail with the distributor, importer, and manufacturer to get something remotely near the sky high costs to fix someone else's problem.

Make a motza doing installations? Impossible.

CX salutes Michael and Sandy Rutledge!

# SYDNEY TURNS OFF THE LIGHTS

**Election season proves there are no votes won on venues.**

**by Julius Grafton**

**While Melbourne is lauded as one of the most vibrant music venue cities, NSW faces the reality of a re-elected state government that fought an election partly defined by its ‘War on Festivals’ and standing firm on ‘lock-out laws’ that have crippled nightlife. Plus the chronic shortage of live theatre space, which became a minor issue when the Minister for the Arts announced the government had saved the long-dark Theatre Royal.**

Both are in focus because the tender for the ‘long term lease’ of the Theatre Royal is now closed, and the NSW Ministry of Health today convened a consultation meeting of music festival promoters. They emailed around 100 music industry leaders and somehow forgot about privacy laws by including everyone’s contact details. That doesn’t instil confidence, nor does the language around ‘further enhancing harm minimisation’.

While the NSW Government hopefully attempts some mitigation on the extreme measures imposed over festivals, Bluefest boss Peter Noble maintains he will move the festival out of NSW after next year unless there are significant changes to expensive police user-pays and over the top medical staffing. NSW has suffered a decline in overall box office revenues and venue turnover that threatens to roll off the cliff.

Just before the state election in late March, a further row broke out when it appeared the NSW Government had also commenced a war on MIRRORBALLS!

Contained within a recent Inquiry Into the Music and Arts Economy is a section where NSW’s assistant police commissioner Mark Walton answers a question about venue decorations that may need to be regulated:

“Venue decorations such as a mirror ball in and of themselves are not considered a significant issue. However, the installation of a mirror ball implies an intent to provide for a dance floor. The inclusion of a dance floor would need to be considered in a Development Application approval. Police would have concern that the installation of a mirror ball in a premise that has not been approved for a license that allows for the dance floor could mean that the premises is being used for purposes not allowed for by the given conditions.”

Quite. We think Mirrorballs imply fun, and the best fun of all is had in your home once the sun goes down, isn’t it?

But being serious, the Theatre Royal tender is a hot topic, and word has it there are just a few non-conforming bidders. CX understands Howard Panter’s Trafalgar Entertainment from London, led locally by Tim McFarlane is one, and Stephen Found’s Foundation Theatres is another.

As reported earlier, the tender contains a poison pill in the form of a \$37 million ‘contribution’ required by the owners of the MLC complex in whose basement it resides. Developer Dexu plan to rip apart the seven levels of retail above the theatre to gain better rentals, as the site abuts the most expensive

shopping strip in Australia, the Pitt Street Mall.

Architect plans seen by CX show the theatre foyer and entry extensively remodelled to harmonise with the rest of the retail podium. For that work, Dexu require \$37 million up front, before any theatre operator walks in the door. Then the operator would face works costing at least \$10 million, with no expansion of the 1,100 seats, to get the theatre working. Expanding the seating by rebuilding the circle would cost north of \$20 million.

All of that is before any rental is agreed, and with the rest of the complex repositioned for luxury retail it is not hard to see how the NSW Government could simply announce they have no viable tender and walk away. Because the NSW Government did not ‘save’ the Theatre Royal at all. They simply took a lease option, with a ‘get-out’ clause, to try to appear like they care about the Arts before the election.

Across town the troubled Powerhouse Museum faces demolition, after a move to a proposed new site at Parramatta that may or may not occur. The NSW Arts Minister also vaguely proposed a new lyric theatre for the current Powerhouse site, but that has so many ‘what-if’s’ attached it isn’t bankable.

The Shadow Minister for Infrastructure and Transport and the then Shadow Minister for Tourism (now Labor leader), Anthony Albanese told a packed meeting at a Balmain Hotel that the night-time economy of Sydney had dropped to the bottom of the list due to laws that had to be changed. Local publicans from the pub-rich area told of single resident complaints closing music, and in one case shutting an outdoor BBQ. Inner West Council mayor Darcy Byrne pledged to work harder as his council enforced complaints from new neighbours of historical pubs and venues, suggesting an ‘existing use’ policy be implemented.

Aside from this, few politicians seem concerned, and the recent state government elections in NSW saw the return of the party that is squashing live entertainment.



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# Spectrum Support Charity Ride

by Stephen Peereboom, Regional Sales Engineer, Bose

**My wife and I are parents of three non-verbal Autistic children aged 5, 4, and 3, with support needs ranging from very high to high functioning. We met a little later in life and decided that starting a family was our priority. As a result, three loving boys arrived back to back.**

Learning that your child is Autistic is a tough thing and there are realisations that come up that you really don't see coming. Will they ever hold down a job? Probably not. Will they ever talk? Unlikely. Have a wife, girlfriend, or find love of any kind? Almost definitely not.

So, what can you do? You learn everything you can and try everything you can, and never stop trying. You will have more failure than successes, but every milestone is celebrated no matter how small. The daily challenges are real.

As we have learned about the reality of being an Autistic male in this world, we have found some real injustices that are very hard to swallow. The Autistic are commonly targeted and exploited, abused, ripped off, and even murdered. It's a hard life for all of us, but it's harder for those on the spectrum.

It was this truth that has moved us to create our charity, Spectrum Support and our first major project, Project Eleos. The purpose of Project Eleos is to change the life experience of Australians with ASDs, and change community

attitudes to Autistic Australians. It's a big job. The first priority is to make the world a safer place. Working with internationally recognised experts in ASD and First Responder Training (Police, Fire, Ambulance) Spectrum Support has developed a training module teaching First Responders how to manage a Victim/Suspect/Witness that is on the spectrum. This module is to be delivered to first responders nationally with the assistance of the NSW Mental Health Intervention Team.

In addition to this training, we will be manufacturing and distributing Wristbands, Necklaces and Pins for each person diagnosed with ASD in Australia. These will each carry the ASD Talisman, the symbol of Autism in Australia and the symbol that will be recognised by first responders nationally. This is the key, the message that the person wearing the ASD Talisman is Autistic and the training will kick in.

It is easy to mistake the actions and speech of an Autistic person as many things that they are not. It can look like violence, look like aggression or non-cooperative behaviour,

or even drug or alcohol intoxication. In truth, Autistic people are rarely violent and are usually looking to increase or decrease sensory input. This is at the very heart of the disorder.

Now, this takes money and this is where our AV community comes in. We have teamed up with the great guys from KONA Training and Consulting for a fundraising event in October that will be a lot of fun and we're looking for your support.

The Spectrum Support Charity Ride will be four days riding a motorcycle around NSW to some of the most breathtaking parts of the state. It's a fundraiser, networking and fun event that will be a lifelong memory, and we hope the first of many annual outings.

## How does it work?

**Individual Riders:** Sign up to ride and you will be given a donation account on the ride website. You need to raise \$5000 to ride in October, so you can contribute yourself, your company can kick in, friends, family, the guys down the pub. 5K and you're in!!

**Corporate Sponsors:** Packages are available across various levels. Packages include promotion and presence at our Spectrum Support Charity Ride day events, Golf Days and our annual Black Tie Dinner. Please see our websites at [www.sscharityride.com.au](http://www.sscharityride.com.au) and [www.spectrumsupport.org](http://www.spectrumsupport.org) for more information.

We're looking for as many riders as we can to get this important work done and support the Autistic community that truly need protection.





## The Route:

Explore NSW like never before. NSW is particularly blessed with great riding roads and the beauty of this trip is in the stunning surrounding landscape!

### Day 1: the Old Pacific Highway towards the Hunter Valley

Starting in Centennial Park (TBC) you will head North along the Old Pacific Highway or the “Old Road”, as it winds over, under and alongside the freeway, always offering a more interesting and picturesque option, framed on one side by ancient rock walls and by the stunning Hawkesbury River on the other. As the road winds on, the scenery changes as you climb through fern gullies and old forest, and the smell of gum leaves is always in the air.

It's the perfect day out before we head into the Wine Country of the Hunter Valley for our 1st pre-booked overnight stay. This is where we will have a beautiful meal, enjoy great company and your choice of drinks.

### Day 2: Country Western NSW

Day 2 takes us through Country NSW where we will experience first-hand this wonderful country as well as the drought affected areas. Beginning our ride in the famous Hunter Valley, we will ride west, skirting National Parks and wineries alike, passing through historic towns like Bylong and Breakfast Creek.

Riding through magnificent motorbike friendly roads we finish the day in historic Bathurst, concluding up with the mandatory circuit of Mount Panorama. Dinner and bragging to follow!

### Day 3: Riding high – the Alpine Way

Day 3 and time to get some altitude! We will ride into the highest point of NSW, the magnificent Mt. Kosciuszko, be sure to pack your woollies as we make our way to the adventure playground of Jindabyne, with its huge, reflective lake and the Snowy Mountains towering over us.

Riding through roads flanked with wild flowers as the altitude rises and the trees and hills cluster around the road, nature will provide a feast for the eyes. We will spend the night at Jindabyne sharing experiences, laughs, and stories of the day.

### Day 4: From Summit to Coast - Jindabyne to Wollongong and home to Sydney

Heading North to Canberra we turn right and go ‘over the top’ of the Great Dividing Range, winding our way from Jindabyne to the coast.

The Grand Pacific Drive is a 140km coastal drive south of Sydney and includes beautiful scenery, coastal rainforests, quaint villages and over the iconic Sea Cliff Bridge before going through the Royal National Park.

Lunch and breaks will make sure we fully enjoy the magnificent scenery and welcome warmth of the ocean path. On the home stretch now, we're off to Sydney where we finish with a bite to eat before heading home to share our experiences with our loved ones.

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# NEW GEAR



## Claypaky HY B-EYE

The Claypaky HY B-EYE has the same features as the B-EYE, but has been enhanced with more power and efficiency, greater interactivity with media servers (Kling-Net protocol included), versatility, and quieter operation. Its optical unit enhances the uniformity and efficiency of the light output. The rotating front lens and the ability to control each single LED individually make kaleidoscopic projections and eye-candy effects possible.

**Australia: Show Technology**  
[www.showtech.com.au](http://www.showtech.com.au)  
or (02) 9748 1122

**New Zealand: Show Technology**  
[www.showtech.com.au](http://www.showtech.com.au)  
or (09) 869 3293

## Barco ClickShare CSE-200+

The CSE-200+ offers interactive collaborative experiences for medium-sized meeting rooms. It allows up to two users to share content simultaneously. Simply plug the ClickShare Button into a laptop and click to get the content on the meeting room screen. The ClickShare App gives you additional features for collaboration with laptops or mobile devices. The CSE-200+ features enhanced security features, central management, and annotation, blackboarding, and touch back support on a 4K canvas.

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## Acme CM 400Z

The Acme CM 400Z is a compact but powerful fast-moving head. It features 7x 30W RGBW LEDs, 6 – 40 degree motorised linear zoom, uniform RGBW colour mixing, smooth full range dimming, and various strobe speeds. It excels at both beam and rainbow effects.

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## Acme LED PAR 200 IP

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#### LD Systems U500

The U500 Series are radio mic systems for vocals and speech. Selectable transmit power up to 30mW provides the U500 vocal sets with a free-field range of over 100 metres. They are available in band 655 – 679 MHz, where 12 systems can be operated simultaneously. The True Diversity UHF wireless systems are equipped with an automatic scan facility to find the best free frequency, and one-touch infrared synchronisation of transmitter and receiver to facilitate easy setup.

The U500 Series vocal sets are available with hand-held transmitters, headsets, lavalier microphones and single or double receivers. The hand-held transmitters feature interchangeable microphone capsules to suit singing or speaking.

**Australia: AVE** [www.avecorp.com.au](http://www.avecorp.com.au)  
or (03) 9706 5325

**New Zealand: Direct Imports**  
[directimports.co.nz](http://directimports.co.nz) or (06) 873 0129

#### NovaStar NovaPro UHD Jr

The NovaPro UHD Jr is NovaStar's all-new video controller, combining 4K processing and 4K sending into a single piece of technology. The UHD Jr outputs 4K x 2K @60Hz or 8K x 1K @ 60Hz, which is 4096\*2160@60Hz / 7680\*1080@60Hz.

It also allows free scaling to any size, with post-scaled images remaining clear and sharp. Onboard are Real4K inputs, including 1x DP, 1x HDMI, 2x SDI, 4x SL also can change as 2x DL DVI. The four DVI inputs can link together into a single independent 4K x 2K or 8K x 1K input. There are a total of 16 Neutrik Ethernet ports and 4 optical ports, with a total loading capacity of 10 million pixels.

**Australia and New Zealand: NovaStar** [www.novastar.tech](http://www.novastar.tech)  
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#### Event Lighting M1S190W

The Event Lighting M1S190W is a moving head spot with an 8000K 190W white LED module. This unit also comes with both rotating and static gobo wheels, iris, frost, and 3/8 facet prism in a compact 14kg package. The operating system also includes on-board recording, customisable DMX user profiles, 3 and 5 pin DMX along with the option to add W-DMX.

**Australia and New Zealand: EVENTEC**  
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#### Maxell 8000 range

Hitachi has introduced two new projector models into its Maxell 8000 range. MPWU8701W and MPWU8801W offer 7,000 & 8,000 ANSI lumens, approximately 20,000 hours (normal mode) of operation time and are virtually maintenance free. Perfect for digital signage applications, auditoriums, lecture halls, large classrooms, conference rooms and museums. They include motorised zoom, focus, and superior lens shift, a variety of lens options, 360° display rotation and status monitor. For added piece of mind, Maxell's MPWU8701W & MPWU8801W are also backed by a 5-year warranty.

**Australia: Hitachi Australia**  
[www.hitachi.com.au](http://www.hitachi.com.au) or 1800 448 224

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### DJPower V-3 Spark

The DJPower V-3 Spark Machine produces non-hazardous effects that look like traditional fireworks or pyrotechnics. It utilises a new control system and standard DMX to realise multiple stage special effects. It is environmentally friendly, safe, and easy to operate. It can be safely used indoors, strongly enhancing the atmosphere on the stage.

**Australia and New Zealand: ULA Group**  
[www.ulagroup.com](http://www.ulagroup.com) or +61 1300 852 476  
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### Williams Sound WaveCAST

WaveCAST brings a professional DSP audio platform to the assisted listening market. It's built on a hardware-based audio DSP audio system architecture, allowing system optimisation to achieve the highest quality audio experience for the audio stream being delivered. Professional audio inputs on the WaveCAST include 1/4" XLR connectors, phantom power and a line level output jack. In addition to multi-stage gain control inputs, the DSP features include AGC, limiters, high and low pass filter, and adjustable range compressor control. The 16-bit DAC provides a 48Khz sample rate for a smooth digital stream and minimizes the digital harshness that occurs in low-bit-rate DACs used in embedded computer-based assisted listening systems.

**Australia: Hills** [www.hills.com.au](http://www.hills.com.au)  
or (02) 9647 1411

**New Zealand: NSL** [www.nsl.co.nz](http://www.nsl.co.nz)  
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### Optoma 506 series

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### VuePix Infiled ER 3.9 Mk-II

The new version of the VuePix Infiled ER series utilises MiniLED technology, allowing a new level of contrast to be produced for LED screens. This is in addition to all the existing features of the ER series; lightweight panels, fast lock-in system, positioning pins, ergonomic handles, separate and exchangeable power and control unit and many more – making the VuePix Infiled ER series the most popular rental and production screen on the market.

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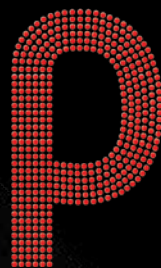
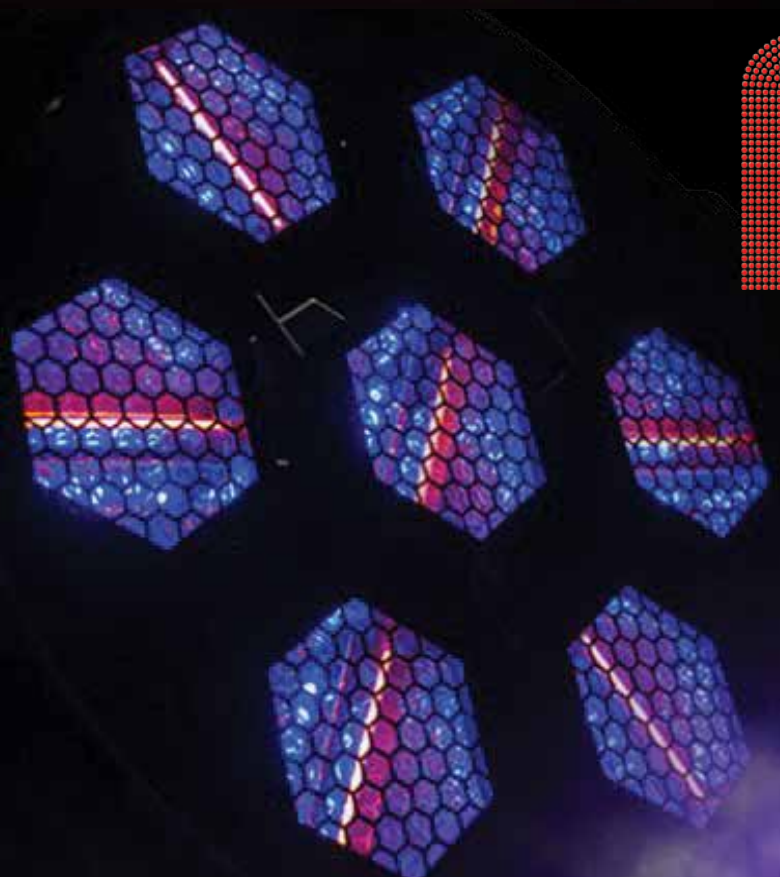


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# MEG MAC

by Cat Strom

Photo Credits: Troy Constable



## **The *Give Me My Name Back* Australian tour, presented by triple j, opened at Sydney's The Enmore Theatre to a sold-out crowd and continued around Australia and NZ.**

For many years Michael 'Smasha' Pollard has been a regular on the touring circuit mixing for acts such as Ross Wilson, The Black Sorrows, and Jon Stevens. Whilst they are all incredible performers they are acts that are basically heading towards their pension!

However in 2017, Smasha was dragged into young people territory when he was asked to mix FOH for Australian singer-songwriter and musician Meg Mac, and, whilst it is a bit of a departure from a four-piece, guitar-based band, he is thoroughly enjoying the experience.

"The first show of the tour was also our biggest, so the pressure was on!" laughed Smasha. "Meg also had a new band, but the Enmore show was great, the venue is always a pleasure to mix in - the system performed well with plenty of headroom, great coverage and a lovely response in the subs, which is important for Meg's show sonics to really shine."

Smasha is particularly enjoying the excitement of being amongst a crowd that are genuinely enthusiastic for the songs and the meaning of the lyrics by a young artist.

"I'm enjoying the honest crowd vibe with fans at the start of their music loving journey in life, as opposed to the older artists I work with that draw a crowd that is revisiting memories from their youth when they first started that same journey," he commented. "Both are equally potent, however it's refreshing to be reminded about the simple power of music and the excitement it brings the listener. In fact it's hard to ignore when in the middle of the room at the

console."

The downside of this is that at some of the shows it is somewhat challenging for Smasha to hear the actual PA mix whilst thousands of people are singing along with Meg. Mixing for Meg is all about the vocals from start to finish of each song.

"It's all about Meg and the identity and power of her voice," added Smasha. "A lot of her songs are written around keyboards so there's a heavy element of synth and piano sounds to compliment the vocals. There's also layered percussion with acoustic kit, sample triggers and MPC pads, which is the more contemporary end of her sound. Then there's a strong, almost retro-soul vibe in the drum and bass sounds which all combines into an enjoyable mix. Basically there's something happening sonically in each song that keeps me working hard to ensure the vocal is above it all."

Much of the touring audio gear was supplied by Melbourne based engineer Josh Barker, who is both Production Manager and Monitor Engineer for the tour and an integral part of Meg's production. The flying tour package includes two DiGiCo SD11 consoles (one supplied by Travers Chesney) for each end of the digital core, all microphones, DIs and a full Sennheiser IEM system. FOH boxes are in-house as provided by venue.

Smasha's DiGiCo SD11 features a Waves Soundgrid server running DiGiGrid Waves plugins and although he usually opts for an

Avid console for pure familiarity and reliability, Smasha has enjoyed getting to know the small DiGiCo console.

"The Waves plugins have allowed me to own back elements of how I like to mix and it has been fairly smooth," he remarked. "The compromise for me has been not having such a large control surface. I've had to design the custom fader layout of the console to facilitate a show environment that keeps my priority signals such as CG (Control Groups) and FX together."

Smasha's Waves Multirack is loaded with key plugins to offer primarily dynamics processing across busses, including drum busses, keys/synth busses, backing vocal and Meg's vocal buss. Essentially they supplement what is on the console and provide him with a sense of familiarity, with processing he knows he likes to hear and can rely on the outcome.

"With Meg featuring a really dynamic vocal style, I am taking care to allow her voice to lift and soar, which is a real highlight of her performance, but also maintain intelligibility when speaking between songs," he explained. "I ride her fader a lot, plus use a chain of processing that offers some additional control including dynamic EQ on the SD11, Waves C6, LA2A and Pultec EQP1A and this combination is working really well so far. FX are all from within the SD11 rack offerings, and together with my song snapshots, offer the ability to give each song some detail in the mix processing."

The microphone package is mostly standard Shure, Sennheiser and Radial DIs with a few favoured exceptions.

"Josh has some lovely AKG 535EB on overheads, the bass cabinet has an Audio-Technica AT2500, backing vocals are on Audix OM7s to help with minimizing stage spill and



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**“It’s all about Meg and the identity and power of her voice.”**



Smasha



Bryce Mace

Meg is on a Shure radio with B58 capsule,” revealed Smasha.

A highlight of the tour was the gig at Miami Marketta on the Gold Coast, a venue that is allegedly haunted.

“We had some strange happenings at the stage and monitor world that can’t be readily explained,” said Smasha. “Equipment settings changed on the console and IEM rack with no clear explanation. It’s a great venue and

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fabulous vibe but has some strange anomalies which apparently haven't only happened to us. The venue owners have actually had paranormal investigators in, so who knows? I'd be interested to hear of any similar experience of other touring acts in this venue."

At the end of the Meg Mac tour Smasha rejoined his age group and went straight onto the APIA Good Times Tour.

Lighting design for the show was originally by Steve Granville who wasn't able to tour so he handed over the reins to Bryce Mace who promptly set about adding elements and changing some fixtures types.

"Steve drew the tour design to which I added a festooned, white polyester cyc from The Look and a black scrim in front of it for a bit of depth," said Bryce. "I added the scrim because I didn't want to see the cyc when it wasn't being lit up. I also substituted the Martin MAC Vipers for Ayrton Ghiblis, the Claypaky B-EYE K20s to MAC Quantum Washes and the SGM P5s for Chauvet Q40s!"

Six Ayrton Ghiblis are located on the ground, three per side of the stage, with Bryce adding one more to the middle of the front truss solely to spot Meg.

"The Ghiblis do some nice break-ups through the band and also project some great gobos onto the cyc for a different look," said Bryce. "I really like their animation wheel too so I use it in a couple of songs and they are incredibly bright. The zoom is awesome, I can point them out towards the crowd and zoom out really wide for some really nice looks."

Seven GLP JDC-1 on the ground are used to light the cyc up or Bryce tilts them forward to silhouette the band in a large flood of light. As you would expect with Meg's music, they are hardly ever used as a strobe.

Chauvet COLORado Panel Q40s are situated to the sides of the stage from where they are used to side wash Meg with one placed behind each riser to silhouette the band. Another two Q40s are located in front of Meg which was a fortunate choice as Bryce didn't know she would be wearing a large brimmed hat for the entire performance!

"I only found this out on the first show and I thought 'holy crap!'" he laughed. "If she didn't stand where the Q40s were, she had a shadow on her face. So after the first show I added nine GLP X4 Bars across the front of the stage! Now she can be uplit wherever she walks!"

Seven upright pipes hold three Acme Stage PAR100 each and Bryce is particularly impressed by these LED fixtures.

"I really like the Acme PARs, in fact they're awesome," said Bryce. "Most people don't realise that they are not real PAR cans and they use 1/10th of the power consumption. Plus of course you don't spend a bunch of money on globes. They're designed exactly like a PAR can and you can't see any pixels. We have added gels to them as I wanted them a bit warmer. You can even set different modes so you can have different dimmer modes such as having them fade out like a PAR can would with a bit of a glow or just snap."

Twelve Vintage Blazes are mounted on some upstage truss uprights and originally Bryce programmed the show so that they first made an appearance in the sixth song for a bit of a wow factor. Last minute that song was moved up the playlist and so they are revealed earlier.

"I use them sparingly and there are a couple of songs where I might use only three of them in an abstract manner," added Bryce.

Six MAC Quantum Washes, chosen for their brightness and reliability, were on front truss to light each person onstage. However, although the band are lit, it's all about Meg so often they are lit darker than her unless of course if they have a solo.

Bryce also programmed the show after immersing himself in Meg's music for several weeks. He took out an MA Lighting MA3 light in order to get his 'muscle memory' ready for when the MA3 software is released and says he was used to the MA3 hardware by the second show.

"I did most of the pre-programming at home on a MA onPC which was hard because my young daughter comes in and always wants to make everything pink on the visualizer," remarked Bryce. "I'll be half way through a song and I'd have to change it all to pink until she went to bed."

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# ACETA CONVENTION 2019

by Jason Allen

## Here's what ACETA can do for you.

**The second annual ACETA Convention ran in Wangaratta, VIC, on the weekend of 3 to 5 May. The case for a strong peak body for our industry cannot be overstated. Here's why it's important.**

Travelling up the Hume to Wangaratta for the ACETA Convention I was contemplating what I get out of participating. Presenting two workshops, I get to share my experience at the coal-face of media to help members negotiate their way in a shifting landscape, which I find rewarding. I've given my entire working life to this industry, and I want to see all parts of it succeed. If my contribution helps someone to market more effectively and increase their bottom line, great.

I also get to spend some social time with the members, who distinguish themselves within our ranks by proving with their presence alone that they care about the rest of the industry, not just themselves. These are the kind of people I want to talk to.

I also get an amazing sense of what we could achieve together, which after returning back to the normal working week, turns into frustration. In the ill-advised words of one of the worst marketing campaigns in Australian history – where the bloody hell are ya?

The 2019 Convention was well attended, but didn't grow from 2018, partially due to some notable illnesses (wishing you a speedy recovery, David Bell), but mainly due to the same hard-core of dedicated people being involved with no significant increase in membership. ACETA will only be truly effective

as an industry peak body if its membership increases dramatically, and the lighting and AV sectors are still largely unrepresented.

So, why should you join ACETA and participate in its workings anyway? The most compelling argument is enlightened self-interest.

A powerful industry body can offer tangible financial benefits to its members. Here's an obvious one – freight costs. How much does your business spend on moving things around the country? What kind of rates do you get from your freight company? Now, imagine if every importer, manufacturer, distributor, wholesaler, integrator, and production company in Australia was an ACETA member, and ACETA went to a freight company to negotiate rates on behalf of ALL of its members as one customer. Reckon you might get a better rate? You betcha. How much money did you just make? Now take that thinking and apply it to EVERYTHING your business spends money on.

Other powerful reasons discussed at the convention include official certification for importer/distributors and service providers. What does that mean? Customers (especially government) will preference products and services provided by ACETA members. That's an effective way to drive the cowboys out of

the industry and improve your profitability. But it only happens with a strong membership and extensive promotion.

Collective action and bargaining will always net a better deal for your business, no matter which part of our industry you work in. The bigger ACETA gets, the more muscle it has. Want legislation changed? Import tariffs dropped? Improved education pathways to our industry? More favourable foreign currency rates? Cheaper warehousing? More comprehensive and affordable insurance? Just think of something that would improve your business that you can't achieve on your own, and ACETA can make it happen. But only if we all join. [www.aceta.org.au/join-aceta](http://www.aceta.org.au/join-aceta)

## Members speak - What does my ACETA membership do for me?



**Deb Sloss - Managing Director - Studio Connections Australia**

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MY ACETA membership has introduced me to lots of people in our industry that I knew by name but didn't know personally, and I've come to realise that we share a lot of the same professional concerns, problems, and issues.

Membership gives you a sense of community, and you no longer feel like you're beating this drum on your own. You get positive input to put into your company and ideas about ways to improve your business just by talking to the other members.

So for me, it's about the network sense of community. We need to band together as an industry to move forward, and acknowledge that we can't do some of the things we need to on our own. We need to work as a collective - yes, we're all competitors to some extent, but we can work together to achieve better results for all of us.



**Ben Clarke - Technical Support Manager - PAVT**

It's important for PAVT to be an ACETA member because we need to make sure that our business has an agency that supports us. Having an industry body means that there is a mechanism to deal with the forces that can act on our business, be they internal or external issues such as imports, exports, compliance, or safety. We are stronger together than individually, especially when it comes to lobbying government.

PAVT attend the annual ACETA convention because it is as much about talking about issues as it is about personal growth. Having an industry body that can assist us with professional development and personal growth means that we become better business people.



**David Di Muzio - Product Manager - PAVT**

I've been dealing with compliance at PAVT since I joined the company. There's a lot of ambiguity around compliance, and the compliance laboratories have led our industry into confusion or assumptions about what compliance should be. According to the laboratories, being compliant would cost us hundreds of thousands of dollars. But having had ACETA working on compliance with the ACMA, we've proven that's not the case at all. Having ACETA at the coalface creating guidelines has taken away the ambiguity and given us clear indications of how to get our products compliant.

Having an industry body helps further the industry. That can only be done from within, and the only way you can help is to be involved.



**Peter Twartz - Supply Chain/IT Manager - Jands**

I think there's an inherent benefit to a quorum; a group of people who work in the same industry getting together and determining a way forward, defining what they want to achieve together, while still being competitive. We should be looking for opportunities to produce more interesting outcomes for customers, and sharing new ideas.

ACETA membership saved Jands a lot of heartache and money during the Digital Dividend process. It was a huge problem for the audio side of the industry, and the benefit of a peak industry body couldn't possibly be understated there. The ability to lobby government and speak for us is something that no other entity can do. While we don't have that exact problem at the moment, we likely will face something entirely different but just as disruptive in the future, and suddenly the entire industry will be challenged. ACETA will need to be there to get our teeth into it, talk, and lobby on behalf of the industry.



**Tony Hambling - Sales Manager - Murray Tregonning & Associates**

ACETA future-proofs our industry, represents us, and deals with the authorities on our behalf. It provides a forum for education and networking opportunities with similar business. The annual convention's workshops and seminars enable us to put ideas into action in our businesses. Learning about other people's concerns within the industry makes you realise that we're all in the same boat, and we become more unified.



**Murray Tregonning - CEO - Murray Tregonning & Associates**

I think it's great that there is a peak body, which until recent times had been sadly lacking in our industry. We all need to come together and discuss problems. The Digital Dividend was definitely a big problem, and the same issues will come up again. God only made so much spectrum real estate, and I don't think the government realised how important it was to us and the community as a whole. RF management is a nightmare, and we've got to self-regulate, because we can't rely on government.

**“A powerful industry body can offer tangible financial benefits to its members.”**



# SOUND MASKING 101

## Sound Masking is a Critical Component of Acoustic Design

When designing an optimal acoustic environment, architects consider a variety of elements to address noise control and speech privacy. Elements added either Absorb, Block, or Cover sound, and are collectively called the ABC's of acoustic design.

**Absorb:** Acoustic wall panels, carpet, and ceiling tiles help absorb excess sound

**Block:** Solid barriers, partitions, and walls help block excess sound

**Cover:** Sound masking helps cover up excess sound

All of the ABC's of acoustic design can be used together or individually to achieve the desired acoustic environment, but absorbing and blocking materials are costly and underused. Sound masking, on the other hand, is a low-cost option for creating acoustical environments that both reduce noise distractions and increase speech privacy.

## Why Do You Need Sound Masking?

**Open Floor Plans are the New Normal**

Most workplaces today feature more open spaces and smaller, and often shared,

workstations. Fewer sound blocking and absorptive materials are being used such as lower or non-existent partitions, hard or glass surfaces, and thinner walls and doors. This creates acoustical challenges that negatively impact workplace satisfaction, productivity, and speech privacy.

### Sound Masking Increases Worker Satisfaction

Approximately 24,000 office workers in private offices, shared offices, cubicles, and open offices were asked to rate their satisfaction with their noise and speech privacy levels. Those with private offices were the only ones satisfied with their speech privacy, and even they only rated them a .55 out of 2 on average.

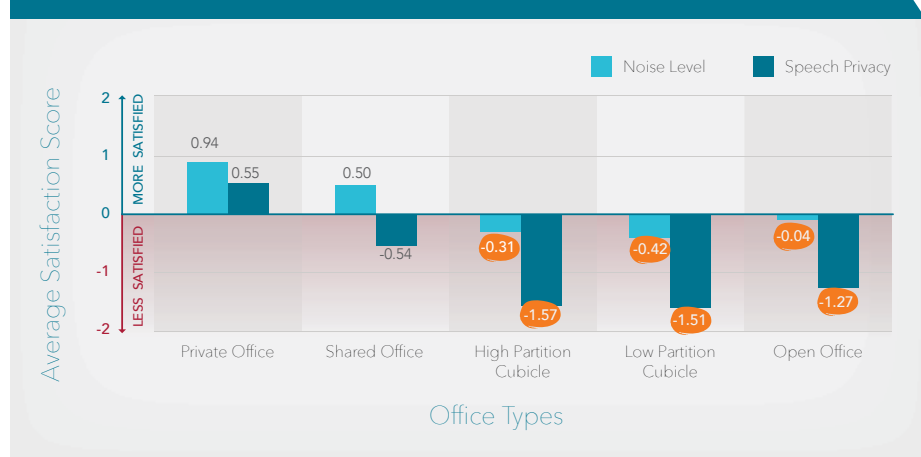
As you can see, cubicle and open office employees were notably dissatisfied with their office's levels of speech privacy.

### Lack of Speech Privacy is the Number One Concern of Employees

What's speech privacy? Simply put, it's the inability of an unintended listener to understand outside conversations. So someone with a lack of speech privacy is overhearing lots of conversations they shouldn't be and is also concerned that their conversation is being overheard by others.

The chart below says it all. The Center for the Built Environment in Berkeley, California, surveyed more than 25,000 workers in more than 2,000 buildings to determine what the

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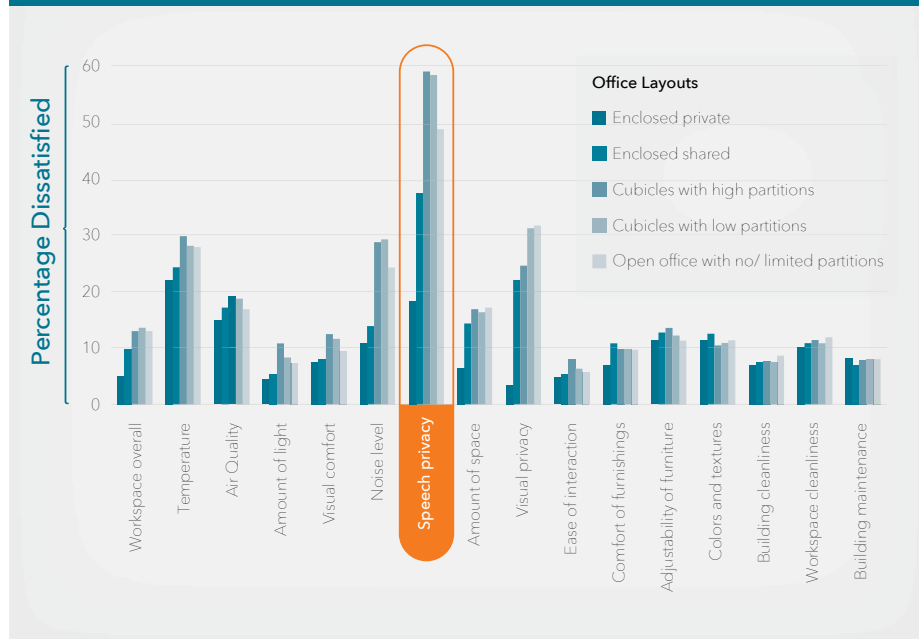
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key environmental issues were for workers. Of all of the factors workers encountered in their environment, speech privacy was far and away the factor they were the most dissatisfied with.

nightmares if overheard by the wrong people.

Providing speech privacy is often encouraged, or outright mandated, by the legal and regulatory environment.

## Drivers of Office Worker Dissatisfaction



Source: Analysis of data from the Center for the Built Environment by Jungsoo Kim and Richard de Dear, University of Sydney

## Distractions Make Your Employees Less Productive

Employees are interrupted once every 11 minutes according to research from UC Irvine, and it takes them up to 23 minutes to get back into the flow of what they were doing before they were interrupted.

### These Distractions Cost Money

In a recent study presented to the International Congress of Noise as a Public Health Problem, researchers found that, on average, employees wasted 21.5 minutes per day due to conversational distractions, making lack of speech privacy the number one cause of reduced productivity. An additional 2014 Steelcase/Ipsos study found that employees lost as much as 86 minutes per day due to noise distractions.

Even using conservative estimates, this loss of productivity adds up to big monetary losses for companies. 21.5 minutes daily is roughly 4% of an average employee's work day (based on an 8 hour day). Some quick math shows that a company with 100 employees and an average employee salary cost of \$50,000 is losing \$200,000 a year in lost productivity.

## Sound Masking Protects Confidentiality and Reduces Liability

Closing the door to an office no longer guarantees speech privacy, in fact, it's probably worse because closing that door provides the illusion of privacy.

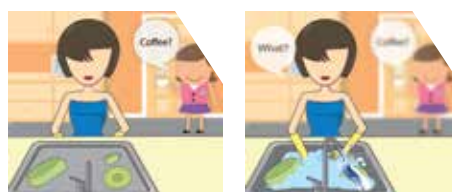
Many private conversations could be HR

## How Does Sound Masking Work?

### Adding Sound Makes Speech Less Intelligible

Adding sound to a space actually makes the space seem quieter. It sounds counter-intuitive, but it's true. This is because the added sound reduces the intelligibility of speech. When you can't understand what someone is saying, their words are less distracting — in fact, you probably don't even notice them.

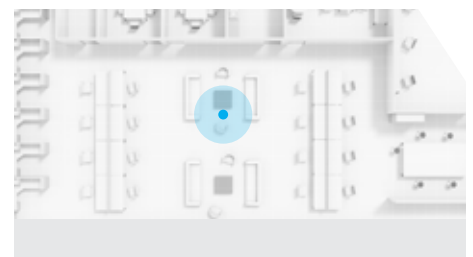
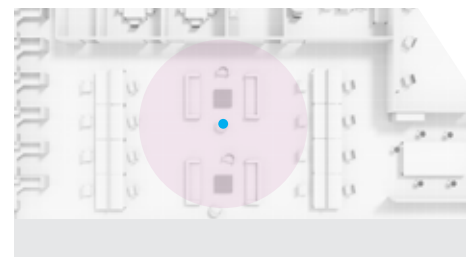
Here's an example of sound masking in everyday life. Have you ever had a conversation with someone while you are washing dishes and they are on the other side of the kitchen? When the water isn't running, you can hear the other person's words perfectly. When you turn the water on it becomes much harder to hear them and understand what they are saying. The person isn't speaking more softly, but they sound as if they are. This is because the noise of



the running water is "masking" the sound of the person speaking to you. Sound masking mimics this phenomenon on a much more sophisticated and effective scale. By adding

ambient sound to an environment, (such as professionally engineered sounds that sound similar to water flowing or airflow) you help mask the other noises in the environment, making them less distracting. Sound masking doesn't eliminate all noises in an environment; it simply reduces the area where human speech is intelligible and distracting. We call this area the radius of distraction.

Once masking is added, it becomes more



challenging to understand conversations from across the room, and thus makes it less likely that conversations will distract you.

## Solving the Noise Problem...

## QtPro® Sound Masking Technology

QtPRO®

Cambridge Sound Management offers the best performing masking technology that can meet the needs of any architectural space. Our commitment to delivering superior products and service has made us far and away the world's largest provider of sound masking solutions.

### Innovators of Direct Field Masking Technology

Cambridge Sound Management revolutionized the sound masking industry with the development of our direct field sound masking technology, QtPro. QtPro uniformly disperses a pre-tuned sound masking signal directly into the workspace. The result is a consistent and comfortable ambient sound throughout the space. The QtPro system consists of three simple components: emitters (i.e. loudspeakers), a control module that powers and sends the audio signal to the emitter, and standard category cables that connect the emitters to the control modules.



## The Qt® Emitter

Emitters are the backbone of QtPro. Qt Emitters are wide-dispersion direct field speakers that are smaller than a coffee mug. They deliver four uncorrelated audio channels and provide uniform, unobtrusive sound masking.



## The Qt® Active Emitter

The Qt Active Emitter provides high sound level and a broader frequency range than the standard Qt Emitter, making it a great choice for workplaces in need of paging and background music capabilities in addition to masking. It utilizes the same control modules and similar cabling infrastructure as the standard emitter.



### Simple Layout, Zoning, and Installation

The QtPro system is designed to meet the unique acoustic requirements of a space, whether large or small.

Emitters are easily installed by certified masking professionals in a simple grid pattern, determined by ceiling height. During the layout and design phase, the space is divided into zones based on acoustic requirements of the space. Zones can range from approximately 100 square feet (9.3 m<sup>2</sup>) to 12,000 square feet (1,115 m<sup>2</sup>).



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# Solving the Speech Privacy Crisis...

## DynasoundPro™ Sound Masking Technology

### DynasoundPRO®

#### Innovators of Indirect Masking Technology

Sound masking can also be emitted into an environment indirectly. In this method, speakers are installed above the ceiling tiles (or in some cases, under a raised access floor). The speakers point upwards, towards the ceiling deck. The masking noise hits the deck and then reverberates back down through the ceiling material into the workplace below.

To be consistent as a direct field sound masking system, it's imperative that each speaker be controllable on an individual basis to account for items in the ceiling plenum or differences in ceiling materials.

The DynasoundPro Networked system is the only sound masking system that allows each speaker to be individually controlled remotely via software, which drastically improves the consistency of sound masking coverage and makes it the best indirect sound masking system available.

Like QtPro, the simplicity of the DynasoundPro Networked system is one of its main advantages over legacy indirect systems. Power is delivered through standard Ethernet cable to a small signal processing box (DS8000) installed in the ceiling. Each DS8000 has 8 speaker outputs. A music and paging interface can also be added to the system, allowing masking, paging, music, all to be controlled at the individual speaker level.

## Sound Masking Technology from Cambridge Sound Management

### Which Sound Masking System is Right for Me?

The best sound masking system for you depends on a variety of factors including ceiling architecture, ceiling height, paging/music needs, and more. Whether you are masking a small office or a multi-campus facility, Cambridge Sound Management can help you decide which solution is the best for your workplace's needs.

### Advantages of Working with Cambridge Sound Management

- The world's largest provider of sound masking solutions with the most extensive network of worldwide certified installers and field engineers

loudspeaker

- Network capabilities for easy control, customization, and system integration
- An affordable alternative to expensive construction projects or sound blocking materials
- Offering products that are GreenSpec listed and the most energy efficient sound masking systems available
- Helps contribute to LEED Certifications
- Customized eavesdropping and SCIF protection services
- Deployed in hundreds of millions of square feet and trusted by over half of the Fortune 100

## Solving the Noise Problem...

## QtPro® Sound Masking Technology

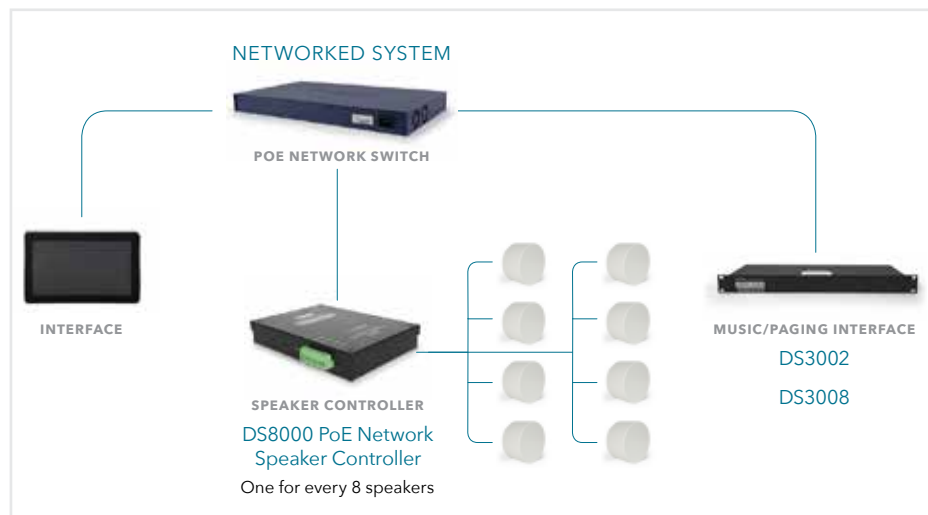
### QtPRO®

#### How Do I Get Sound Masking?

Design, quotation, and installation of Cambridge Sound Management systems is handled by our staff and our international network of certified sound masking professionals.

Certified sound masking professionals include service providers your business may have already used before, such as:

- Data, voice, and video cabling
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- Telecom integrators
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- Security integrators
- Office furniture dealers
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DS1398 Under-floor and Shallow Cavity Speaker | DS3002/3008 Music and Paging Interface

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# THE IMPORTANCE OF NETWORKED ASSET MANAGEMENT FOR AV

by Jands' Chris Ling, Business Development Manager  
(Corporate, Education & Government NSW, QLD & ACT)

**As many of you would know, the requirement for Corporate ICT teams to be the gatekeepers of everything that sits on their network is increasing. Many of us may still be in the world of segregated AV networks, but no matter what network your AV equipment is connected to, clients will still want to know what is there. Is the equipment working? Are they getting return on investment?**

What is important to the IT client may not always be what we as the AV industry see as a requirement for network management. It is vital to understand that network management is not the same as network-based control. Many products can be configured, commissioned, and controlled via web graphic user interface (GUI) or dedicated software. The asset management removes these functionalities from the access of the client IT team and lets them understand what they care about; IP addresses, security certificates, updates, and maintenance.

No matter what assets you have or what software the manufacturer uses, there are key features that makes a great asset management platform. These features are what help ICT teams understand and address issues to best manage AV items on the network:

- LDAP credentials – This means that users credentials are uniform across various platforms and requirements. No need for the team to have a new set of log-in names and passwords.
- Messaging alerts – The ability to be notified of issues via email/SMS. Being able to be made aware of issues immediately and the ability to set different levels of attention required for each alert.

- IP address management – Being able to understand quickly the IP address being used and what equipment is on the network is a must. Whether it is a dynamic or static IP address, the team will want to know what is there.
- Hierarchical structure – You want to be able to know exactly where an item is. This helps with multiple sites, building floors systems etc. without having to just scan a large list of names/IP addresses.
- Event logs – This is the ability to see what events or actions or changes have taken place across the system, right down to status changes of equipment. This is a vital tool in being able to troubleshoot issues and understand the use of units.
- Centralised updates – You no longer need to go to every device to update firmware. This is a great function of asset management and saves time which, in the end, is the most important asset to manage.
- Simple-to-follow interface – The best asset management platforms are intuitive to navigate for the ICT based user.

Companies have addressed these issues in different ways. Two examples of this are Biamp's SageVue and Shure's System On.

Biamp offer their network management

system as free software to Tesira and Devio customers. The initial offering for the software needs be installed on a PC or NUC that is operating Windows 10 Professional edition or higher and is available for either 32bit or 64bit installations. The PC or NUC has to be on the same network as the devices, and from that point on, use of the software is via web browser. The new SageVue 2.0, announced at ISE, will allow the software to be installed on servers running Windows Server 2012 or 2016.

Along with the Server installation, below are some more functionalities forecast for SageVue 2.0, due for release soon:

- Scheduled overnight maintenance tasks including Tesira preset recalls, device re-boot, Devio auto-setups, firmware updates and pushing DSP configuration file to devices
- Better ICT VoIP configuration for enabled Tesira devices
- Better hierarchical structure for multiple campus/sites, rooms and systems

Shure have a slightly different approach to the adoption of asset management. Due to the nature of large installations of various devices, Shure deploy licenses on a per-device basis. This assists teams in adding new or refurbished spaces to their existing networks or understanding when certain items may be removed or replaced and need licensing to be included for network asset management.

Due to wireless microphones being in use in multiple areas and battery management being critical to some meetings, Shure have made this a priority for teams. The ability to pair spare MXW transmitters equipment to any MXW Access Point and deliver a replacement to a meeting or event in progress is one of the many ways Shure understands how their asset management can be a benefit to teams.

Shure goes a little bit further to bring the ICT team into the audio world, giving them more operational control over equipment, as well as the latest version adding the popular MXA range and P300 to System On.





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# THE FREELANCE TECH - THE RIGHT STRUCTURE

by Simon Byrne

**I've been in this industry for a while and I've noticed those who are still in the business from the time when I started fit into two categories - The Haves, and the Have Nots!**

The Have Nots are the ones I worry about. These are the people who after many years in the industry, probably should have a bit more to show for it. I suspect that this contributes to our industry's high representation for depression and suicide.

Don't be a Have Not in thirty years' time.

If you choose to be freelance, you are running a business. Run it well.

The first consideration is structure. You'll either be a casual employee, sole trader, or provide your services through a Pty Ltd company.

As a casual, you are an employee of the companies that contract you, and your engagements come with all the entitlements that other employees get. That is tax should be deducted from your pay, you get worker's compensation cover, and you are entitled to superannuation if you earn more than \$450 in a calendar month. This is the simplest arrangement.

The more common arrangement is that of a Sole Trader. That is, you provide your services as a separate business. The arrangement is extremely prevalent but in my view, most examples of this are just employer/employee relationships dressed up as subcontracts so the main contractor sidesteps their obligations as an employer. Generally you

know this is the arrangement when the employer wants you to have your own ABN (Australian Business Number), but from every other angle you are still effectively a casual employee.

If you choose this route, be comfortable that you understand the issues. Check out my previous articles on this "Contractor or Employee" in CX134 (<https://www.cxnetwork.com.au/cx-magazine/cx134-march-2018/>) and "Sham Contracting Exposes Workers to Being Sued" in CX144 (<https://www.cxnetwork.com.au/cx-magazine/cx144-february-2019/>)

The last structure is a Pty Ltd Company which is a separate legal entity. The fact that it is a separate legal entity gives you some personal protection from being sued. Say you cause an incident which costs someone else a lot of money and it is your fault, or you get involved in a protracted legal dispute. If you are working as an employee of your company, it is your company that will get sued, not you personally.

This is a good thing for you because in the worst case, your Pty Ltd company will lose money, even go bankrupt but at least you are not personally financially destroyed. That is, your personal assets are protected. However if you are a sole trader that has some assets such as a house, those assets are exposed.

When you have your own Pty Ltd company, you are its employee, so the company can take out worker's compensation insurance which will provide cover for you. Worker's compensation insurance is government regulated so the premium rates are a fixed percentage of the employee's wages.

Proper insurance cover for a workplace accident for a sole trader is a difficult area. As a sole trader, you can't cover yourself as an 'employee' with workers' compensation insurance. Therefore a sole trader might need to take out their own personal death, illness and disability insurance. You can cover yourself for accident and sickness insurance through a private insurer but it is typically more expensive, and much more difficult to take out and maintain because insurers consider the risk to be higher.

Pty Ltd companies have one more advantage in that risk-adverse employers such as the government like engaging freelancers with a Pty Ltd company structure. The company gives them confidence that they are not required to deduct tax or pay superannuation.

It is for these reasons I prefer the Pty Ltd Company structure.

As a freelancer, you should take note of your client's business structure too. The building industry is littered with Pty Ltd companies that go bust in the late stages of a construction build, stiff their subcontractors and re-emerge the next week as a new company free from the liabilities of its previous incarnations.

Some dubious event promoters will incorporate a Pty Ltd company solely for a



single event or tour. As a subcontractor, this should raise an alert because it can mean the company has been created for the primary reason to limit liability, and that the company is unlikely to have any assets, combined with lots of obligations.

This means the risk is higher that subcontractors might not get paid and the issue needs to be managed. In those cases, request a deposit, because if they pay the deposit, it is a sign that they do in fact have financing in place, and if they subsequently go bust, you have not lost all of what you are owed.

Care about your superannuation. This will be very important to your later years.

In Australia, you have a wide choice over where you invest your hard-earned superannuation providing the funds comply. The difference between the retail superannuation funds and the industry fund's performance can be dramatic. It's illegal for us to provide financial advice so I cannot make any recommendations. On a completely separate topic, have you seen those industry superannuation television ads that demonstrate consistently higher returns than the retail funds?

Chasing money - It is not up to you to fund your clients, and that is what is happening when they string your payment out. I only

deal with clients that I consider as reasonable payers, and for me, the most that I consider reasonable is no more than thirty days after the month. This might not work for you, and some would say that this is generous, but I work for a lot of large companies and government departments who are incapable of paying more quickly. As long as I know the money is coming, I'm okay with it.

However, I'll never get to a point where a client owes me a very large amount of money, especially if I am incurring costs. On very large jobs where I crosshire people and equipment, I'll insist on progress payments.

For my slow-paying clients, I may get them to pay a deposit too. Most of them are okay with this, as the slow payers are usually the large organisations that operate at a glacial pace. They are used to paying deposits and don't expect you to fund their inefficiency.

For the fast payers, I don't worry about deposits. They are usually the nimble, small operators who realise that their subbies need to be paid promptly, otherwise those subbies might not be available the next time they call.

Having said all of this, I don't let slow payment damage an otherwise good working relationship. We are a relationship business so if you are a freelancer that is known to be narky about getting paid, you are not going to get the calls.

In your career, a very small portion of your clients will fail to pay for various reasons. It happens. Learn from the experience and if there are reasonable (and legal) avenues to chase the money, by all means go for it! Other than that, learn from the experience and don't lose any sleep over it.

Don't go for the cheapest accountant. Good advice is invaluable so spend some time finding a good one, and be prepared to pay a reasonable fee. I spend a small fortune with my accountant every year, but the amount of money he has saved me, as well as the smart strategies he has got me to put in place, has made me dramatically more money than what I have paid out.

I hope this article will inspire the younger freelancer in the industry to take some steps which will make a dramatic difference to their financial situation in the future.

The live event industry is inherently messy. Set yourself up in the right structure to ride the good times, as well as the bad, and put in place some routines to ensure that you build a great business. As usual, this article is of general advice only and does not take into account your own circumstances - it might even be wrong for you! You should definitely get your own advice.



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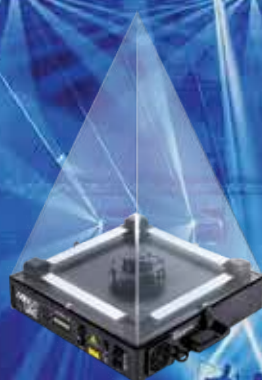


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# 5 STEPS TO THE PERFECT MEETING

## Making meetings matter again.

Meetings have had a bad reputation for a long time. At some point in the 20th century, they went from being something everyone wanted to be in (because important people were always invited to meetings), to experiences most people wanted to avoid. Today, meetings are often seen by many (if not most people) as inconvenient distractions, and their very mention can induce exasperation and eye-rolling apathy.

Nevertheless, companies can't function without the productive exchange of ideas, and collaboration remains integral to business success. Meetings, in some form, are entirely necessary. So, here at Barco, we decided to find out why meetings have fallen out of favor – and what businesses can do to reclaim their usefulness.

We joined forces with Circle Research to survey nearly 3,000 white-collar workers in Europe, the Pacific, the US, China and India.

Our sample of workers were aged between 21 and 65 and were employed across a range of organisation sizes, industries, job seniority and roles.

We identified five reasons why workers find it hard to get the most out of meetings, and why the format can so often prove to be an inefficient use of company time. In this white paper we explore these areas and offer tangible ways for businesses to re-engage their workers, and make meetings matter again.

## Why are we here?

“What am I doing here?” It may be an existential question, but – as we sit in meetings thinking about what we should be doing instead – it's one that many of us find ourselves asking a lot. In fact, the reasons for meetings and their relevance to attendees is the research area that garnered the strongest reaction from our respondents, and the highest levels of agreement.

It's understandable. The most important

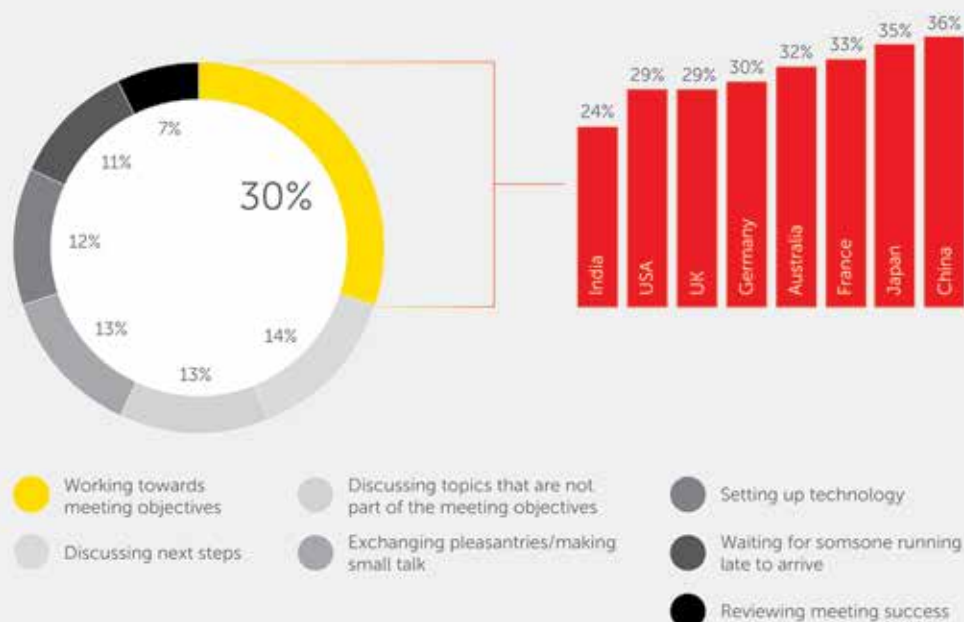
aspect of any meeting should be the reason for calling it, and for choosing the people you want to attend. Yet, over half of the people we asked (51%) said they were often asked to attend meetings which turned out to be irrelevant to them.

And nearly half (48%) said it's often unclear to them what they are there to achieve, a statistic which rises to a staggering 61% among the C-suite. That's nearly two-thirds of a company's highest-paid executives who perceive themselves to be misusing their time – which tells us a lot about the reasons meetings are often viewed with suspicion.

To top it all, our research also revealed that, when meeting objectives are known, on average only 30% of time is actually spent working towards them. This is below 30% in the UK, USA and India.

So, not only are people invited to meetings they don't need to attend, but meetings are either being used to work out objectives, or objectives – when they exist – are not adhered to.

How employees use time in meetings:





## Step 1 ›

So, what can companies do about the sorry state meetings find themselves in? It may seem like an obvious point, but our research suggests it needs calling out: every meeting needs a clear objective, preferably one that's articulated beforehand, or at least made clear at the very beginning. If everyone is clear on what they are working towards, then they will also be clear on whether or not they can contribute. If the meeting has no objective, finding an objective should not

be the reason for the meeting. Businesses could take a leaf out of Mark Zuckerberg's book here. The Facebook CEO reportedly asks his managers to consider the point of each meeting. "Is it to make a decision or to have a discussion?" If it's to have a discussion, is a meeting the right forum?

Our research also points to a culture issue. People feel like their time is being wasted, but they are unwilling to speak up or question the reasons for their attendance. It's just the way things have always been.

This needs to be tackled. The best way to do that is for mid-level and senior managers to lead by example. In fact, the C-suite and directors told us directly in the research what needs to happen: if meetings aren't working, stop them.

These steps may seem extreme to some, but following them should ensure that meetings have meaning, people's time is not wasted, and everyone has a reason to be there.

### How meetings should be run



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# Do we need *another* meeting?

Ever heard someone say, “my day was eaten by meetings”?

Our research indicates it’s a common occurrence. More than one in ten of our respondents said that they attend over twenty meetings a week. And 26% said they attend 10 to 19 meetings per week. The overall average is ten meetings. Meanwhile, a majority of employees think meetings should be shorter – with this figure being as high as 65% in Japan.

So, how long do meetings tend to be? The data shows that the average meeting lasts 48 minutes. But the most telling statistic we found was that 58% of respondents schedule hour-long meetings because that’s the standard timeslot in their meeting booking tool. Which begs the question: how much time is being wasted by letting meetings roll on,



purely because the space has been booked for an hour? Could employees be making better use of this time to work on that vital

presentation, for example, or to prepare for that sales pitch?



## A 21-minute meeting.

It’s also worth extrapolating these numbers. If a person is attending on average 10 meetings a week, each lasting 48 minutes, that’s one full working day given to meetings every week. In many companies, meetings don’t contribute to productivity timesheets, so that’s one ‘extra’ day that needs to be found. No wonder people feel frustrated by the number of meetings they’re asked to attend. Yet we know that meetings in some form are valuable. And we also know that, according to our research, 44% of the time spent in them is worthwhile – 30% of time is working towards the meeting’s objectives, and an additional 14% is agreeing next steps. So, what is the perfect meeting length? Based on our research, if we cut out the unnecessary time spent in meetings, we’re left with 21 minutes.

### Step 2 ›

It’s no surprise then that people want fewer, more streamlined meetings. The challenge is with changing company cultures so that people get what they want, and the meetings that do take place are more useful and productive. Reviewing the value of recurring, weekly catch-ups in the diary, is a proactive first step businesses can take. Do these scheduled events result in everyone taking actions away? If not, are they necessary? Many work processes don’t follow predictable patterns, so using a more agile meeting-room-booking tool – which allows people to book the time they actually need, when they need it – may well be more useful than relying on an arbitrary booking slot.

Secondly, when it comes to the number of attendees, less is more. Only the key decision makers should be involved. Or, to put it another way, only those who are likely to take away or allocate actions need attend. If decision-making processes are more egalitarian, meeting-holders can canvas wider opinions beforehand via email to cut down on discussion time. Collaboration is best when it’s spontaneous and informal, so cutting down on formal meeting time and incorporating huddle spaces also encourages impromptu collaboration in more efficient, smaller groups.

Finally, it’s worth assigning meeting roles

and fixed-agenda items. Our research showed that most people found roles such as chairperson, timekeeper and note-taker to be useful – but that time needn’t be wasted at the start of a meeting assigning these roles. These roles should be designated and communicated beforehand.

Similarly, time can be saved by removing fixed, recurring agenda items that aren’t adding any value. For example, there’s no need for a retrospective review to discuss what went well or badly in a half-hour meeting you’re still sitting in. Meetings should be springboards, not sinkholes. Constructive opinions can be pooled, logged and communicated after the event.

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# We'll bring our own devices.

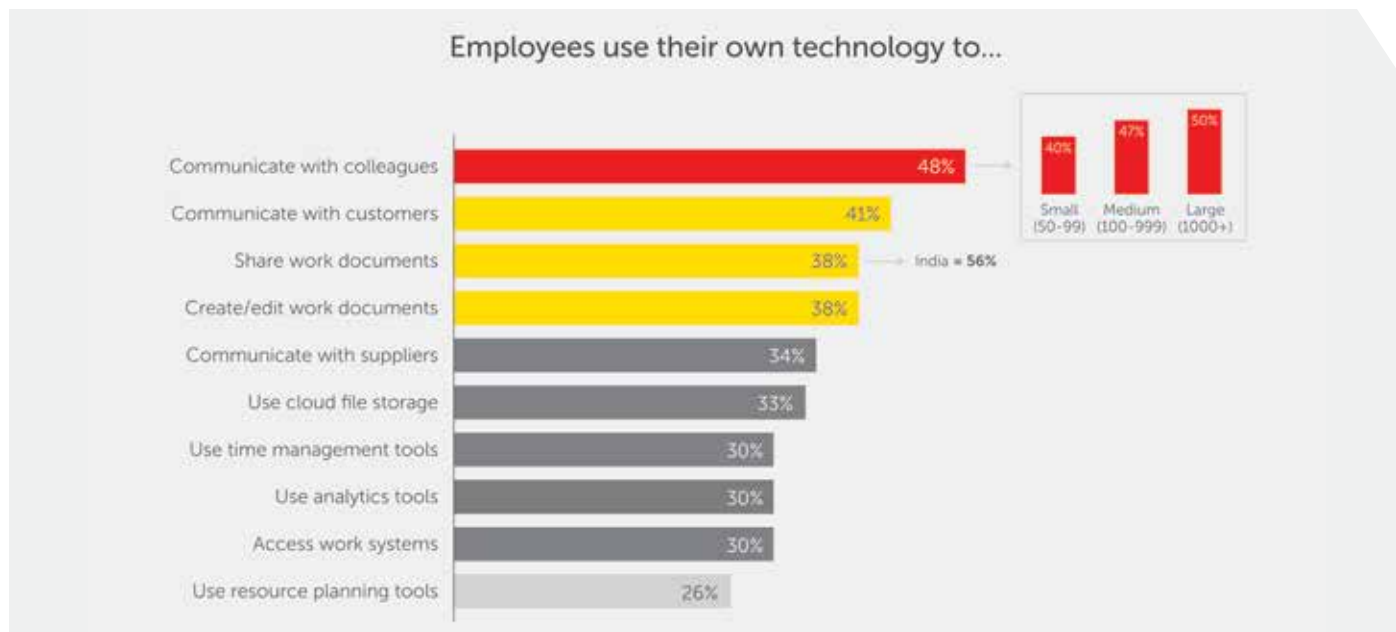
When it comes to collaboration, technology is seen as the great enabler. And rightly so. The huge rise in remote working over the past ten years has only been made possible by conferencing and collaboration technologies, together with instant messaging software. Meanwhile, in-room technologies have made screen-sharing quicker, easier and more effective. However, as we all know, technology

is only a great enabler when it works. When it doesn't, it's a barrier to productivity that can end up wasting valuable time. Our research showed that a worrying number of employees experience regular downtime. In fact, when it comes to meetings, on average 12% of the time is spent on trying to set up or connect to technology.

This figure is borne out by the way our respondents evaluated the questions about the technology provided by their employer. The majority – nearly three quarters – referred to it as inconvenient.

This explains why employees are turning to their own devices to facilitate sharing and conferencing. 57% said they used their own device at work, with speed and ease-of-use being the main drivers. This figure climbs to 66% among millennials.

This, of course, represents a security problem that businesses need to face. How many employees are conducting commercially sensitive tasks or accessing the company network on tech that is not protected by corporate security policies?



## Step 3 ›

Whether it's connecting to the audio when working remotely, or screen sharing during on-site meetings, businesses need to choose technology that is intuitive, simple to use and reliable. That way, meetings can start on time and finish earlier. And companies will be taking steps to actively protect themselves.

Think of it this way. With 37% of our respondents saying they would use whatever tech is necessary to be able to work productively, regardless of whether or not it is secure, it's clear that a lack of investment in sharing and conferencing technology equates to an increased security risk.

On the other hand, investing in technology and tools that people want to use, and which easily become their default choice (even on their own devices), directly counters the threats inherent in the bring-your-own-device (BYOD) trend. By staying technically up to date, everyone benefits.

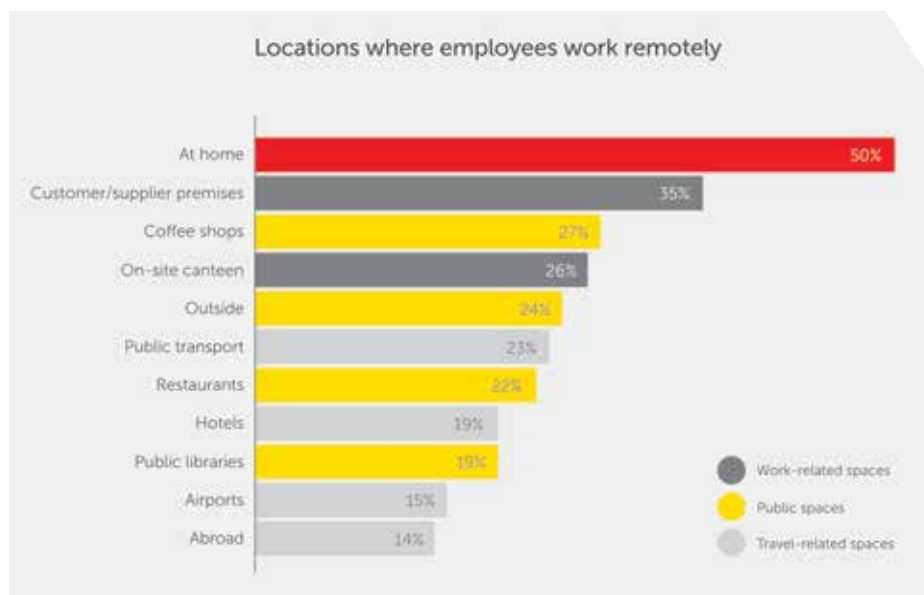


## Where are we going?

These days, people work everywhere and anywhere. Go into a coffee shop or board a train and you'll see people on devices making the most of their time to stay productive. Much of this liberating rise in remote working has been enabled by conferencing, messaging and sharing technologies that allow people to stay in touch with their colleagues, wherever they are. This doesn't mean that we're heading

towards a future where the traditional, bricks-and-mortar workplace will be obsolete. It seems people want the flexibility to work remotely when it suits them, but they still want to go to work, and to collaborate with others under one roof.

Our respondents were very clear about this, across all age groups. Millennials, for example, were 78% likely to want a fixed place called 'work' to go to every day, with non-millennials not far behind at 75%.





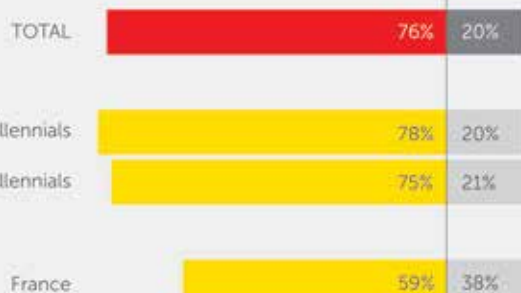
## Step 4 >

It's clear we're on the verge of a period of rapid evolution in meeting room technology, as providers search for solutions that will seamlessly connect virtual and physical workplaces with next-generation sharing technologies. When these products arrive, we can expect them to increase meeting productivity, efficiency and engagement like never before. Businesses should stay knowledgeable about new technologies as they arise and be ready to capitalize, or risk falling short of employee expectations and becoming less attractive to the best talent.

Meanwhile, staying ahead of the game in this way – or at least keeping pace with it – also applies to existing connectivity solutions. Employers should prioritize keeping their technology updated and optimized to ensure that collaboration remains seamless.

### Employees still want a fixed base to call 'work'

A fixed place most days ← I want to work from... → Different places day-to-day



The latest generation in the workplace want the office to remain a feature.

French employees are much more likely to be happy to quit the office

So, far from being a place that employers can afford to de-prioritize or scale back, the 'office' should be a place that businesses continue to invest in. Increasingly, the office is seen by employees as a collaboration hub, a kind of 'productivity HQ'. And, as technology evolves, the digitally native workforce will expect access to the very latest in collaboration tools while they're there.

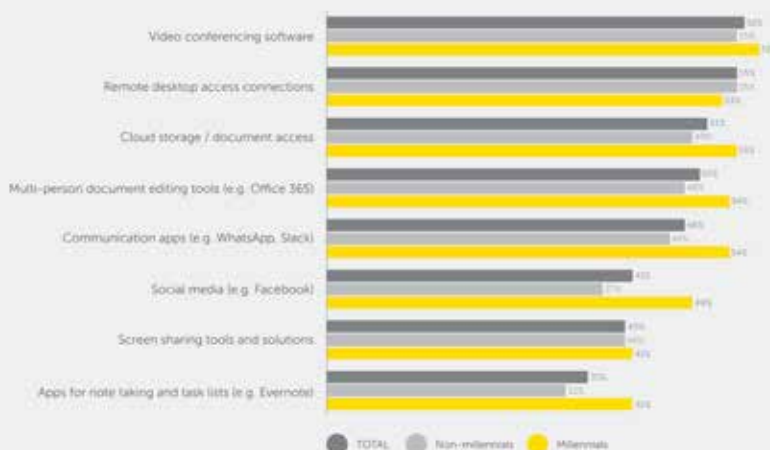
Our research shows that this is already happening, with 70% of respondents saying voice-recognition systems should be used to make meetings more interactive and efficient. Meanwhile 67% think transformative technologies such as augmented reality (AR) technologies will improve meetings, and 68% say the same of virtual reality (VR).

Most tellingly though, more than one in three workers expect VR to become a major collaboration tool within the next five years. Professionals in the fields of design, architecture, engineering and construction are already using VR to review models together in a virtual space (check out InsiteVR). And VR has tremendous potential to bring added value

to meetings in other industries, too, which is another reason the VR industry is expected to continue its growth trajectory.

This developing technology will make its way into your office before you know it!

### 'Most used' technology when working remotely (in top 5)





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# Okay, let's huddle!

When people work remotely, they will if possible choose the environment they want to work out of. And you can be pretty sure that the places they select will not be bland and nondescript. Our surroundings help us thrive, and environments where work takes place and meetings are held play an important part in supporting positive outcomes.

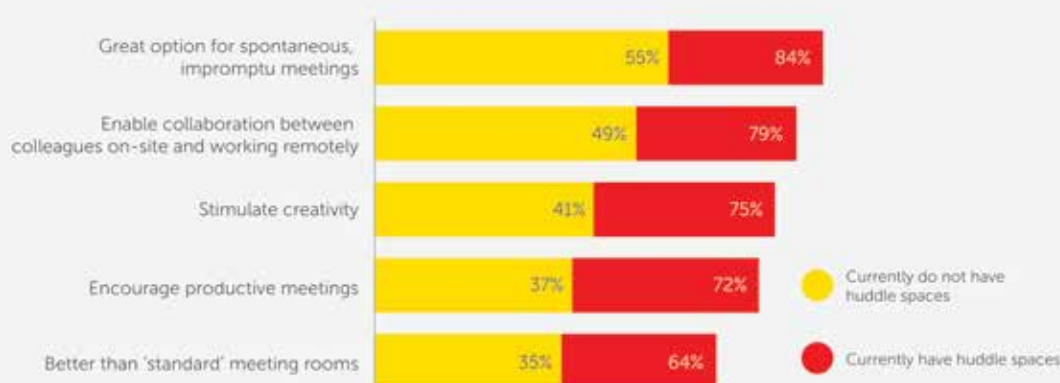
With this in mind, companies are increasingly seeking to inject creativity and inspiration into their work areas. Rather than deciding what they think workers want – such as with the fashion for open-plan offices – decision-makers are recognizing that people respond best to environments that reflect the places

they would naturally spend time in. Of course, that doesn't mean all meeting rooms should be like coffee shops. But it does mean that spaces where we collaborate should be a draw, not a drag.

As well as being somewhere people want to go to, meeting spaces also need to be easily accessible. On average, half of the respondents in our survey said they regularly can't hold meetings when they want to due to a lack of room availability, with this figure rising to 62% in the UK and 67% in Japan. This clearly demonstrates that the systems currently in place for booking spaces, together with a lack of easy-to-access spaces overall, are stifling collaboration. More seriously, it also means that the majority of employees might be putting off making

important business decisions with others because they can't reserve the space to make them in. How did we get to this? Our research points to a clear solution – more huddle spaces. The respondents in our survey showed overwhelming support for these unbookable, informal meeting spaces, with 82% of people saying that every office should have at least one huddle space. And the enthusiasm is not just about accessibility (84% of huddle-space users said they were a great option for spontaneous meetings). It's also about the kind of meetings that huddle spaces encourage, and the output that often results from their use. For example, 72% of workers with huddle spaces said they encourage productivity, while three-quarters said they stimulate creativity.

## Huddle spaces...



## Step 5 ›

By providing more huddle spaces, businesses can facilitate the kinds of inclusive, impromptu meetings that drive innovation. Unbookable, informal and – crucially – small, these spaces help working groups focus their energies, protecting them from the distractions of noisy open-plan floors while resisting the temptation

to separate them in traditional meeting rooms. There will of course be times when the boardroom is the most appropriate venue, but staff should have the flexibility to choose the right space for the kind of meeting they want to hold. Huddle spaces help remote workers feel included, too. Their size and informality allows people

connecting to the huddle to more easily feel part of the discussion. With the right technology solutions in place to enable seamless conferencing and sharing, there should be little to prevent remote workers contributing as fully as if they were in the building. Technology needs to accommodate everyone, wherever they are.

## Conclusion - Seizing the opportunity.

Everyone will have their own opinion about what makes the perfect meeting, but our research tells us what the majority of today's workforce feels is essential.

According to our respondents, businesses should prioritize the following five actions:

1. Set a clear objective for every meeting
2. Reduce the number and length of meetings
3. Choose the right technology, and accommodate BYOD securely
4. Keep an eye on advances in meeting technology and keep current tech optimized
5. Provide more accessible, more agile meeting environments, such as huddle spaces.

We believe that every business can achieve these steps in the short to medium term and see real change as a result.

Above all, businesses should view the fact that so much time is currently being lost in meetings as an opportunity. By focussing on these five findings, they can reclaim this time for their people. And, by giving their employees the opportunity to be even more strategic and innovative, they'll automatically increase their competitive advantage.

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# My Business in Show Business

By John O'Brien

Show business - there's no business quite like show business, right? We all know that - it's our gig. We also know that getting the show on requires equal parts talent and perspiration. However, not many events would be staged unless someone was making some money from them. Hence, the commercial side of shows.

Over several decades, I've been involved in a lot of different roles in a lot of different show related businesses and it's been a constant learning curve. There have been personal successes and failures but each phase has offered a different perspective on the process of making a living. Watching how others conduct their business and using continual self-reflection to apply what you like to your own approach is a great way forward.

These days, circumstances and choices have led me back to being self-employed. As a freelancer, I've found three distinct parts to the business cycle - getting the work, doing the work, and administering the work. They seem to take up nearly equal amounts of time and energy. The administration is the least exciting but, at the very least, it should get me paid and keep me out of court.

## The Bureaucracy of Business

Long gone are the times where it was all a handshake and wads of cash. While that approach may have had its upsides, these days it's somewhat difficult rocking up to the bank with a fistful of folding as a deposit on your new house / car / expensive shiny thing. "It's all hard-earned and legit ... honest." Yeh, right - better get a lawyer, son.

Paperwork, forms and acronyms ... ABN, CRM, GST, BAS, etc. These tedious details are an endemic part of every business. Even as a sole trader (freelance contractor), you are required by law to follow the rules of doing business in this country. Pay your taxes, get registered and ticketed, get insured, and make sure that you are receiving (or paying) WorkCover and Super.

To be honest, I haven't always given this advice the weight that I may have. After all, one of the main attractions of rock and roll to me was its mythologised lawlessness. However, now in my early 50s, I have little super accumulated and bear the scars of many wounds not treated under the WorkCover that my casual employers often never had.

## Friends, Foes, or Colleagues?

Some of these employers became colleagues. Some colleagues became friends. Businesses are run by people and people need relationships to prosper together. Building relationships with suppliers, colleagues and

employers / customers is crucial to your success as a business. Whether you are a sole proprietor / contractor, employee or head honcho of a mega enterprise, you are reliant on these relationships. Nurture these connections but keep it professional. You never know where the next job is coming from or who you might be working alongside in the future.

Do be careful if you mix pleasure with business though. Many moons ago, I set up a company with a friend and fellow LD. We were both still regularly gigging and I had another sideline producing sculptural lighting and artworks. Our intent was to build or source set pieces and tie them in with some production management, event staging and the like. Great idea and there was room in the market for it. However, the first client started with a retail clothing display rack, then 2, then 3 and it morphed into us producing hundreds of polystyrene point-of-sale displays. Somehow, the direction of the business had changed before we even got our first big production client on board.

My partner then found the promoters for a large dance party and we were to provide a bunch of set pieces including custom steel dance platforms that were all caged in. Awesome - that was more the type of gig that we were chasing. Meetings were had, plans were drawn, a new factory space rented and it was all go. "Contracts - nah, that stuff's boring. These guys are good for it." I took the bait and ran with it. Before getting any up-front payment, I bought a whole heap of materials, partnered with another fabricator and got to constructing these platforms. And then, the wheels fell distinctly off the chariot.

First of all, my business partner turned around one day and said: "The surf in Melbourne is s\*\*t." and promptly left for Sydney, never to return again. Only a few days after, I botched up on the installation of some sculptural hat racks that I'd made for the manager of two of the bands that I regularly lit. Due to over-commitment, I needed to get another friend in to fix the mess (bye-bye any immediate profit) but the real loss was the regular LD gigs that were pulled because of my mistake on a part-time hustle. Next, the dance promoter client decided to pocket all of the advance ticket money and piss off to anonymity in Canada without paying us (now just me!) a cent. This left me considerably out of pocket but not so much as when the rented factory got flooded a few weeks later and I had to ditch most of the remaining stock and materials. Final insult - the original customer went belly up, owing our sinking endeavour thousands more. Including seed capital, I burned through

a couple of house deposits right there. That particular business is now ancient history and the friendship is also long gone. On the upside, numerous lessons were learned out of the fiasco. I'm also now a much better judge of character.

## Success or Failure?

Many entrepreneurs will celebrate this kind of failure. Viewing the whole catastrophe as an opportunity to learn from rather than a personal shortcoming is a good way to get back up off the mat and start swinging again. My lessons from above included:

- spreading myself too thin and diluting focus ... it's better to concentrate on core strengths and perform them well.
- confusing being busy with doing good business.
- not having clear and agreed upon goals.
- working with friends (not an absolute no-no but best done with some very clear and agreed upon parameters).
- not getting it all in writing, which leads to...

## Getting It All in Writing

Paperwork might be boring but it does cover your butt. Spreadsheets, contracts, accountants, lawyers and other mundane things won't get the crowds roaring but they are a necessary part of us doing business in this day and age. If I'd done the right thing in the personal example above and insisted on a bit more organisation (maybe even some clearer goals and demarcation), perhaps my business might have lasted a little longer and even had some success.

When a much wiser and more experienced me was later employed as a project manager for a multi-million dollar AV install, the first task was to lock myself in a closet with the contract until I knew its every word. Suitably forearmed, I was confident staring down hard-nosed building contractors when they started playing funny games at the crunch end of an already over budget project. Several other AV contractors went broke on that job, but I knew 'exactly' what we'd signed up for and ensured that: a) we didn't get shafted, and b) we still got paid. I had great trust in the power of good documentation after that.

Now that you've taken care of all your corporate responsibilities, there is still a show to go on. Get your ducks in a row, then go enjoy making your living knowing that the business essentials are covered and you can focus on doing what you do best.



# THE RECORDING BUSY-NESS

by Andy Stewart

"Don't voice your opinion, invoice your opinion!"

This statement was uttered some years ago by a mate of mine, as a broad-stroke operational philosophy for studio owners. They were wise words indeed, in hindsight, despite their seemingly throwaway attitude at the time. In essence, they were a warning to all studio professionals; that if you don't value your time and opinion – and invoice accordingly for the hours you work – you not only rob yourself of earnings, you simultaneously undercut the whole recording industry's collective value.

This might seem like a dramatic opening salvo, but the economic logic underpinning it is straightforward. When any industry fills to bursting with operators prepared to work for a pittance, the collective value of the whole profession collapses like a cardboard box.

But this economic logic assumes one basic misnomer: that everyone working in the audio industry should be worth about the same, because each has the same basic qualifications that are regulated and provided by the industry itself – levels of experience and notoriety of individuals notwithstanding. But, of course, nothing could be further from the truth in this unregulated, cottage industry. So it's nonsense to assume that, just because Joe Blow up the street is charging \$19.50 for a mix (literally less than the price of peanuts), the value of everyone else's work must also drop to match this idiotically low bar.

There are several reasons why a professional can still charge decent money for their work, even in this seemingly bankrupt environment.

## The Breakaway Group

While it's easy to moan and groan,

complaining to all and sundry about the oversupply of backyard operators in the audio industry, the best way to separate yourself from this peloton of 'professionals' is by doing great work. An obvious assertion, but true.

Great work advertises you and your skills better than everything else combined. If all you ever do is amazing recordings, awesome mixes, or superb mastering work, new clients will find you for as long as you put yourself out there in even the most basic ways.

For me, the main task I perform that keeps my business functioning and the work flowing in, is simply doing quality work week in and week out. I don't do much advertising – beyond maintaining a decent website – I don't ring record labels to organise a lunch meeting with them, I don't have a manager, I don't go to thousands of gigs and hand out cards, though doing all of these things would no doubt help

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my profile. What I do is apply my craft to the best of my ability every single time I'm at the console. I bill for the hours I work, and that is that.

From there, the albums I work on go out into the world with my name on them. Occasionally one develops a high profile, and with the aid of my website, which has a bunch of examples of my work on it for people to cross-check, new clients can seek me out as and when they need to employ my expertise. (It's important to add here that in an almost label-less online marketplace, where hard copies of CDs and vinyl represent only a small percentage of what's sold or heard by the public, your name on any credits list tends to be lost or swept aside most of the time, making your website archive a vitally important component of your business.)

### Choose Your Market

The way I see my business model – basic and naïve though it may be – is this: there are always new clients out there (as well as experienced ones that return again and again) that want to sound brilliant and are prepared to pay for it. When these people go searching for someone with whom they can achieve quality results, that's when having runs on the board and countless great albums in the archive, pays dividends.

In short (and apologies for blowing my own trumpet here), because I'm confident in my ability to produce great musical and sonic outcomes, some artists – certainly not all – are happy to pay for the work I do, secure in the knowledge that their outlay will result in a great sounding product.

I don't compete with the \$19.50 mix brigade, because the customers attracted to this peanut price point are typically driven wholly by cost rather than quality, and don't necessarily yet understand the difference between a good engineer and a shonky one. That may change for them over time, but for now at least, they aren't really looking for me in the first place. I have no issue whatsoever with that, per se, but as a professional, there's little economic advantage in me competing for their dollar (unless, as a producer, I think I hear a star in the making, at which point increased royalty percentages on a contract can sometimes make up for the lack of production funds).

Moreover, I know my working methods pretty well by now. After so many years at this caper, my tendency is to work hard to produce great sounding albums every single time, even if the budget is small. While this is a strength on the one hand, economically it tends not to be! Given my track-record for making things sound good at any cost (even if it's mine!), taking on low-budget projects potentially robs me of income because the work takes about the same amount of time – sometimes longer, effectively lowering my daily rate – and often sinks without a trace once released. Neither of these factors is good for business.



Andy Stewart

### Every Product Leaves Sounding Awesome

Nevertheless, doing great work is vitally important to the long-term health of your reputation as a producer or engineer. Though it's hard to control in this fickle industry, your reputation, alongside the products you produce, is effectively all you have to trade on in the recording industry.

Over the long haul it is therefore crucial that you always prioritise the quality of your craftsmanship over other considerations, because it sets you apart from the pack. Not only will this allow you to maintain your income, it will keep you interested in the job, allow you to grow your skill set, buy and maintain your equipment, and hone your craft. By constantly improving your technical and artistic abilities, remaining humble, open-minded and never becoming complacent about how awesome you are, your work will almost inevitably improve. On the other hand, convince yourself that you know it all, and the death knell will ring faster than a meteorite strike.

### The Back-Catalogue

One last thing to note is that your work lingers. People discover music you've crafted at different times, in some cases several years, even decades, out of sync from your personal involvement with it. So it's important to maintain the quality of your work, lest it be out there undermining your reputation without you even knowing it. It's great having fantastic music out there that's commercially successful, artistically brilliant or cool in some particular way. When people associate you

with any of this noteworthy stuff, you hear about it all the time. But juxtaposed to this; if there's any poorly produced, badly edited, dodgily mixed work floating around out there with your name pinned to it, you almost never hear about it. You just miss out on the next well-paid job.

So don't be fooled into thinking you get away with producing poor quality audio, whether that be songs, mixes, or masters. The good and the bad work you produce contribute to the strengthening (or weakening) of your reputation, though in what percentage or measure is hard to say. Either way, only the good work rates a mention to your face. Don't therefore judge the quality of your work based on what people say about it, but rather by how you honestly evaluate it yourself, and by how many new clients are knocking down the door.

If there's a stampede of clients heading your way you're probably doing something right. If, on the other hand, the phone is silent, don't give up either. Everyone suffers from this periodically. Just know that the best way to improve is to be the first – not the last – to admit you don't know it all. Rest assured, no-one does.

Andy Stewart owns and operates The Mill on Victoria's Bass Coast. He's a highly credentialed producer/engineer who's seen it all in studios for over three decades. He's happy to respond to any pleas for recording or mixing help...  
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# TAME IMPALA HEADLINE COACHELLA

by Cat Strom

ER Productions / Dina Douglas - Andrena Photography

**For their fourth Coachella, local legends Tame Impala wrapped up Day Two of the festival on the main stage.**

Australian band Tame Impala headlined night two of Coachella's opening weekend in Indio, California. They've played three Coachella shows in the past but never thought they'd be on the main stage as the headlining act! Despite the surprising pick for headliner, they certainly held their own, delivering their customary mix of dreamy vibes and mesmerizing anthems.

FOH Engineer Adam Round has mixed the band for several years, enjoying their ride to fame, and was stoked upon hearing they were headlining Coachella.

"We had played a few years before and I thoroughly enjoyed mixing on that PA," he remarked. "It still blows my mind that we have been able to play and even headline some of these major festivals. I am very lucky."

In previous years the band shared backstage with other bands, an experience Adam describes as nice and chilled, but this year they had their own 'compound'.

Soundcheck was a virtual experience with Adam currently using a 2014 MacBook Pro running Waves Tracks Live with a G-Technology Thunderbolt SSD Raid Drive.

"It's connected to two MGB which gives me up to 128 channels to the record system," he added. "It's quite happy recording the full track count at 96k (the recording is only for virtual soundcheck purposes), and Macs Fan Control allows the computer's CPU to run at its full potential without throttling, which is the key to it all running smoothly."

According to Adam the festival's production

team were awesome, particularly the RAT Sound team who have got the system really dialed in. Rat Sound have been looking after Coachella's audio for 19 years now.

"They have also been our system provider for a number of years," said Adam. "I have had the pleasure of having Tom Worley from RAT out on the road with us many times as my systems tech and he still designs many systems for us now."

The PA for the Main Stage was all L-Acoustics, with two main hangs of eight K1SB, 12 K1, and four K2 each, two side hangs of four K1SB, 12 K1, and two K2 each, 12 Kara and six Arcs for front fill, 36 KS28 subwoofers and LA8/LA12 amplification to suit.

"The audio reinforcement is good everywhere," commented Adam. "Not including the Main PA there are 168 K2 across 15 sets of delays and VIP fill. It is really impressive coverage. Fortunately we have toured L-Acoustics K series extensively





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**“There are many effects, and also a lot of things we like to keep a bit mysterious.”**



Adam Round



throughout the US and Europe for years and are very familiar with it.”

Adam tours a brand new DiGiCo SD7 Quantum mixing console plus double SD Racks with 32 Bit mic pres. Additionally he runs quite a lot of Waves and for that he has four Waves Servers, Luminex Switches, two MacBook Pros, and a Dell 2418HT touchscreen.

“There are many effects, and also a lot of things we like to keep a bit mysterious,” elaborated Adam. “I have hundreds of snapshots including fader moves, EQ changes, effects, filter sweeps on certain elements in and out of sections, side chain feeds, just to name a few. I also like to mute anything that isn’t being used at that moment in time to get things super clean.”

Rafael Lazzaro does monitors for the band using a Digico SD10, with double SD Racks with 32 Bit mic pres.

The main difficulty with playing Coachella is the wind, with Adam commenting that when it picks up it gets a bit hairy. It’s also the desert so you get a bit dusty.

“The first weekend was perfect conditions but the second week we had to land the Main PA due to high-speed winds,” he said. “You’d think that would be a major issue but in fact the RAT team have had to do this so many times over the years that in the changeover we landed the PA, switched off the bottom six boxes, recalled the preset in the event this had to happen and we were away. It still threw evenly all the way to FOH and the delays start there.”



Adam admits that with an all-new setup for them, including new backline, and an audience of millions thanks to live streaming, he was very nervous!

“It was definitely up there with the biggest crowds I’ve mixed in front of,” he commented. “When we made it out the other side without any major issues I think everyone was extremely happy. All departments worked very hard to pull off this show and think it went extremely well. The crowd loved it. There were definitely a few beers drunk that night!”

Tame Impala are in the midst of a full-on year of shows around the world. They are heading to Mexico after the rest of the US dates, and then to Europe.

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## Hawke's Bay Opera House's Vision for the Future.

**What do you get if you combine a community that understands the value a theatre brings to a city, a Council that believes that art and creativity have a place in regional government, and a manager who thinks it is time for local artists to have the opportunity to step up? Hawke's Bay Opera House: the Next Generation.**

Megan Peacock-Coyle, the new Manager of Hawke's Bay Opera House Arts and Events Precinct, has a mandate any political party would be envious of as she works on the strategic plan for the beautiful Hawke's Bay Opera House. The venue was closed in 2014 after engineers found the 12-metre side walls of the theatre could collapse during an earthquake. An extensive public consultation was carried out in early 2016, asking residents if they were in favour of strengthening and re-opening the Opera House or demolition. The Council received more than 3000 submissions with 80 per cent of the feedback in favour of retaining, strengthening, and re-opening the Opera House.

As recently appointed Manager and an ex-Hawke's Bay citizen herself, Megan Peacock-Coyle reflects on the level of support, "I think the people of Hawke's Bay thought it cost a lot of money, but they understood the importance

and the benefit of such a facility because they were without anything for five years. It impacted a lot of people, not just the arts community but businesses too. We used to host two hundred plus events a year including balls, weddings, and expos."

As Megan picks up the mantle she is not only grateful to the community for their commitment, but she is also in the fortunate position of having strong Council backing, "Hawke's Bay has never had the reputation for being a cultural wasteland like some other regions of New Zealand and that's not only due to the people but also the Council, who see the value in performing arts."

The commitment and affection for the Opera House created an environment conducive to innovation and creativity. The Council, under the leadership of Group Manager for Community Facilities and Programmes Alison Banks, was determined to make the most of



Megan Peacock-Coyle



Construction

every opportunity that the restoration and re-opening offered. Megan explains, "It is thanks to their vision that we are in the place we are now. They established an independent working party looking at the big questions such as 'What is the Opera House?' and 'Where does it sit from cultural, community and city perspectives? Since then we've been pulling all that together and doing the strategic mapping."

### The Next Generation

The Council and the community wanted the Hawke's Bay Opera House to not just be a leading performing arts venue, bringing the best acts to the Hawke's Bay, but to also genuinely trailblaze a new approach to what it is to be a community venue, what Megan refers to as the '4th Generation' of arts centre.

Megan is referencing the work of Steven Wolff, Principal of AMS Planning & Research, an American Arts Management consultancy that work extensively across Australia. He identifies that to date there has been three generations of Arts Centre. The first, that of showcase or home for a certain genre of performing arts, for example Sydney Opera House. Then the 80s saw Arts Centres as stimuli to commercial development, used by planners to regenerate a declining urban area or stymie the flight of people and businesses from city centres to the suburbs. In the 90s came the realisation that these Arts Centres were all much of a muchness, showing the same productions no matter their location. Arts Centres began to strive to connect with

their local communities, particularly families and ethnic populations and try to make the Arts more accessible to the people that were footing the bill. Education programmes, talent searches and summer theatre camps became new entry points to the performing arts.

It is Wolff's 'Generation 4' that inspires Megan and the Hawke's Bay Opera House team. Wolff describes it as fostering 'cultural vitality' and talks about three essential elements: providing opportunities for cultural expression; facilitating participation in the arts; and supporting the arts and cultural activity. Megan explains, "It is not just being a hall for hire, but focusing on a more curatorial role. Yes, we provide what the audience wants to see but we also want to be the cultural heart of the community."

She talks about three ways in which Hawke's Bay Opera House is already working towards this goal. Firstly, to ensure that they are providing those opportunities for cultural expression talked about by Wolff, the team have instituted and will maintain authentic stakeholder engagement. "Since getting the go ahead for re-opening the Opera House, we have established an outward focus and met with the whole arts community. We have and will continue to consult with arts organisations – the Hastings City Art Gallery, Arts Inc. Heretaunga – the Trust responsible for the Hawke's Bay Arts Festival and many arts

events here in Hawke's Bay, the National Youth Drama School, Kahurangi Dance Company, Project Prima Volta, EIT [the local tertiary institute] and the local iwi, Ngati Kahununu. Jointly, Hastings City Council is also working towards an Arts and Cultural Strategy for the region."

Megan sees this leadership as being a critical part of the role of a 4th generation venue, encouraging and supporting artists, "We want to help performers make their own opportunities locally, and as a venue not just rely on touring parties."

To facilitate participation in the arts, the team have committed to providing employment pathways for youth who wish to become involved in the performing arts industry, "The new Skills Active qualifications and accreditation programme offer our industry and our young people a wonderful opportunity and we will be developing apprenticeships and educational programmes to make the most of them." She chuckles and adds, "After all, many of the best techs come from high schools."

Finally, she wants the Opera House to inspire others – artists, local bodies, even the national government, "I sit on national industry boards to help raise the profile of our industry at a government level, but things need to be happening regionally to underpin that. We want to bring individual artists together to lobby local government and advocate for

our industry. We have to encourage local government to see and understand the value for a city of having an active and creative element to it."

Megan thinks a part of this is accountability, "It is time we held a mirror up to ourselves and started capturing how much business an event brings to a region, then we can talk about the cultural economy and we can build capability in regional towns and cities and encourage investment in the arts, just like the tourism industry has done. Local artists need to be supported to make the work, but they also need to focus on their sustainability. They need to start from the bottom up and work to ensure all voices get heard and part of our role as a venue in our community should be to support them."

Wolff talks a lot about 'Generation 4' Art Centres being thought leaders, and the conviction and passion with which Megan rallies for artists to stand up, be counted and ensure that the New Zealand Arts Sector is acknowledged, leaves you in no doubt that this Arts Centre has that box ticked.

With the consultation stages now over, the Council has recently adopted the vision for the Hawke's Bay Opera House to be the most vibrant and significant arts' culture and events facility in New Zealand. Perhaps not such a big ask for this vibrant community, fired-up management team and proactive Council.

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# CAN I HAVE FULL HOUSE LIGHTS PLEASE?

Simon Byrne

**This should be an easily answered question but as I travel from venue to venue, I'm constantly amazed how good house event IT infrastructure is thwarted by terrible design and implementation. Let me give you a few examples:**

## Example One

I'm doing a corporate event for a thousand people in an upstairs ballroom of a major hotel in Melbourne. The house AV tech provides us with an iPad to control the recently upgraded houselights. This was particularly important for our video rolls in our tightly scripted show.

The first issue is that the iPad needs to be woken, have a passcode entered, then there is a delay before it reconnects to the house WiFi network, and there is another three second delay between when you push the button and the fade starts, which takes eight seconds! Less than ideal when you are running a tight show and cannot synchronise the house light fade with the video rolls.

But it gets worse. During the show we go to black, and twenty seconds later the house lights come back up! We put to black again, and it comes up again! This happened three times.

It turned out that the iPad which controlled the house lighting network not only controlled

our ballroom, but also the foyer as well as the entire conferencing floor below us. Every time we turned the lights down, we killed the lights in the entire building's wing, and someone on the floor below us who was running their own event and wanted light turned the lights back on!

This is dumb design. Why would the people on the first floor ever need control of the houselights on the floor below them? They don't. But because someone thought it was clever to be able to control everything from multiple locations, problems are bound to arise.

## Example Two

The load out for ENTECH 2019 commences in a major convention centre. The room is somewhat dim and we need more working light to load out safely. Our exhibitors are complaining! We make the request and it turns out that we cannot get more room light "because that is a lighting scene and we'll have to get a lighting person in to get

that happening". No lighting operator with the equipment and skills are on duty at that time to do the necessary soft patching so we are forced to load out with a less than ideal amount of working light.

## Example Three

In this most extreme example, another major convention centre completed a huge systems upgrade which included venue-wide Dante and ArtNet networks. Once again, someone thought it was a good idea for operators to be able to access everything in the building from any location.

Picture this; a show running in Hall G and a crew setting up for another event in Hall A at the same time. The event in Hall G is going great until the crew in Hall A plug their Yamaha CL5 desk into the house Dante network. Suddenly the setup crew in Hall A have control of the audio in Hall G and their faders are down! This actually happened... several times.

The ArtNet network did this too! I'm told that on many occasions several Grand MA desks are plugged into the network throughout the building, with roughly the same addressing.

"Interesting control problems" did arise during shows.

This high tech stuff should make things easier, not the opposite. We need standards because apparently simple house control problems have become overly complex, with surprising and poor outcomes.

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# FRANKLIN GRAHAM GOSPEL TOUR

by Cat Strom

Photo Credits: CPC Production Services

## Tour life is not all rock'n'roll excess as sometimes the client is of a somewhat different mold.

Recently CPC Production Services was contracted to supply a full technical production solution for Franklin Graham's six-city tour preaching the Gospel in Australia. This included audio, backline, lighting, rigging, LED screens and television production. CPC also production managed all crewing, travel and accommodation.

The tour visited Perth, Darwin, Melbourne, Brisbane, Adelaide and Sydney, reaching more than 59,000 people in person and thousands more through a live web stream. Each tour stop featured music from Crowder and the Planetshakers.

CPC was responsible for the entire audio rig, supplying all equipment except the DiGiCo SD10s for American artists (FoH, Monitors and Record) and their partner company PMSL from Hobart supplied the d&b rig.

Front of House varied from venue to venue, but generally consisted of two hangs of d&b J series per side for the main left and right, two hangs of d&b V Series per side for outfills, d&b V Series for front fills and other various fills and d&b B2 subs running in cardioid mode.

The lighting was designed and programmed by Daniel Smallbone of Lumina Design and was operated by his associate Matt Brewer. The rig was designed for the rock'n'roll schedule they had to work to: in at 6am, up and going by 10am for rehearsals and soundcheck from 2pm until 5:30pm. The show

was performed at 6:30pm through to 9:30pm, then load out and done about midnight.

A simple front of house truss held eight Martin MAC2000 Performance profiles for effects in the audience, 12 MAC2000 Washes for stage and audience wash and four MAC Viper Profiles running Follow-Me data merged into the MA Lighting grandMA2 network. These were used for all specials, followspotting, and key lighting.

The midstage truss had eight MAC2000 Profiles with custom gobos for effects across the stage and 14 MAC Aura XBs for overhead stage wash and effects. The upstage truss had the same combination but with five MAC2000 and eight MAC Aura XBs. More MAC2000 were located on the upstage floor to deliver aerial effects with custom gobos. Side of the stage were eight MAC Quantum Washes, four per side. Atmosphere was supplied by an MDG Atmosphere HO.

For control there were two MA Lighting grandMA2 light; one for Matt and the second for the Planetshakers' LD. An NPU with three 2-Port Nodes was used for DMX transmission. MA, ArtNet and NDI networks were in place for the entire system to interface all consoles and the two Resolume Arena media servers.

The tour used VuePix screens: two 8m by 4m ER4.6 rear screens, two 4m by 8m ER4.6 side screens and one 15m by 2m ER4.6 Proscenium Screen. All were running Brompton Technologies controllers, scalers

and receiver cards. Three S4 Controllers did the rear and proscenium screens, and two M2 Scaler/Controllers did the side screens.

The rear and proscenium screens were driven from lighting's main Resolume Arena media servers, which had three separate video feeds/auxs coming from the OB truck including pre made content and effects on board. The side screens were driven directly from OB Truck. All controllers were networked and controlled by the Technical Director and CCU Operator back in the OB Truck for exposure and colour matching.

CPC's new OB truck that they designed and built earlier this year made its debut on the tour. This truck is specifically fitted out for the recording and streaming/televising of concerts and other live style events, as quickly and efficiently as possible. The truck has the ability to run full 4K HDR all the way through if needed, but like most jobs at this stage they ran 1080p50 HDR.

Major pieces of equipment in the truck include four Panasonic AK-UC3000 4K HDR Studio Cameras, Fujifilm lenses, Vinten tripod systems and a full suite of Ross Video vision mixing equipment. A Midas XL8 96 channel digital mixing system is also included as is a Riedel Artist 64 comms frame with 12x RSP-2318 AES67 Panels and two-way radio repeaters, phone and Clearcom 2-wire interfacing.

The truck was used to switch the eight camera chains individually to the LED screen feeds, multiple live web streams and then clean feed records and ISOs for postproduction. The truck also did playbacks for material going separately to the arena and the live streams.





## Company Production Manager:

Murray Free

## Audio:

FoH System Tech: Nick Morse

Monitors System Tech: Jamie Muller

Stage and System Tech: Murray Keidge

Stage and System Tech: Ashley Rieck

Backline Tech: Simon Grubb

## Lighting:

System Engineer / Rigger: Wesley Bluff

Floor Electrician: Lachlan Hood

## Video:

Technical Director: Owen Forsyth

CCU: Andrew Hardcourt

Comms: Glynn Carter

LED Screens / Graphics: Dale Norris

LED Screens / Graphics: Michah Coto

Camera: Ron Surtees



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# ASTERA CONTROL

by Thor Andre, ULA Group

**We have all been there before; mid bump-in and presented with a fixture we have never used before, and we must make it work. Usually, this entails connecting it to the console of your choice using a DMX cable, patching the fixture in to your console, addressing the fixture, and off we go. But what about when there is a whole range of different ways to control said fixture? Some that are proprietary and not used by any other manufacturer. Then what? That is what this guide is for.**

It is very likely that you have already come across Astera's range of battery lights. If you haven't used the fixtures yet, I suspect you might have heard about them and the app that can be used to control them. This unique app is what we are going to focus on for the most part in this article. But as that is only one of many ways to control the fixtures, I will give a quick overview of the other options.

First we should describe the range of fixtures. It is a compact range:

**LED Pars.** Three different sizes. AX3 15W RGBW CREE LED – 13° Beam Angle, AX5 45W RGBAW (3x 15W) – 13° Beam Angle & AX10 135W (9 x 15W) RGBAW – 13° Beam Angle. All units in the range are IP65, with 20hr runtime battery life, and have a useful selection of accessories.

**LED Tubes.** Currently three different versions. (Soon to be four) AX1 PixelTube 28W RGBW

LEDs – 180° Beam Angle, FP1 TitanTube 72W RGBMA LEDs – 120° Beam Angle, FP2 HeliosTube (60cm version of the Titan) and the next one to be introduced, HyperionTube, a 2m version of the TitanTube.

For control, the simplest is ARC1, the infrared controller. The heart of your system ART7, the AsteraBox, is basically what we have all wanted for any fixture we have ever used - a little box full of "taking the hassle out of setup and control".

## The different methods of control

All fixtures can be controlled by the ARC1 IR Remote. Just one small controller for the most basic of functionality. Turning fixtures on or off, a few basic colours and colour temperatures, make them strobe, (and more importantly, NOT strobe!), some basic effects, and so on.



ARC1 & ART7 in case



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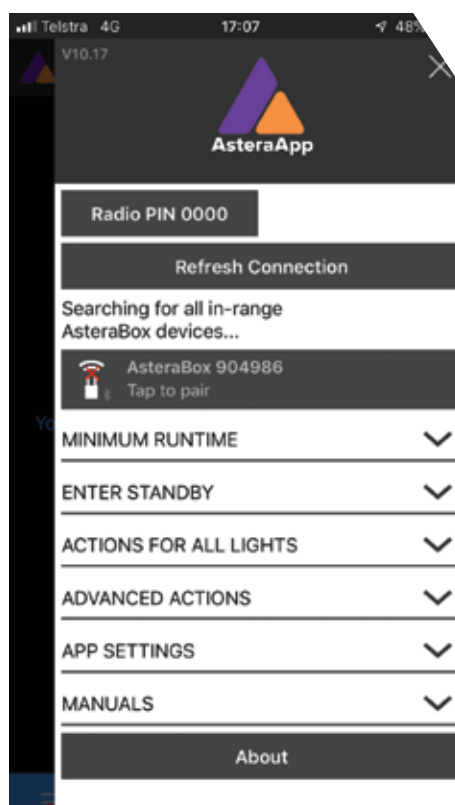
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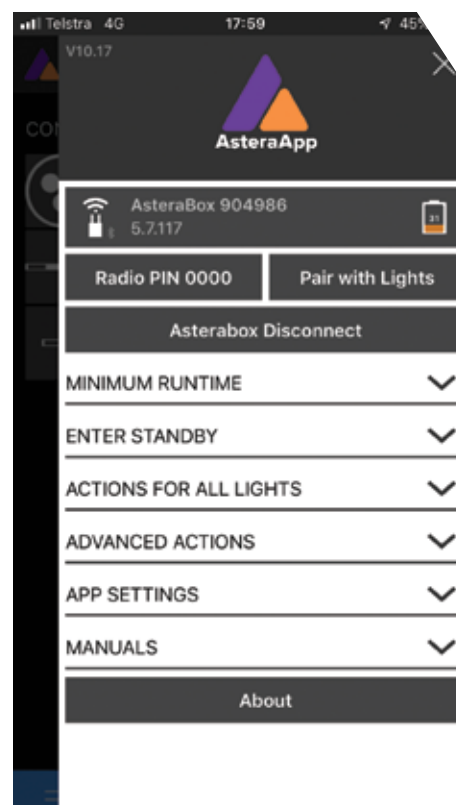




Initial start-up screen



Connection dialogue



Main Menu

**Wireless DMX.** All Astera fixtures have built in Lumen Radio Wireless receivers. This means they will pair up with any Lumen Radio transmitter, and with Wireless Solutions W-DMX transmitters, up to and including G4. Chances are if you have wireless DMX transmitters in your inventory, they will work with the Astera fixtures.

**Wired DMX.** This isn't for all the fixtures, only for the newest ones, the AX5 LED Par as well as the Titan, Helios and Hyperion tubes. The AX5 has 5pin XLRs on board. For the tubes, you run DMX to the PSU/Charger and the data interpolates onto the power cable to the fixtures.

**ArtNet & sACN.** This is only for the newest tubes; Titan, Helios and Hyperion. It works the same way as the wired DMX for these fixtures. You run ArtNet or sACN to the network port of the PSU/Charger and it interpolates the data onto the power cable to the fixtures.

As this is control technology that we are all familiar with, I'm not going to dive any deeper into it. So, let's move on to the Astera App.

The app is available for both iOS and Android, but not Windows mobile, and will work on phones and tablets. If you haven't already, I recommend you download the latest version. There is currently one version for iOS, and an official version and Beta version for Android. The Beta is safe, and you will love the extra functionality. Once installed, the look and feel of the apps are the same, regardless of the OS you are on.

The AsteraBox consists of two parts; the Astera part that connects via Bluetooth to your phone or tablet and has a bi-directional link with the fixtures on the UHF band. Region can be set in the app and will change the frequency to make sure you are always legal, so one box is safe to use all over the world if you travel a lot. The second part of it is a "free" Lumen Radio transmitter. It even comes with an adapter cable to connect it to your console.

Once you open the app, the first thing you want to do is connect to the AsteraBox. The app will prompt you through the process.

Tap the top right corner labelled with three horizontal lines. This opens up the setup screen and allows you to connect to the AsteraBox. You will find the Bluetooth pairing pin on the back of the AsteraBox. You can also set the Radio Pin here, which is a unique pin code to lock the fixtures to the specific AsteraBox.

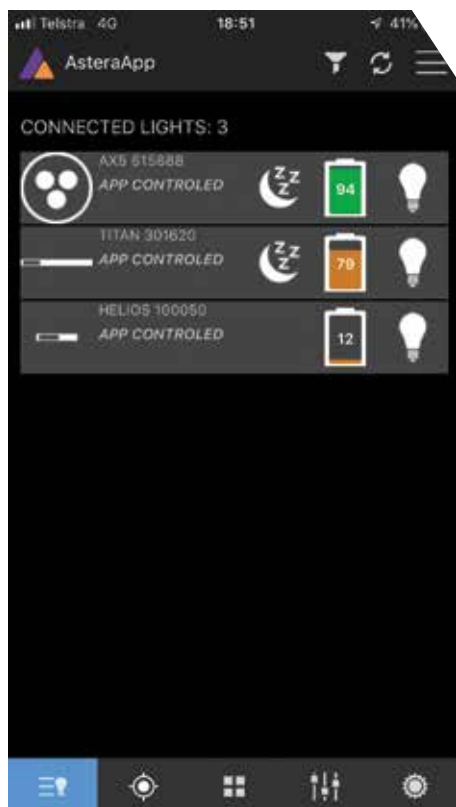
Now you can pair the lights to the AsteraBox. This process is the same on all the fixtures. Once the fixture is switched on, you press and hold the power button for three seconds until the light starts flashing blue. This is appropriately called "Blue Mode". The fixture is now ready to pair. In the same view as mentioned above, you have a button called "Pair With Lights". You press that and follow the instructions on screen. Once the lights stop flashing, they are paired up with the box. You can now change all the individual settings for the fixtures and control them.

Here's an overview of the global settings you have control over here (with most also available on a fixture-by-fixture basis):

**Minimum Runtime.** This is a unique feature of the Astera fixtures when running them on battery. You set the runtime you want from 2 to 20 hours in one hour increments and the fixtures will automatically throttle the output to accommodate.

**Enter standby.** To conserve battery, you can put the fixtures in Standby mode. In this mode, the fixtures will only use 5% of the battery life per day. Standby mode can also be scheduled. So you can set out the fixtures in the morning, and set them to turn on at 18:45 for your event that starts at 19:00 and turn off again at 03:00 when the event is over. You do not need to leave your phone or tablet for this to take effect. All the scheduling is done in the AsteraBox. The device is just the interface.

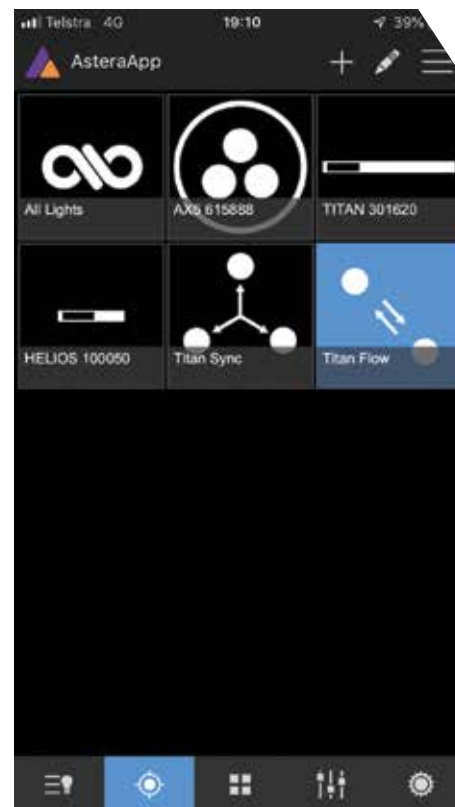
**Actions for all Lights.** Here you have your **DMX Configuration**, so you can set the DMX map for all the fixtures, DMX address, what to do on DMX failure and Power failure (If you are running wired) options are, Blackout, do nothing or emergency light, and your dimmer curve. **Reset Lights / Unpair CRMX** allows you to do a global reset to factory default of all the fixtures when they come back from a hire and also unpair from any wireless DMX transmitters, all with the touch of a button, instead of manually going into the menu on fixture after fixture to do it. **Theft Alarm On** - all the fixtures have a built in accelerometer,



Fixture List



Individual fixture configuration



Target/Group view

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so you can set the theft alarm on them. If someone tries to pick them up and run away with them, they will start flashing and beeping. This is usually enough to make someone who is just goofing around put the light back down. But in the event that someone does make off with the light, by the time the battery runs out, the fixture is bricked. The only way to unbrick it is to re-connect it to the specific AsteraBox it was previously controlled from, or to send it to your nearest service centre, at which point, we will of course be more than happy to return it to its rightful owner.

**Advanced Actions. Anti-Flicker** - all Astera fixtures use scrambled PWM to drive the LEDs and prevent camera flicker. However, it is also possible to set specific PWM frequencies should you wish to, select your frame rate and the app will work out the PWM frequency for you. **Master Reset Lights** - if the fixtures come back from hire and they have been used on different AsteraBoxes, the radio pin won't match. Using Master Reset Lights will allow you to still do a factory reset on these lights from the app.

**App Settings. Talkback+.** This is the bi-directional communication between the AsteraBox/app and the fixtures that allows you to monitor things like battery status. **Keep screen On** - exactly what it says on the tin; it prevents your device from switching off the screen because you have taken a minute to enjoy the beautiful atmosphere you have created with your lights. **Lights Background Update** - there are no more special boxes or adapter cables to update the firmware of your fixtures; it is all done wirelessly via the



Colour Picker

app and happens in the background, so you can continue to use the fixtures as normal while they are receiving and installing the update. **Show Quickstart** - this gives you another run through the hints and tips on how to get going. **AsteraApp Factory Reset** - takes you back to square one and deletes any customisation you have done. **Backup & Restore** - as with anything show critical, always remember to back up your work. The Astera app also makes it easy to share your backup. Once saved, you can send it via mail, SMS, WhatsApp, WeChat or whatever your preferred platform is. **RF Region** - this allows you to change the RF Region you are in if you travel internationally. **UI** - User interface. Set to Auto as default, but you can choose Phone or Tablet

**Manuals** - ever wished you had the manual for the fixtures you are using? Well here they are, all in the app. As an extra bonus, there is a "cheat sheet" for all the RGB values for the full Lee and Rosco libraries, both with a Tungsten and a Daylight source.

Why just RGB when the fixtures use more LED colours? Because it is all calibrated and written into the firmware of the fixtures. Here's a tip - when controlling the fixtures via DMX, only ever use RGB as your colour space. The fixtures will then automatically include the other colours as and when needed to maximise colour consistency and light output.

The previous were all global controls. From the fixture list (bottom left hand button on the screen) we can now go into each individual light.



Customisable Effects

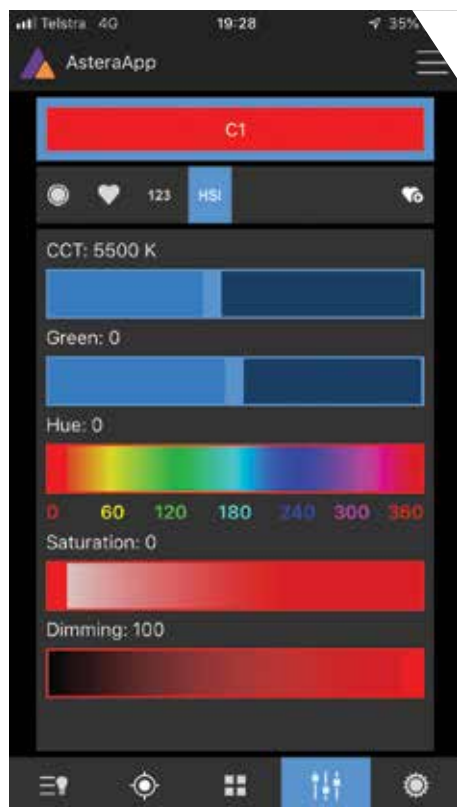
This gives us the same configuration options as the global app controls, but on a fixture by fixture basis. And it also gives us visibility over the remaining battery life, as well as the charging cycles. This list can be filtered and sorted on different criteria to give you the overview you need. Everything from fixture type and alphabetical name, to how strong the fixtures receive the wireless signal. If you're wondering what the max limit of fixtures that can be controlled on the app is, it's virtually unlimited. Just be aware that once you start adding more than a thousand fixtures to it, the fixture list will become sluggish and unmanageable. However, at that quantity, you should have moved to a console or a media server anyway.

The next button over is your "Target" or Group button.

Here you can create your groups of lights so it is easy to select the ones you want to control. You simply use the "+" and "pencil" symbols at the top to add or edit groups. There are two types of groups; Sync Sets and Flow Sets. A Sync Set means that all the fixtures in the group do exactly the same thing. A Flow Set turns all the fixtures in that group into "One Giant Fixture" allowing an effect to flow through all the fixtures.

The middle button is the effects. The app comes with a range of predefined effects built in. You can adjust and edit these, and create new ones.

For solid colour control, this is your starting point. Select the tile in the top right hand corner that says "Just Red" then select the



HSI

next button over on the bottom toolbar to open up the effect editor, and press the red box labelled C1. This now gives you the colour picker with some predefined white colour temperatures as well, and easy access to more options.

The “Heart” button is where your favourite colour pre-sets are stored and you can add new ones by pressing the “Heart+” symbol on the right hand side. The “123” button, gives you full Lee and Rosco libraries with both

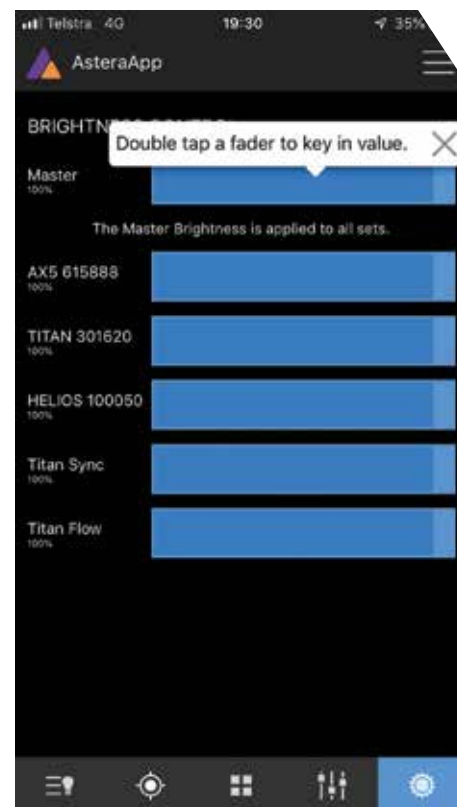


+/- Green Control

Tungsten and Daylight source. And the “HIS” button gives you HIS control. It also gives you full colour temperature control as well as +/- Green control, and you can double tap the sliders to type in the value you want.

The last button on the bottom toolbar gives you access to the Grand Master and the sub masters for the groups you have created.

If you want to learn more, visit [www.astera-led.com](http://www.astera-led.com) to check out the manuals. Even



Grand Master &amp; Sub Masters

better, reach out to your friendly local ULA Group rep and tell them you would like a proper demo and we will be more than happy to go through it all with you.

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<sup>1</sup>Passion, Pride, Pitfalls Dec 2014

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# ACOUSTIC TECHNOLOGIES SS30A

by Ray Eberle

The Acoustic Technologies SS30 is a 12" and horn cabinet available in a passive or powered model, the SS30A being the powered model and the subject of this review. There are two horizontal dispersion options available; 70 degrees or 100 degrees, and I have invested in the 100 degree option, which has a vertical dispersion of 30 degrees. Application-wise, I use the SS30As as FOH and delays, indoors and outdoors, with and without subs.

## Frequency Response

I've mixed on quite a lot of powered mid-highs, and most don't come anywhere near the quality of the SS30As. They are a dream to mix on. Their response is flat, and there's very, very little EQing to be done. The response is incredible - when you push up the faders, there's just so much headroom. I've used some really nice top-end European loudspeakers, and I'd say the SS30As sound similar, but less processed and more natural.

I've found the SS30As particularly impressive for speech. Interestingly, using the SS30As, I've come to the conclusion that what really works on a lectern gooseneck is an SM57! All of my condensers are now sitting on the shelf. I've just done a huge outdoor gig for ANZAC Day with 3000 people using four SS30As with two SM57s on the lectern, and the frequency response was absolutely dead flat with no EQ needed. I've now started using the same rig indoors for major political speeches.

## DSP

The SS30As use a Powersoft amplifier module, which comes with their Armonia DSP platform. If you really want to alter the factory settings, you can connect your computer and make changes within Armonia. But the way AT have tuned this box, there's no way you'd want

to go and play with it. It is one of the warmest boxes I've ever heard without changing any settings - it's tuned perfectly.

On a more practical level, there's a four position switch on the back which you can use to switch between full range and 'with sub' settings. Switch position one is full range, position two is high-passed for use with subs, and positions three and four duplicate positions one and two respectively, allowing for future-proofing if AT decide to add two more presets one day.

## Construction and Finish

The fact the SS30As are a wooden cabinet was a big factor in my decision to purchase them. There is a huge difference in sound quality between wood and plastic. Also, the product looks good; I do a lot of corporate gigs, and you don't roll up with plastic boxes to a corporate gig.

The SS30As come with a road case, and we look after them. Even after a few year's use, I still get people asking if my SS30As are new. It's the combination of the birch plywood and AT's Acousti-Coat elastomer finish.

## Manual Handling

At 29kg per box, it's good that there's a handle on either side, with an indent in the top to cup the groove of your fingers. I'm about five seven and 64 kilos, and I can lift an SS30A onto my shoulder and onto a speaker stand. I wouldn't say it is with ease, but I can do it, and do most days without problems.

## Market Perception

Being an Australian-made product, we don't tend to see AT products on overseas riders and lists of requested equipment, because

they're just all about what everybody's using in Europe and America. If you're going to compare premium European brands to Acoustic Technologies, there's a big difference in price, but in hearing the results, there's not much in it at all. We've found that once engineers have operated and mixed on the SS30As or other AT products as a guest engineer, they're very impressed.

## Pricing

Price-wise, in a busy market, the SS30As sit extremely well. We have a very good relationship with Acoustic Technologies and have always found their pricing extremely competitive. High-end imported products have to sell at a price that covers their importation, which is understandable, but you're paying top dollar because they've come from overseas.

## Australian Made

I'm proud to support an Australian-made product. I've been in business for over 25 years and it annoys me no end that almost everything we buy in pro audio comes from overseas, from componentry to finished products. Acoustic Technologies are manufacturing and assembling in Australia for Australian audio professionals. If you can't support that, then you're not seeing the big picture. So I support Australian Made, not just because of that, but because it's also a damn good product.

**Brand:** Acoustic Technologies

**Model:** SS30A

**Product Info:** [www.atprofessional.com.au](http://www.atprofessional.com.au)

**Australia and New Zealand:**  
[www.atprofessional.com.au](http://www.atprofessional.com.au)

Ray Eberle is the owner of Fat Sound, located in the Shoalhaven region of NSW. Fat Sound specialises in high-performance sound and lighting and has provided professional production to the Australian music industry for over 25 years. Fat Sound has become a reputable fixture in the Shoalhaven event scene, providing premium quality sound reinforcement and lighting for corporate meetings, special events, private functions, school productions, and outdoor or indoor concerts. Fat Sound has toured with most major bands around Australia and overseas, as well as with local artists.



## The Specs

1 x 12" Bass Transducer,  
1 x 2" exit H.F. Compression Driver

### Frequency Response:

90 Hz – 18 kHz @ 3 dB  
60 Hz – 22 kHz -10 dB

### High Frequency Dispersion (Degrees):

70(H) x 40(V) or 100(H) x 40(V)

### Dimensions:

Height 556mm (inc Feet)  
Depth 377mm  
Front Width 331mm  
Rear Width 232mm  
Weight 29kg

### Passive Mode Specifications:

#### Sensitivity:

100 dB @ 1 watt, 1 metre

#### Max Input Continuous:

530 watts RMS

#### Max SPL Continuous:

127 dB @ 1 metre

#### Active Crossover Frequency:

1.2 kHz or higher at 24 dB / Octave

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# IT'S JUST WRONG

by Duncan Fry

## I hate it when I'm watching a program or movie on TV and something comes on that is so wrong or out of place that it makes me wonder how anyone could have signed off on it.

Let's start with 1988's 'Who Framed Roger Rabbit? Great movie, great animation, and Jessica Rabbit as well. What's not to like? I haven't watched the movie for some time, but there's a scene where one of the famous old Los Angeles Red Trams slides by silhouetted in the background. So what? I hear you ask.

Well, like the early Melbourne trams, the L.A. ones had spring-loaded poles on the roof that pushed up against the power lines to get the power to run the tram's motors. Nowadays, modern trams use a pantograph like trains do. But back then there was a pole at the back to make the tram go forwards, another at the front to make it go backwards. Only one pole can be up at a time though. In the movie this Red Tramcar glides past with both power poles up, which is technically impossible!

Anyone who had seen one of the California street cars moving along, or visited Melbourne up until about 20 years ago, would have known this straight away. But sadly they didn't ask me! In the words of Ecclesiastes, 'The prophet is without favour in his own land!'

He's still without favour in the next item too: The Doctor Blake mysteries – a drama series about a country doctor set in 1950-ish Ballarat. By and large the re-creation of the post-WW2 era was quite good, except for one glaring mistake that undid all the previous good work.

Have you ever seen one of those wind-up early 78-rpm gramophones? We used to have one when I was a little tacker. There were about five disks that I played incessantly, with catchy titles like Frankie Laine's 'Ghost Riders in the Sky,' and another favourite by Tennessee Ernie Ford 'Oh I was born to wander, I was born to roam, but Mister and Mississippi, made me feel at home!' and 'Animal Crackers in my soup' by Shirley Temple. Oh the horror. But I digress. In one of the Dr Blake episodes all the female characters in the show are downstairs in the basement of the Ballarat Old Grogans Club having a hen's night or something similar.

"Let's have some music." says one of them and goes over to an early wind-up 1920's 78-rpm record player with a monster cast aluminium tone arm, pops a vinyl 1960's era 45-rpm single

on and bangs the needle down on it. "No-no-no" I groaned, expecting to see a spiral of vinyl curl away from the 45 as the couple of kilos of tone arm and steel needle chiselled its way through it! Luckily the story cut to the next scene before I could hurl the remote at the screen.

Now let's move on from Ballarat to the Nashville TV series. The town of Nashville is like Ballarat but with more country music, and the eponymous TV series is a bit of an upmarket country music soapie. As a program it is usually pretty good for having realistic production values. The details of guitars, amps, studio microphones, mixers and the actual performances etc. are all good and quite believable.

Although I suspect a fair amount of Gibson product placement, because we were up to halfway through Series 2 before we even caught a glimpse of a Fender Telecaster - THE country music guitar!

As I said, it's all well done and believable - except for the following glaring problem...

We're backstage at a concert, and at the last minute before she goes on, the star decides she needs the 25-piece gospel choir, with whom she recorded her last album, to be on stage with her. A second later the curtains open and suddenly there they are on stage, all 25 of them, each clutching a handheld wireless mic in their hot little hands! So that's 25 wireless mics the poor sound guy has to suddenly find, all tuned, frequency checked, and sound checked, AND 25 spare channels on the console in less time than he could yell "Not my problem" and run screaming out the door.

Look, we're all involved in the entertainment business in some shape or form, but even non-industry people must see the impossibility of a situation like this.

Next up - The Recording Studio, on the ABC. A program where people come into a big professional recording studio to record a song with top producers and engineers. I watched a couple of episodes because I wanted to watch Mark Opitz, one of my favourite producers, at work in the studio. I stopped watching it

because I realised the sole purpose of the show was to have the whole TV audience crying in their collective beers. Talk about tugging at the heartstrings. On one episode Grandpa Tom Copley and all his whole family band come in to sing 'Rolling in my Sweet Baby's Arms', possibly not realising that rockin' and rollin' was an early euphemism for some 'horizontal folk dancing'. Or maybe he did!

The producer (not Mark Opitz) decides to scrap the whole perfectly good setup that the engineer had organised, and go for a single mic recording with the whole band standing around it. The producer insists on bringing in his own favourite vintage microphone, which promptly shits itself in the middle of the first (and best) take, forcing the engineer to go and find the fault. It took about an hour to find the problem while the band sits around scratching their bums, and the engineer spends her time probably thinking about a far better place she could stick the producer's favourite mic which would remind him every time he sat down. I know I would!

The track finally gets finished and they cut to a close-up shot of a spinning 12" LP which I very much doubt is theirs, because it has at least 6 tracks on it. A hand drops the needle anywhere on the disk, and the just recorded track supposedly starts to play. Huh? So wrong on so many levels that you'd think someone in the production team had a bit of a clue about music and vinyl?

Just as I was finishing up this story a TV commercial came on which really grated on me. The scene is a trendy dinner venue for an Italian party. Everyone is standing around looking bored and glamorous, but nothing happens until the chef arrives with a packet of Barilla spaghetti, made in Italy! At last the party gets going, and the whole gang starts partying to some real Italian music that just screams Italy.

Which turns out to be that old Italian favourite ...Zorba's Dance! Really? Is that the best tune they could come up with? They're supposed to be Italian not Greek! Someone should tell the producer that they're not interchangeable or the same. Either way it's an insult to both races.

Any one of us with a mobile phone has the world's greatest information source at our fingertips 24 hours a day. It only takes a few seconds to come up with info on a popular Italian party song, or a picture of a 50s/60s record player, and yet these mistakes still occur. But not while old eagle eye Fry is on the job!



# We took a vote...

# Shall we have another convention in 2020?

# The outcome was unanimous.



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