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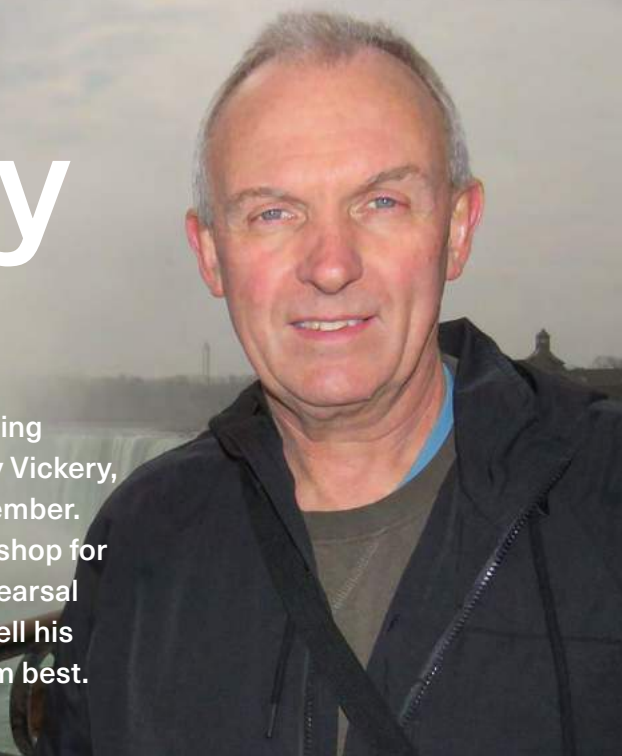
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Ray Vickery

1955 - 2023

After a long battle with prostate cancer, Australian lighting pioneer and mentor to the lighting industry at large, Ray Vickery, was laid to rest in a ceremony in Melbourne on 23 November. Ray's company, Lighting Lab, served as a creative workshop for inventing new products and nurturing new talent, a rehearsal space for bands, all in addition to renting out gear. We tell his story here through the memories of those that knew him best.



Ray Vickery: Humble, Reliable, Honest, Trustworthy

Andy Edis, Lighting Lab

A true gentleman, Ray was as genuine a man as you could ever find. He did not listen to what anyone said, he watched what they did. He did not tell anyone what to do; he showed them what to do. Ray never looked for accolades or praise, he just did what had to be done.

Ray worked out the formula to success early in life, which was pretty simple, really; please others. And I believe he did that every day.

Being an A grade electrician, and due to his talent in design and creation, lighting production was a perfect career choice for Ray, which he was not only brilliant at, but also loved.

Ray started his company, Lighting Lab, in the garage of his home in Bessazile Avenue, Forrest Hill, in 1978. He built the lights and equipment he needed to light shows of any kind. He was a talented tradesman and built anything he needed from scratch.

He very quickly developed a reputation as a talented lighting designer and innovator, using turntables from record players and ceiling fan motors without the blades to create moving lighting effects for productions. He created amazing effects as exciting as the digital lighting of today, simply by adapting mechanical devices to lighting to create custom looks. He used cycloramas and the oil effects of the time to create amazing looks.

His shows were being noticed by all on the circuit and his equipment was growing in demand. In 1980 he had lots of work lighting shows and touring. His inventory was growing, so he needed someone to look after Lighting Lab while he was away, sometimes for many weeks.

Ray employed me to prep the shows and look after the bands while he was away. I was a fifteen-year-old cover band lighting trog and was honoured to be offered the job at Lighting Lab, where the band I was working for at the time was hiring their lights.

One band he was lighting designer and operator for was legendary Aussie live act The Uncanny X Men, with Brian Mannix as front man. They had a huge following on the pub and club scene and were the perfect band for Ray to light, as they had the budget. Ray designed their versatile lighting rig designs that could be adapted while on the road to any size venue on the circuit.

Large or small, Ray was able to make the shows look as big as the bands sounded. His looks in every venue were legendary, and were industry-leading light shows. His rigging techniques, his focuses, beams, pyros, and his incredible cueing contributed massively to the success of those live shows. Ray's quote in his book sums it all up; "When ten thousand people all gasp at one of your lighting cues, it's an amazing feeling!"

Most band and crew would over-indulge in the opulence of the 80s touring circuit. However, before the party got messy, Ray would quietly retreat to his hotel and be designing and planning the next show or gig, or Lighting Lab's next move.

Ray would be relaying instructions back to Melbourne via landline, and I would be on my bike peddling round to Bessazile Avenue to please others, serving the bands what they

needed. Loading and unloading trucks all hours of the day and night. Changing dimmer racks, supplying new Par 64 bubbles, globes, or anything the growing number of touring bands needed.

Eight tonne pantechinics reversing up the driveway, gear in and out, truss and winch ups banging and crashing. The neighbors loved it! When Ray came back from an east coast tour, he said "We are moving, Andy."

We walk in to 16 Clarice Road, Box Hill. It's a huge empty warehouse in an industrial area with access down the side walkway, all of the gear from Bessazile fits into one little corner of the factory. I'm asking "What the hell are you going to do with all this space, Ray?" Answer; "I'm not sure." Yeah, right! Classic Ray; bypass the problem and go straight to the solution. It didn't mean he didn't know; it meant he knew he was going to fill it, but just hadn't worked out when and with what!

With Ray's Dad John Vickery (known as Jack), an accomplished engineer and craftsman, they began designing, creating, and constructing.

Ray recognised a need for state-of-the-art rehearsal spaces for the growing number of bands, so they designed and built the first studio, complete with recording facilities, utilising the laneway entrance and rear door, which allowed bands to come and go without interfering with the business.

The demand exploded so the construction continued, and resulted in what we see today, eight studios with equipment mezzanines above utilising every inch of the warehouse.



Keeping it clean, and well-stocked with bickies, tea, and coffee, became a daily task for the employees and Ray, who never expected anyone to do anything he was not prepared to do himself.

While all this was happening, Ray was still doing shows, building his inventory, diversifying into audio, staging, and new technologies, still always pleasing others with the equipment they needed. Ray was building

relationships with overseas manufacturers, designing equipment customised to his needs, and arranging the manufacturing and shipping of the gear to Australia for sales and hire, developing Ray's unique brands.

Somewhere in Ray's incredibly busy life, Ray and his wife Gloria raised four boys to become the most wonderful, honourable men they are today. A tribute to Ray and Gloria and a pride to us all.

By now, 16 Clarice is bursting at the seams and Ray needs more space. Factory 9, number 10 Clarice Road becomes available and Ray once again takes a risk and grabs it. Yet again, walking into a huge empty warehouse, but this time without Jack as he had sadly passed. So Ray puts head down, ass up, and gets on designing, drawing, creating and building the special place we see today all while running and expanding Lighting Lab!

He built that space to please others. He built it for us to work in and create from. Ray built it; every stair, rail, bench, counter, shelf, and wall. It's a very special place that pleases others.

As Ray embarked on his gallant battle with prostate cancer, Scott Pryor stepped up and grabbed the reigns to keep the business

going as it has for 45 years. Hats off to Scott, amongst his own challenges, to get on with it as he does every day. Brandon and Blake were prepping the gear to Ray's high standards and getting it out the door, serving the customers.

The studios were looked after the whole time, cleaned and restocked every day. Ray's wife Gloria and sister Helen chipped in to ensure Ray's high standards of chockie bickies and immaculate studios were upheld.

Ray was a great husband, a great father, a great son, a great brother, a great partner, a great mentor, a great friend, and an industry legend.

You've left us now, and we have gear to prep and shows to get out the door, but don't worry! We will be OK, because you showed us what to do, and you showed us how to do it!



Ray Vickery and the Early Years

Gary Pritchard, LSC Control Systems

Ray was born and raised mostly in Box Hill Melbourne. He attended Box Hill Technical School where he first discovered and fell in love with lighting and sound, and operated both for his school and other schools in the area. However, it was the lighting side of things that grabbed Ray's attention, and, after starting to light bands in the local area at the ripe age of 16, he was hooked. He slowly started to amass equipment including his own lights (wooden boxes and gel) and a switchboard to control it all.

After secondary school, Ray embarked on an electrical apprenticeship while continuing to light bands on the weekends. However, halfway through his apprenticeship in 1974 Ray was offered a permanent weekend gig with a band that had some of his friends in it. This solidified his desire to complete his apprenticeship and seek a career in lighting. Business was to follow and following years were spent working as an electrician during the day and lighting bands, building lighting equipment or hiring it out at other times.

By 1979, Ray was running a sizeable full-time from his home in Forest Hill. In 1980, under the strain of growth and complaints about trucks turning up at his home at all hours, he made his first big step into commercial premises and moved into a warehouse in Box Hill. At the

same time, the business finally got an official name and Lighting Lab was registered.

At around the same time, he approached his long-term friend Gary (the drummer from the band) who happened to have just completed his electronics degree and asked if he would like to design some lighting gear together. At the time, the majority of the equipment on the Australian market was from Strand and Ray was looking for something both different and cheaper. The two designed a lighting controller called the Entertainer and a 6-channel dimmer pack. Several of these were built and sold into the marketplace and the different gear helped Ray differentiate his offerings from his competition.

The warehouse that Ray leased was much bigger than he needed and he quickly saw a market opportunity for somewhere for bands to rehearse. Always being able to turn his hand to anything physical, Ray started to build rehearsal studios which were seriously sound-proofed. Being in an industrial area, noise complaints were not an issue. Over the years, Ray went on to build several of these studios and eventually moved Lighting Lab to new premises up the road. The rehearsal studios still function today, are always booked out, and are testament to Ray's ability to seize an opportunity.

Now with premises and staff on, Ray got back to doing what he loved; running the show. He spent the next years alternating between six months on the road and six months in the office.

At this point Ray found the love of his life Gloria, and in 1992 they were married. Not long after, children entered the picture. As is usual, home life then took up a large majority of his time.

The story of Lighting Lab was now nearly 20 years in the making but had a long way to go and the company continues today to service the entertainment industry rental and sales market.

Footnote: The Gary in this story is Gary Pritchard, founder of LSC Control Systems. There is no doubt that LSC Control Systems would not exist today were it not for Ray approaching Gary to design some equipment for him. It can be said that Ray's influence on the industry was deep and wide.

Gary Pritchard's reflection on Ray Vickery

I first met Ray when he was 16 through a mutual friend. While we were not close in those early days, we did hang around in the same group and later on spent a lot of time together in pubs, parties and on various trips. That changed and we got a lot closer, when in the mid seventies, Ray became the lighting guy for our band. Lighting was not a big part of live performances in those days, particularly at the pub band level, but Ray, with his collection of home-made lights and his eye for lighting, made us look better than we were.

We spent many times together over the years including travelling to Europe by ship in 1979. In 1987, I exercised my brand-new pilot's licence taking Ray on an island-hopping trip up the east coast of Australia, where I met my wife.

It is not widely known but Ray is the reason that LSC Control Systems exists today. He approached me in late 1979 to design some lighting equipment for his then fledgling company, Lighting Lab. This I did and that led onto me designing equipment for other companies, and LSC was born.

Ray was an amazing character and was always positive even if the chips were down. He never gave up and would inevitably find a way to make things work. His smile was always on his face, he was ready for a laugh, and he wore his heart on his sleeve. He was instrumental in helping many people into the industry that he loved so much and was always there as a helping hand.

Ray will be sorely missed, and I will miss our chats and laughs together. RIP my friend.



Thank You, Ray

Gary Davey, Lighting Lab

For me it began in July 1991, the start of a new financial year. Ray offered me a position at Lighting Lab after I had been doing freelance lighting for cover bands.

Prior to this I was an upholsterer, and when I started lighting I really struggled with the idea of being paid for creating an illusion that was pulled down at the end of the night, as opposed to creating a piece of furniture that would last for years. Ray soon taught me that the purpose of stage lighting was to 'enhance' what was happening on the stage, and if that was done well it would help create lasting memories of the performance for the audience. This valuable insight completely changed how I approached lighting and was just one example of how much Ray was willing to guide and share his knowledge in order to help someone develop their craft.

There was never a dull moment working with Ray and it didn't take too long for me to realise that he was always tossing around ideas in the back of his head as well as developing projects that would help improve his business, either by becoming more efficient or by offering better service for his customers. This was something he thrived on, and it was something that I believe motivated him every day.

As Lighting Lab continued to expand it became obvious that one of Ray's joys in life was the opportunity to 'get on the tools'. He loved working with his hands, whether it be building some outdoor seating and table for the studios, his old grey fibreglass road cases (which were bullet proof), then on to larger projects such as the mezzanine floor at the new factory including the showroom, repair room, his office and meeting room. He got so much satisfaction seeing it all come together. He didn't always have the right tool in his hand for the job, but somehow he made it work.

Unfortunately, some of the projects didn't come without significant risk of personal injury due to Ray's tendency to do things as fast as he could. There was the broken wrist from falling off a ladder at the old factory, falling off the front counter at the new factory (which I believe was another broken bone), and then there was the odd drill bit through the thumb (not sure how he managed that). But he would always dust himself off and get back to work as soon as he was able. It never ceased to amaze me what one man could achieve.

Over the years I have witnessed many changes in the business, and I know Ray took great pride in watching it evolve. This evolution was not only confined to the business itself though; it also applied to some of Lighting Lab's customers as well. It has been very satisfying to see some of the early customers, some which were still at school at the time, go on to achieve incredible success in their



chosen fields within the industry, with some even going on to create successful businesses for themselves. All of which I believe was in part made possible by Ray's generosity and willingness to help others where he could.

If I had to identify one attribute that was the secret to Ray's success it was that he was fearless in business. He had such a strong sense of purpose and belief in himself that he was able to navigate his way through hard times, and he had his fair share of those, but he always managed to get through. He also had great intuition and trusted his gut instinct which saw him expand the business into new areas including audio, staging and finally into AV with the purchase of LED screens, which I always thought was his crowning achievement.

It was the LED screens that I loved working with the most, and thanks to Ray's belief in me, I had the opportunity to work with some amazing people, both at the factory and on the road, as well as being a part of some of the most incredible events I have ever been involved with, many of which have left me with my own lasting memories.

After COVID hit, and the following uncertainty that surrounded the industry, I was given an opportunity to go back to upholstery in 2021 which, after much consideration, I accepted. I will always remember the support, encouragement and understanding that Ray gave me during this time which made the transition so much easier for me.

I was at Lighting Lab for just on 30 years. There were incredible highs, and yes there were a few lows, but during that time I achieved way more than I thought I was capable of and that is all thanks to one man.

Ray, thank you for believing in me when I had little belief in myself. My life is richer for having known you. I just hope you know how much impact you have had not only on the industry you loved so much, but more importantly, the impact you have had on the people that came into your life.

Thanks for the memories my friend.
Rest in Peace.

Ray Illuminated our Industry

Lynden Gare, Colourblind

Reminiscing about Ray brings me back to my first visit to Lighting Lab in Box Hill. As a 10 or 11-year-old, brought along by my father one Saturday morning, I entered a space where Ray, alongside his trusted general manager Gary, unfolded the world of lighting for me for the first time.

I had been encouraged by my parents to learn about business by DJing for friend's parties. And naturally I wanted to make these events as exciting and as close to my idea of a good show as possible. Ray spent an hour or more showing me all the best sound activated effects on the market, before I started asking about lighting consoles and moving lights. My eyes were now wide open to the exciting world I would later call my career. Gifted a shiny magazine from Ray, my parents would later buy me a subscription to that magazine, Connections, (now this publication, CX) for my birthday that year.

Instantly, Ray's dedication to nurturing enthusiasm shone through as it did every time that I went back for the next 10 years. Despite my youth, both Ray and Gary treated me with care, extending the same attention for a kid with a \$200 budget as they would to a client with \$20,000. It was a foundational experience that set the course for my current career.

Reviewing the memories, it becomes clear that under Ray's leadership, Lighting Lab has always been more than a rental company; it is a place where passion meets mentorship. Ray's dedication and enthusiasm for the lesser-known artistic pursuit of using production lighting technology was so important for not only seasoned professionals with big gig budgets, but also to young, aspiring individuals like myself.

My last encounter with Ray mirrored the initial one; a testament to his consistent dedication.



A planned 20-minute visit for speakers for a friend's wedding turned into a captivating two-and-a-half-hour exploration of his latest products and profound discussions on lighting techniques and business strategy.

Over the three decades I knew Ray, his unwavering commitment to each and every customer remained a beacon for our industry. His legacy extends beyond the products and technologies; it encompasses the mentorship that inspired countless individuals, including myself.

Ray's passing leaves a void, but his positive impact on our industry is enduring. I'll remember him not only for his contributions to the small end of our event industry but also for his role as a mentor, exemplifying the qualities of patience, dedication, and a genuine passion for the artistic possibilities within our field. In honouring Ray, we should never lose sight of the importance of nurturing the next generation of professionals who might illuminate our industry with creativity and enthusiasm.



Last Goodbyes

"It was with great shock and sadness that I heard of the passing of Ray Vickery. Ray was a pleasure to deal with and was highly influential in the Melbourne entertainment and production industry. Condolences to his family and friends."

- *Darren Holborow, SMOKESCREEN Illumination*

"It is never easy saying goodbye to someone you looked up to. Ray, you have been an inspiration to many, myself included. Your love and dedication to what you have built is amazing. Your patience and kindness does not go unnoticed either. It has been an honour and privilege to have worked for you over the last five years."

- *Brandon Tan, Lighting Lab*

"I first met Ray at the start of my career decades ago when I walked into Lighting Lab with my enthusiasm certainly outweighing my ability. Back in the early 90s there were not a lot of women working in lighting, and certainly not working with bands as LDs. Ray was so incredibly supportive of me and my career at a time when many were not. He had limitless patience and time to offer advice and even showed me how to patch my first console. He saw the potential in me. Ray genuinely cared about our craft and all those who worked in it. I will never forget how willing he was to teach and support someone starting out and I always try to pay that forward. Rest in peace dear Ray, you will be remembered and cherished always."

- *Megan McGann, Nine Network/Colourblind*

"I have had the privilege of working for Ray and Lighting Lab for the last 13 and a half years. I have learnt so much from Ray, from how to properly prep lights, through to running the business. He had a passion for lighting. He had a passion for every show; a single Par Can hire to a 300 LED panel hire were given the same attention. I am honoured and privileged to be able to call Ray not just a boss, but a friend. I will miss our chats about hires, working out costs, and planning new purchases. He had a knack for knowing what the industry needed. I am also honoured to continue the legacy that Ray has built in Lighting Lab. Ray was an exceptional man; kind, generous, humble, never in want of an accolade, and driven. He will be truly missed at Lab, and by me."

- *Scott Pryor, Lighting Lab*

What's Holding Up Your Production?

CHAINMASTER's Adam Beaumont on Hoist Safety

At October's ENTECH Road Show, Adam Beaumont, Global Head of Sales and Business Development at German hoist specialist CHAINMASTER, was on the road to school us in safe rigging practices. Speaking to a keen crowd in each of his presentations in the tour's five cities, Adam spread the knowledge while dispelling myths.

"It's been really interesting coming to Australia from the UK and doing this presentation," says Adam. "The response has been positive, as have the discussions after the presentation, because people are really interested in improving the levels of safety in their work."

One of the focuses of Adam's presentation is the difference between a D8 and a D8 Plus chain hoist, and where the standard came from. "There's a lot of confusion about what you can and can't do with a hoist," continues Adam. "People can get confused about D8 and D8 Plus, which are a German code of practice. They are not new standards; I'm clarifying their meaning. They are quality standards with two levels of built-in safety in the hoist."

The main difference is that a D8 hoist is not designed to suspend loads above people. It can be used for this, but only with the addition of secondary safety device (secondary tether) being deployed alongside the hoist. A D8 Plus hoist is designed with higher safety factors in the chain and any load bearing component along with double brakes. This allows the user to suspend loads above people without the need for that secondary safety device.

"If you select a D8 Plus hoist and don't have to put in a secondary safety, it reduces the risk of installation," explains Adam. "You don't send anybody up to access the equipment, you don't have to send a rigger climbing to put the safety on, and there's no ensuring the safety device is the right piece of equipment or correctly fitted. It just gets rid of all the risk associated with secondary devices."

CHAINMASTER has had input into a document known as SQP2:2018 Code of Practice, published by IGWW (an EU organisation, based in Germany). Even though SQP2:2018 is a German code of practice, it is recognised across the world as a point of reference when it comes to chain hoist safety in the event industry.

"It all comes down to the risk assessment for each specific project," offers Adam. "If you've correctly assessed your project, you can select the right equipment for the job. The user, owner, and rigger have a responsibility

to ensure what they are doing is as safe as possible based on that risk assessment. Once they've done the risk assessment they can reference the different resources, such as SQP2 and make their rigging practice as safe as possible."

CHAINMASTER have had a long presence in the Australian and New Zealand market with ULA Group as their exclusive distribution and service partner. Their three bestsellers are their 250, 500 and 1000 kg D8 Plus hoists, all designed to be as small and lightweight as possible without compromising on safety and engineering.

"It sounds like a cliché, but it's handmade German engineering," states Adam. "All load bearing components in our hoists are manufactured and assembled in our factory in Germany; all the gearbox parts, lift wheels, shafts and pinions. We take the raw steel, machine that down into components, and assemble every product in our own facility."

This level of control over their supply chain enables CHAINMASTER to administer quality and safety on a granular level. "Every part we



manufacture has a unique ID code," outlines Adam. "If you give us that code from a gear wheel in a hoist made four years ago, we can tell you what batch of steel it was made from, on what date, on which machine, by which operator, it's all about traceability and safety. When we buy steel, we take samples and test it in-house to make sure that it's the grade of steel it says it is. When you're talking about hanging loads above people, it's all about safety and there can be no compromise there."

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THE SOUND THAT CONNECTS US
COHESION™

Clair Global elevates Cohesion to a fully supported enterprise

Clair Global has announced Cohesion's transformation from a loudspeaker series to a fully supported product development and manufacturing organisation within the greater Clair Global Group.

Cohesion was originally launched as a private brand available exclusively through Clair's rental division, but based on its overwhelming success and subsequent market demand, Cohesion is now available to exclusive installations worldwide.

Cohesion is already trusted by some of the world's most successful touring artists, including more than half of Pollstar's top-50 grossing artists in 2022, and 2023 is on track to produce similar results. Front of house and system engineers globally have praised Cohesion for its performance, efficiency, and reliability, and now venues beyond live touring and festival stages will benefit from the same industry-leading sound.

"We are investing in the people, product development, and resources needed to support this venture," said Troy Clair, President and CEO of the Clair Global Group. "We see this as an opportunity to build comprehensive, connected solutions that go beyond designing and manufacturing loudspeakers. I'm thrilled by what's happening today, and I'm even more optimistic about what's to come."

Designed and assembled at its headquarters in Lititz, Pennsylvania, Cohesion is prioritising workflow optimisation and a broadened ecosystem bolstered by a dedicated team of experts. The launch includes products never seen before, with more in development, that will expand and enhance the full catalogue.

"We've been sound reinforcement innovators for a long time, and our clients have come to depend on our team to deliver solutions that enable amazing audio experiences," said Jeff Rocha, General Manager of Clair Global's product division and Managing Director of Cohesion. "We're excited that this new era will now deliver those same exceptional results to high-end installations, such as sports facilities, houses of worship, and entertainment venues, that align with our core DNA and passion."



LEA Professional 1500W per-channel IoT-enabled amplifiers now available in APAC

Underscoring its commitment to listening to pro audio integrators and installers, and responding with technologies that meet their needs, LEA Professional, a manufacturer of innovative, high-quality, professional-grade amplifiers with cloud- and IoT-based technologies, is now shipping its Connect Series 1504 and 1504D worldwide. This high-power amplifier sets the standard in pro audio amplifier performance, connectivity, and ease of deployment for large installations.

The LEA Connect Series 1504 four-channel model drives up to 1500W per channel into 2, 4, and 8Ω as well as 70Vrms and 100Vrms, and is available in Network Connect (1504) Dante Connect (1504D) versions. The 1504D includes both 96kHz-capable Dante and AES67 connectivity options. The 1504 and 1504D include advanced DSP with 96kHz linear phase FIR crossover filters, acoustically transparent look-ahead RMS and peak limiters, 32-bit floating-point DSP with built-in sample rate converters, and two Smart Power Bridge channels.

"With the significant adoption rate of Connect Series amplifiers, APAC integrators,

in particular, said they were looking for an option to provide high-power performance and IoT connectivity to large-scale and high-performance installations," said Brian Pickowitz, VP Marketing, LEA Professional. "With the delivery of the Connect Series 1504 and 1504D, we're excited to fulfill another customer promise. We view APAC as a primary growth region for us, as evidenced by our growing number of local partners. We look forward to helping the region's integrators with installations that demand the highest performance out of their systems."



Harman Professional Solutions Set To Acquire Flux Software Engineering



Harman Professional Solutions, a global leader in audio, lighting, video and control technologies, has announced that it will be entering into an agreement to acquire Flux Software Engineering, the France-based pioneers in immersive audio production, audio processing plug-in design, and audio analysis.

The acquisition of Flux will broaden Harman Professional's offerings across multiple applications with world-class immersive technology, in addition to establishing a foundation for future innovation by bringing together Flux's team with the hardware and software engineers of Harman Professional. When closed, the deal will include Flux's immersive, processing, and analysis solutions

across live production, installation sound, content creation, and post-production.

"The Flux acquisition is part of a technology investment Harman Professional is making to bring outstanding immersive experiences for live and recorded productions," said Brian Divine, President of Harman Professional Solutions. "From creation to real-time immersive delivery, we aim to empower artists, designers, and engineers with a comprehensive product list across the entire system. The foundational technology developed by the talented Flux team opens many opportunities for future integration with our portfolio of brands."

Flux was founded in 2006 by sound recording engineer and current CEO, Gaël Martinet, for the purpose of creating intuitive and innovative audio software tools. Now, the portfolio of nearly twenty products is used globally by talented professionals across many applications. Highlights of these include:

Flux Spat Revolution, a powerful object-based and perceptual immersive mixing solution

providing artists, sound-designers, and sound-engineers the tools to design, create, and mix outstanding real-time immersive experiences; Flux Analyzer, a modular RTA-system providing an extensive range of analyzer options for any audio analysis and measurement application; and Flux Processing, a comprehensive suite of plug-ins including channel strips, EQs, dynamics processing, and more.

"The future integration of our software technology with Harman's industry leading brands make for exciting opportunities, not only for touring applications, but for installed audio where spatial sound will play an increasingly important role," said Gaël Martinet, Founder and CEO of Flux. "We've been pioneering and engineering immersive audio solutions for many years and to be among these Harman brands, namely JBL, which developed some of the earliest loudspeakers, is very compelling for our team and for customers."

The acquisition is anticipated to be wrapped up before the end of 2023.



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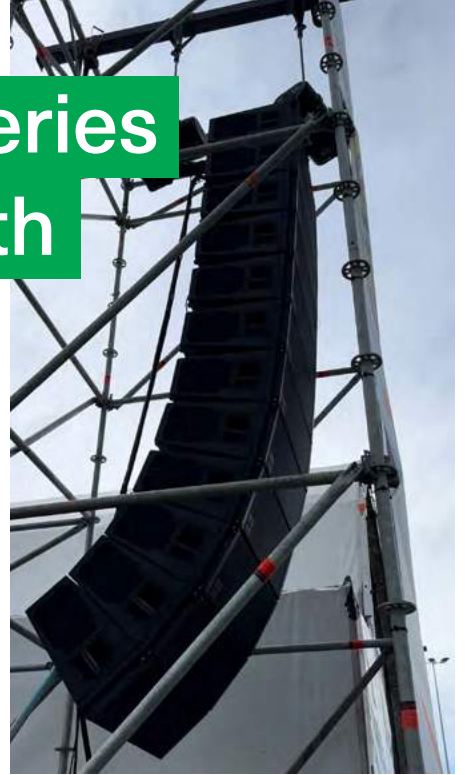


FLANDINA 18



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d&b audiotechnik KSL Series supports business growth



Jay Productions reaps benefits of investment in KSL Line Arrays

Jay Productions, established in 2008 by Jason Ghazal, has developed into one of Australia's fastest growing and highest quality production companies. The expansion of the business has been matched by significant investment in inventory, including the recent acquisition of a d&b audiotechnik KSL Series line array with KSL8 and KSL12 elements, plus SL-Subs and amp racks from distributor NAS.

Suthagar 'Suth' Karunanithi, Jay Productions' Head of Sales, describes the journey from supplying weddings to producing events for A-list clients, "Founder Jason started small, working out of his Dad's garage, jumping into his first warehouse three or four years later, and he hasn't stopped growing the business since. I started about eight years ago as a subcontractor and general labourer and now I'm sitting here as Head of Sales having witnessed this phenomenal shift from social events to the annual ground activations for Kia at the Australian Open, and international concerts."

Jay Productions had a history with d&b, "Jay started off with a d&b V line array system which we still hold and use for our weekly jobs. As we moved into festivals and larger scale events, we decided to invest in a more powerful line array and open up a new market. We currently have 16 KSL top boxes, 12 KSL 8s, four KSL 12s, and eight SLG subs."

Jay Productions' decision to opt for the KSL Series over other brands was motivated by the requests for KSLs on the riders for big events, "Personally I produce a lot of touring Indian concerts and other international cultural shows and they were specifically asking for KSLs. They all want the wide throw for the arenas. We also saw it on the Lost Paradise rider quite a few times, and for Summer Camp Festival."

Since acquiring the KSL line array, Jay Productions haven't looked back, "We got it in the middle of last year and started using it

straight away at a few outdoor festivals. The first one I took it on was Lost Paradise 2022 in Glenworth Valley. Nowadays the sales team are competing with each other as to who can get their hands on it first, a good issue to have!"

It has just come back from Clearly Music, Art and Wellness Festival in Kiama, with Xavier Rudd and Peter Garrett headlining, and is locked in for Parramatta Park for New Year's Eve, and has been quoted for Summer Camp Festival, "We also collaborate with another local company operating in a different market but where the KSL is also in demand. We work in partnership to share our d&b inventory for a variety of shows."

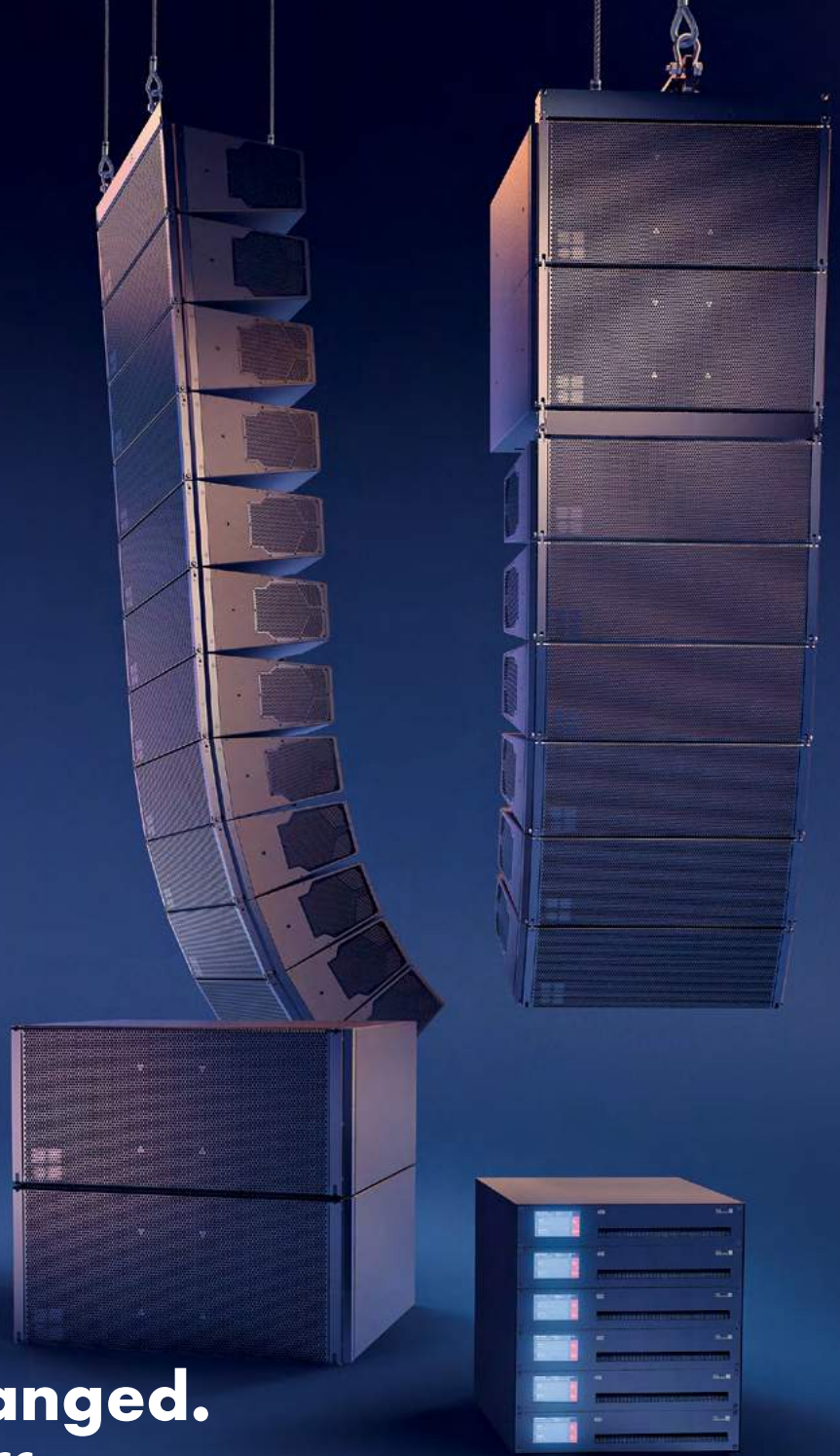
Suth and the rest of the team are thoroughly enjoying the KSL Series, "As we had been running on Vs for quite a long time, the KSL has been a big step up. The longer throw means we can use the KSL for 10-20,000 plus festivals and arenas; the Vs are for our under 10,000 events. At the bigger festivals and auditoriums, we use the KSLs for our main hangs and the Vs as our front fill. If we needed side hangs, we'd also use the Vs."

The ease of use of the d&b range has made the integration of the KSL system straightforward, "Out of the box, the KSL sounds great and, depending on the space, only needs a few tweaks on the system EQ. Together as a complete system with the SL-GSUBs, the coverage and quality that can be achieved is always powerful and predictable."

"They are really easy to get up in the air. The d&b ArrayCalc software is intuitive and assists to work out the splay angles and makes hanging them simple and quick. ArrayCalc also provides comprehensive rigging documentation that our system designer can hand to technicians on site to hang the PA for the desired coverage. The predictive SPL mapping that the software generates always ensures we can get the maximum desired coverage from the KSL line array. I've used it at boxing events where we are doing four or five hangs and I just give a sheet to each person and everyone gets their hang right first time."

Whilst Jay Production's expanded inventory is playing a significant part in the company's success, Suth also puts the growth in high profile customers down to the team's passion and skills, "That's driven by the care that Jason himself has put into developing his staff. As owner of the company, he's always looked after the welfare of the staff onsite and made sure they've got everything that they need. He never skimps on equipment. All the gear that we stock is top notch, nothing second grade. We spend a lot of time and energy in the warehouse maintaining the equipment and have a high care factor. We have clients thinking that the gear we are lending them is brand new, but it will be four or five years old, and we have just looked after it. That's where excellent relationships with the distributors, like NAS, really count."

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MadisonAV Expands Portfolio as Distributor of NETGEAR AV Managed Switches in Australia

NETGEAR® AV



MadisonAV have announced its strategic partnership with NETGEAR, Inc, a global leader in networking products. MadisonAV will now serve as a specialised distributor of NETGEAR AV Managed Switches and associated accessories in the Australian market.

The collaboration marks a significant milestone for MadisonAV, reinforcing its commitment to offering cutting-edge solutions and further cementing itself as a premier distributor of professional AV products. With NETGEAR's Pro AV products added to its portfolio, MadisonAV enhances its capability to deliver comprehensive, reliable, and scalable networked AV solutions to its diverse customer base.

Ken Kyle, CEO of MadisonAV, expressed enthusiasm about the partnership, stating, "We are thrilled to be appointed distributor of NETGEAR Pro AV products in Australia. This collaboration aligns seamlessly with our vision of providing world-class audio-visual solutions to our clients. NETGEAR is a globally recognised manufacturer of exceptional switching products, and their Pro AV switches complement our existing offerings perfectly."

NETGEAR Pro AV switches will seamlessly integrate with MadisonAV's existing product lineup, enhancing the company's ability to provide complete, fully integrated networked AV solutions and will play a crucial role in MadisonAV's sales of AMX SVSI networked AV solutions, providing clients with reliable and robust networking infrastructure. This integration allows MadisonAV to offer a one-stop-shop for AV and networking solutions, simplifying the procurement process for its customers.

Ken Kyle continued, "The addition of NETGEAR Pro AV products to our portfolio further expands our ability to supply even more comprehensive solutions. Another of our

brands, AMX by HARMAN, have a preferred vendor relationship with NETGEAR, where their professional AV series 4350, 4300 and 4250 switches are now the recommended choice for all AMX AV over IP installations worldwide. This relationship provides the additional reassurance that their collective efforts to achieve interoperability and technology integration will result in a superior experience for our shared customers."

NETGEAR designed the M4250 series of switches from the ground up with input from the AV community, drawing upon over 25 years of networking experience to ensure these Pro AV-targeted switches had what it takes for the demanding rigors of sending audio, video, and control signals over an IP network. As a result, NETGEAR is fast becoming the most recommended switch vendor for AV over IP deployments.

NETGEAR AV Line of Managed Switches

The AV Line of switches are engineered for AV over IP and designed for clean integration in an AV rack, under a table, or behind a display. Models with PoE+ and Ultra 90 PoE++ allow powering of AV endpoints and more. Built with NETGEAR IGMP Plus, Auto-LAG, and Auto-Trunk for automatic and dynamic configuration – even with multiple switches.

The easy-to-use AV interface and Engage Controller free software application helps integrators conquer the typically tedious AV over IP switch configurations. The installer need only select the protocol or vendor and

then select the applicable ports. From there, the switch will automate the remainder of the configuration, resulting in less time spent on the network configuration and more time focusing on the other parts of the installation.



Ken Kyle CEO MadisonAV





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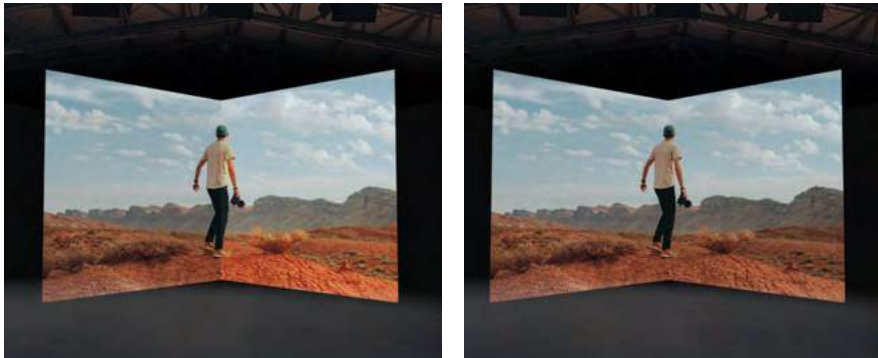
SHOW
TECHNOLOGY

VuePix Infiled Launches CBSF Technology for xR and VP Environments

VuePix Infiled, a market leader in LED display technology, has announced the recent launch of its game changing CBSF (Colour and Brightness Shift-Free) technology, which marks a significant technological leap in the xR/VP market.

With CBSF technology, VuePix Infiled is setting a new benchmark for colour performance in xR/VP. CBSF will further enable the rapid development occurring within the virtual production industry.

The CBSF technology, powered by the innovative M2 chip, marks a new era for xR/VP markets. It enables accurate colour reproduction, by eliminating colour shifts and uneven brightness, for both vertical and horizontal viewing angles.

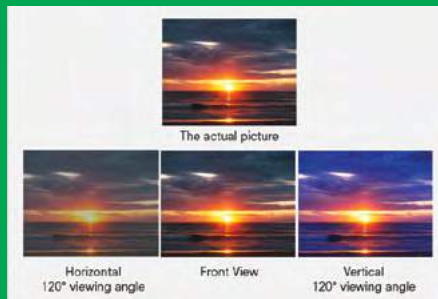


The conventional LED display (left) vs the display with CBSF technology integrated (right)

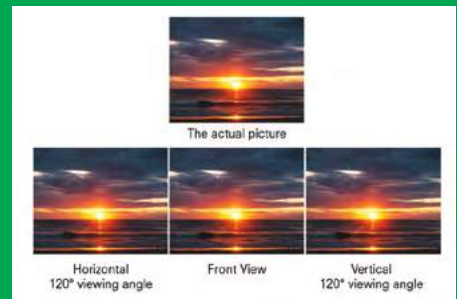
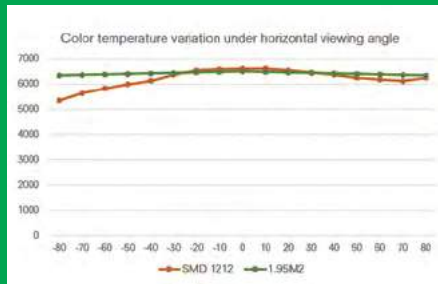
Colour Shift Free

The typical layout of SMD RGB chips often results in a blueish or reddish hue when viewed from a wide angle. However, CBSF technology resolves this issue by harmonizing the RGB among all pixels and between adjacent pixels, resulting in consistent and stable colour temperature across a wide 160 degree viewing angle. CBSF technology ensures colour shift free performance, resulting in vibrant and accurate colours in all conditions.

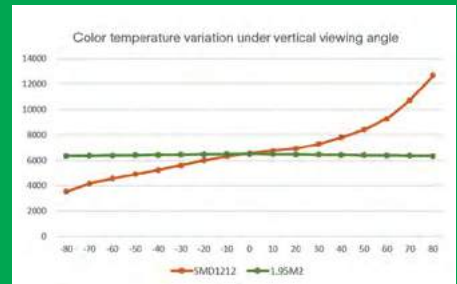
In the 160 degrees horizontal and vertical viewing angle range, the 1.95M2 LED chip maintains more consistent colour temperature than conventional LEDs.



Conventional LED display



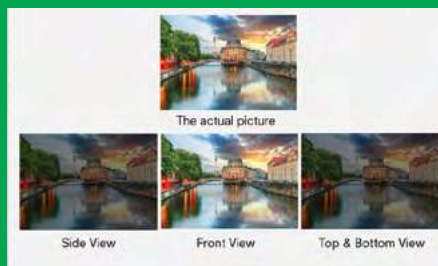
Display with CBSF Technology



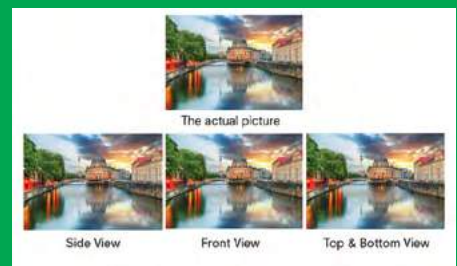
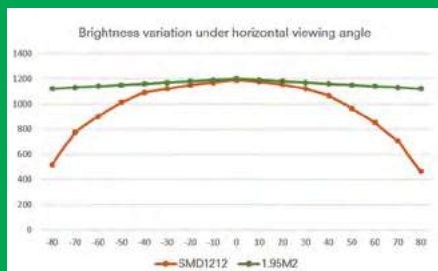
Brightness Stability

When deviating from the optimal viewing angle using conventional LED, the image may appear darker, while CBSF technology solves the problem of inconsistent brightness levels from different filming angles. This greatly reduces the time spent on adjusting the brightness levels during the production process.

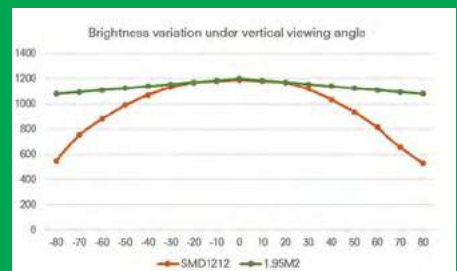
At the 160 degree horizontal and vertical viewing angle ranges, the 1.95M2 maintains a more consistent brightness than conventional products.

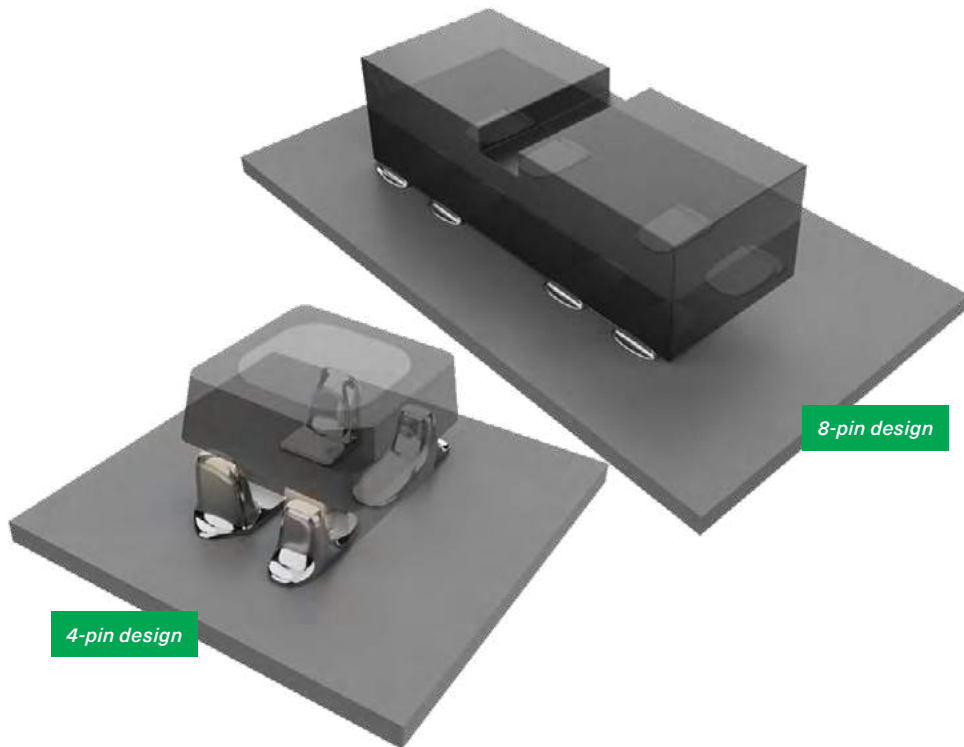


Conventional LED display



Display with CBSF Technology





4-pin design

8-pin design

High Contrast and Anti-Glare

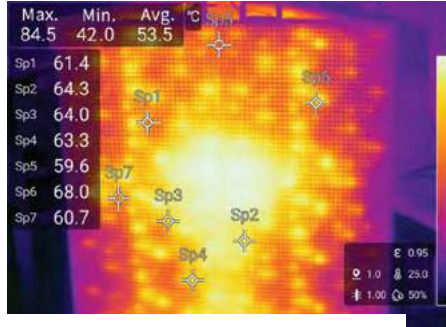
To achieve better anti-glare performance, M2 utilises a unique surface treatment process. The treatment process effectively addresses reflection issues due to the inconsistent LED surface. This produces a more uniform and softer display, resulting in perfect visual performance.

Soldering Stability

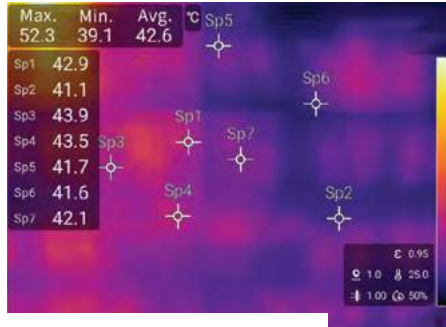
M2 is a chip-type package with double the number of pins compared to conventional LEDs, which improves durability and stability. The incorporation of an 8-pin design and an increased soldering area 2.5 times larger strengthens the LED from shearing forces by four times. The design significantly improves the LEDs' stability and shields them against external chemical contamination.

Cold LED Technology

The CBSF technology has obtained a significant improvement in the energy-saving performance of LED displays. It has exhibited a remarkable reduction in power consumption by 30%, and a significant reduction in screen temperature, compared to conventional products, all while maintaining an equivalent level of brightness.



Temperature of conventional LED screen



Temperature of cold LED screen



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Ayrton IP65 Rivale Profile

Ayrton's Rivale Profile is a 450W sealed mono-block LED module, calibrated at 6500K, offering a luminous flux of 30,000 lumens. The optical system has 13 lenses (with 160mm frontal lens), 13-to-1 zoom ratio and zoom range of 4 to 52°. It has a progressive CMY colour-mixing system to fine tune colour temperature from 2700K to 6500K, and a seven-position colour wheel. Colour rendering index from 70 to 86. Feature a 15-blade iris diaphragm with an aperture range from 15-100% and 15 interchangeable high-definition glass gobos on two wheels: one rotating with seven positions and one fixed with eight positions. The effect section has a monochromatic animation wheel, two combinable rotating prisms and two frost filters. Rated to IP65.

Australia: Show Technology

showtech.com.au 02 97481122

New Zealand: Show Technology

showtech.com.au/homenz/ 09-8693293



NEW GEAR

Elation Versatile KL Spot IP

Elation's Versatile KL Spot IP is a static LED spot that can double as a profile. The integrated zoom lens spans from 7° to 50°, and an optional motorised framing module automates zoom and framing capabilities. Built-in CCT presets range from 2400K to 8500K, with a native colour temperature of 6500K. 305W full spectrum RGBMA LED engine outputs 10,600 lumens. six rotating/indexing glass gobos and seven fixed glass gobos are included. IP65 rated.

Australia: ULA Group ulagroup.com 1300 852 476

New Zealand: ULA Group ulagroup.com 09 218 6532



Elation Proteus Hybrid MAX

Proteus Hybrid MAX is a beam/spot/wash hybrid capable of true linear zoom from a 1.8° shaft of light to a 45° wide beam. Added frost softens light allowing use as a precision wash. Features 170mm front aperture lens. Philips MSD Platinum FLEX 500 lamp has life of up to 4,000 hours, and outputs 22,000 lumens. CMY colour mixing system has 16-position colour wheel. Includes eight rotating replaceable glass gobos, 16 static-fixed metal gobos, and a host of animation options. DMX, Art-Net, sACN, and RDM support. Wireless control via NFC and Aria X2.

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NEW GEAR



L-Acoustics LC16D Multichannel Network Audio Converter

LC16D is a high-capacity AES/EBU- and MADI-to-Milan AVB audio network converter. With up to 80 legacy format inputs and outputs, LC16D can interface with up to 128 channels to and from the network. It offers flexible power options, with Power over Ethernet and seamless Milan AVB audio connections. An embedded web interface enables full control and monitoring from any device with a web browser. Ten user configurations for storing and loading different channel mappings, and comprehensive clocking options for synchronisation.

Australia: Jands
jands.com.au 02 9582 0909
New Zealand: Jands
jands.co.nz 09 941 9780

Martin P3 System Control Hardware

Martin have released P3-175 and P3-275 System Controllers and P3 Software Update 6.0.0. P3 System Controllers offer tight, accurate and full control over P3-enabled fixtures from one central location. Allows automated mapping, scaling, configuring, and addressing of fixtures. P3-175 and P3-275 System Controllers support video input up to 4K over HDMI and NDI. Real-time previews illustrate how DMX controls and video will be rendered on the fixtures. Mapping and patches can be exported to third-party lighting consoles, visualizers, and CAD programs with MVR integration.

Australia: Show Technology showtech.com.au 02 9748 1122
New Zealand: Show Technology showtech.com.au 09 869 3293



JBL Professional IRX ONE All-in-One Column PA

JBL IRX ONE All-in-One Column PA comes with 3-channel mixer and Bluetooth 5.0 audio streaming. C-shaped array includes six 2" high-frequency drivers and an 8" woofer for low-frequency response down to 40 Hz. Features ¼" and XLR inputs with included 48V phantom power and ¼" balanced mix-out. dbx automatic feedback suppression (AFS), 5 EQ presets and Soundcraft audio ducking. 15.5kg.

Australia: CMI Music & Audio cmi.com.au 03 9315 2244
New Zealand: JPRO jpro.co.nz 09 275 8710

Fourier Audio transform.engine

transform.engine is a Dante-connected server designed to run all VST3-native software plugins in a live environment. Hardware is in a 2U touring-grade chassis with dual redundant power supplies. Starting with DiGiCo consoles, transform.engine puts control of plugins directly under the fingers of engineers on their own worksurfaces. Also capable of operating in conjunction with any professional digital console on the market via Dante, using the Windows/macOS application to control the engine. Application can also control the engine without a console.

Australia and New Zealand: Group Technologies grouptechnologies.com.au +61 3 9354 9133





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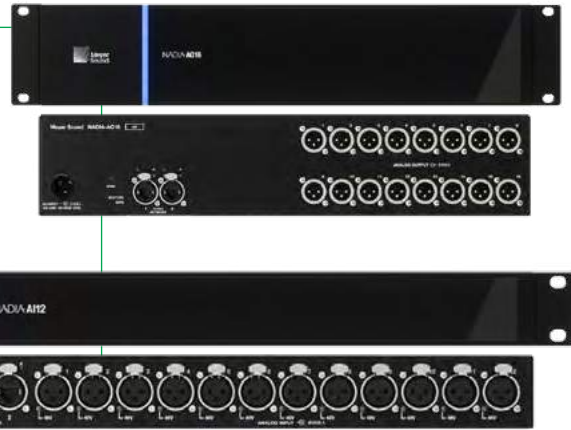
Constellation



Meyer Sound NADIA

NADIA is a network-based digital audio processing and distribution platform to power future installations of Constellation by Meyer Sound. NADIA platform supports up to 96 inputs for Constellation acoustic processing as well as 128 independent program audio inputs. NADIA-CP is the core processor unit. Additional NADIA-CP modules can be added to increase the number of outputs. All communication to and from the NADIA-CP module is via a Milan-compatible AVB network. Processing is at 96 kHz/64-bit floating point resolution. NADIA-AI12 provides 12 channels of analog input with a preamp on each channel. NADIA-AO1 provides 16 channels of analog line level output.

Australia and New Zealand: Meyer Sound
meyersound.com +1 510 486 1166



NEW GEAR

Q-SYS QIO-AES8x8 and QIO-TEL2

QIO-AES8x8 features eight AES3 digital inputs and eight AES3 digital outputs, allowing users to integrate a wide range of digital sources into their systems, including media servers, mixing consoles, digital audio workstations, or other digital recording and playback devices. QIO-TEL2 integrates two PSTN (POTS) phone lines on standard RJ-11 connectors to integrate analog telephony systems into Q-SYS. Designed to handle PSTN subscriber lines, PBX phone and paging systems, and easily retrofit applications.

Australia: Technical Audio Group
tag.com.au 02 9519 0900
New Zealand: NSL
nsl.co.nz 09 913 6212



Riedel RiMotion R10 Replay Solution

The RiMotion replay series is part of Riedel's family of software-based products for multicamera production, providing extensive replay capabilities, including super-slow-motion (SSM) camera support. RiMotion R10 supports 10 video channels, offering up to eight multi-format camera inputs, including SDI, SRT, and NDI, plus two outputs in a powerful and compact 1RU server. It has a convenient touchscreen interface and includes a conventional hardware-based remote controller panel.

Australia and New Zealand:
Riedel Communications Australia
riedel.net +61 (0)2 9669 1199



Q-SYS Zero-Bezel AcousticDesign Series Loudspeakers

Q-SYS AcousticDesign (AD) 4-inch and 6-inch ceiling speakers now have a zero-bezel models. AD-C4T-ZB, AD-C4T-LPZB, AD-C6T-ZB, and AD-C6T-LPZB all have white grille with no bezel. Black grilles are also available separately for all models.

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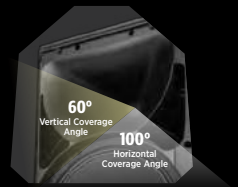
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Yothu Yindi. Photo credit: Mitch Lowe

MUSHROOM 50

It's All About Family

It was an audacious plan, executed flawlessly. Choose 50 songs from Mushroom Group's 50 year catalogue, put the performers on stage, and broadcast the whole thing live on Channel 7. On Sunday 26 November at Rod Laver Arena in Melbourne, Mushroom delivered one of the most technically complicated concerts I've ever seen, all while going live to broadcast, and totally nailed every aspect.

A packed roster of beloved music royalty (Paul Kelly, Jimmy Barnes), Australian artists with careers almost as old as Mushroom (Ross Wilson, Red Symons), and exciting up and comers (special mention to the absolute dynamite that was Logan) made for four hours of hits, nostalgia, and surprises. The fact that big international Mushroom acts like Ed Sheeran and Foo Fighters couldn't make it made the show feel much more like a celebration of Australia and family. Almost every artist, either on stage or beaming in via video, mentioned that Mushroom feels like their family, a sentiment that Mushroom's dedicated production crew share.

In what has been a bruising year for Indigenous Australians, Mushroom put First Nations performers front and centre. Christine Anu and her daughter Zipporah delivered a stunning version of 'My Island Home' that had the crowd cheering the line "I come from the saltwater people". Mushroom have been championing Indigenous Australian artists for decades, and

their audience is with them. The programme then very neatly segued into Goanna performing their hit protest song 'Solid Rock'.

The full might of Arnhem Land's Yothu Yindi was one of the biggest performances of the night, and the full band and dancers performing 'Treaty' brought the house down and effectively closed the first half, complete with pyros. Later in the night, an absolutely gut-wrenching performance from Dan Sultan of Archie Roach's 'Took The Children Away' produced a standing ovation, and he deserved it.

What made the production logistics feasible in Travis Hogan and Simon Johnson's production design was the revolve centre stage. The plan divided the revolve in half and set what they called the 'house band' on one side. The giant centre LED screen would fly out to facilitate the revolve and changeover, then fly in to hide what was going on behind it. The house setup stayed patched and more or less constant through the evening. They would perform two

or three songs with guest vocalists, while an army of techs behind the screen set up for the 'feature act' that was on next. Taking a little pressure off the main stage was the third 'acoustic' stage, set-up just behind the FoH control position, which came in to play just three times during the show.

This meant there was effectively 30 concerts worth of equipment in play, with only one of them staying set up and patched. Every changeover involved rolling out a fully set-up riser, setting the revolve with all the band equipment and a full mic kit, and patching it in. I was watching James 'Oysters' Kilpatrick at the FoH mix position during the house band sections, mixed by Jimmy Foster on another desk. Oysters was on cans with talkback mic pretty much until the last minute of every changeover, checking all the lines with the techs backstage. He looked calm and composed, but just watching him was giving me anxiety.



Vika & Linda. Photo credit: ZENNIESHIA



Jimmy Barnes. Photo credit: Mitch Lowe



Christine Anu. Photo credit: Tim Lambert



Dan Sultan and Missy Higgins. Photo credit: Mitch Lowe

"Yeah, there was a fair bit going on backstage," quips Hayden Vassallo, Stage and Backline Manager on the night. "The feature acts all have dedicated gear on dedicated risers. This is more gear than your average festival. Rod Laver has four laneways backstage. We've got one for video, one for control, and two for band risers. We are very limited in how much time we have for changeovers; it's either two

or three songs. And when they come off, we're clearing the dock and getting ready for the load out during the show."

All of these channels meant Audio Director James 'Oysters' Kilpatrick's biggest job was organising the patching. "I got to Rod Laver on Monday 20 and spent 12 hours a day in a side office programming and updating the patch

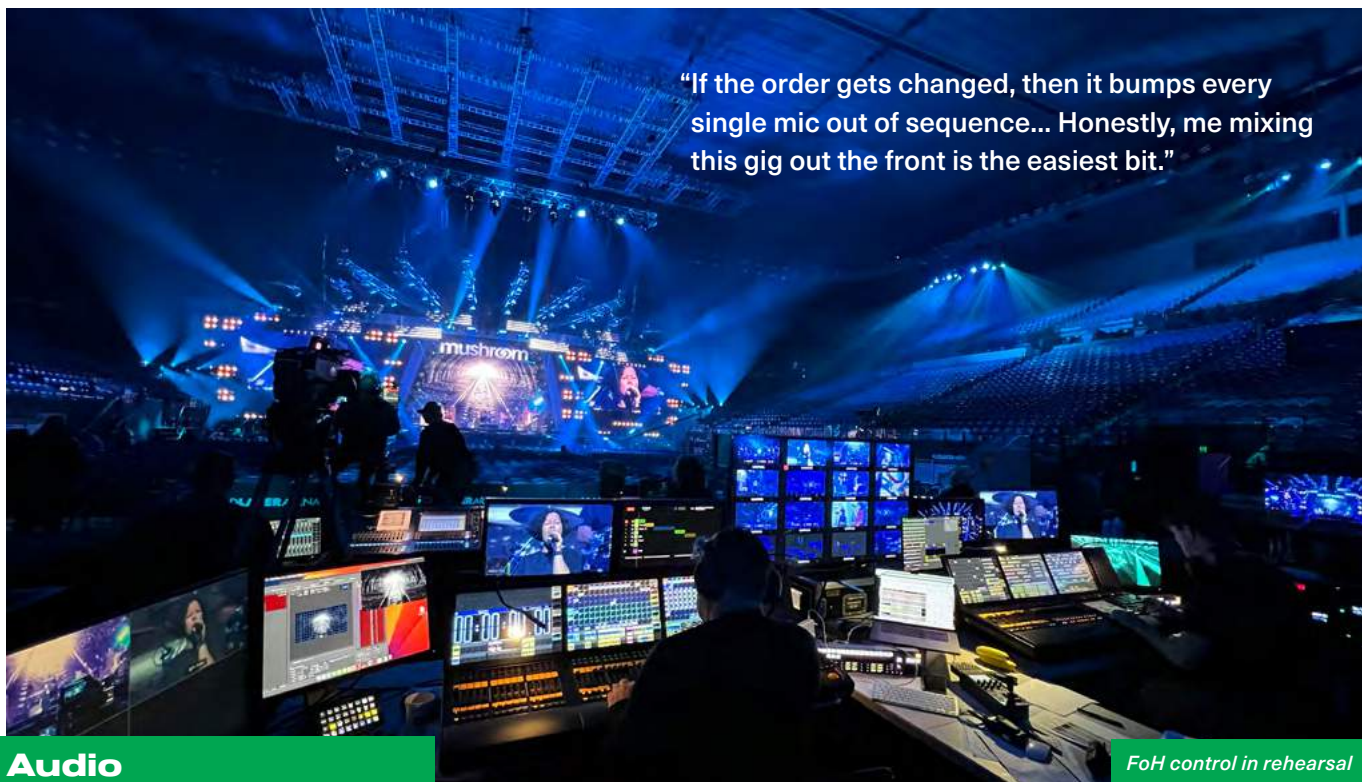
and the set list," relates Oysters. "I've been working what's probably the equivalent of part-time for a month just on the patch."

The gig was mixed out the front on a DiGiCo SD12 for the feature acts and an SD10 for the house band, with a DiGiCo SD5 and SD10 on monitors, and an SD11 on the acoustic stage. All the DiGiCo SD- and Nano-Rack I/O was



"The full might of Arnhem Land's Yothu Yindi was one of the biggest performances of the night."

Yothu Yindi. Photo credit: ZENNIESHIA



“If the order gets changed, then it bumps every single mic out of sequence... Honestly, me mixing this gig out the front is the easiest bit.”

FoH control in rehearsal

Audio

DiGiCo SD12 for feature acts FoH, SD5 feature acts monitors

DiGiCo SD10 house band FoH, SD12 house band monitors

4 x 56 channel DiGiCo SD-Racks, 2 x DiGiCo Nano-Racks (not including the broadcast system)

DiGiCo SD11, acoustic stage, high level and speech returns from broadcast

Small format Soundcraft digital console used as audio comms mixer

linked by a fibre loop. And here's where it gets complicated. “Each stage has a different I/O system,” outlines Oysters. “On the main stage, there is an A and B SD-Rack for FoH, an A and B SD-Rack for monitors, and A and B SD-Racks for the OB trucks. When A stage is on, B stage is setting up and trucks are checking, and vice versa. There's also a set of tails for Hunters and Collector's AVID S6L and another set of tails for Temper Trap's SD11 monitor desk. That's eight SD-Racks in total, essentially a four-way split that goes to each stage.”

that everything had to go in an exact order. “If someone on the B stage is checking mics and ears, they can't be appearing in the ears and mics for the next band on the B stage, who are likely to already be wearing their ears,” continues Oysters. “If the order gets changed, then it bumps every single mic out of sequence. So, the patch crew is huge, and they've got the thankless task. It's two or three songs then changeover, and at one point there's two acts on stage, and a video to segue to a third. Honestly, me mixing this gig out the front is the easiest bit.”

With the patch carefully mapped out, it meant

FoH PA

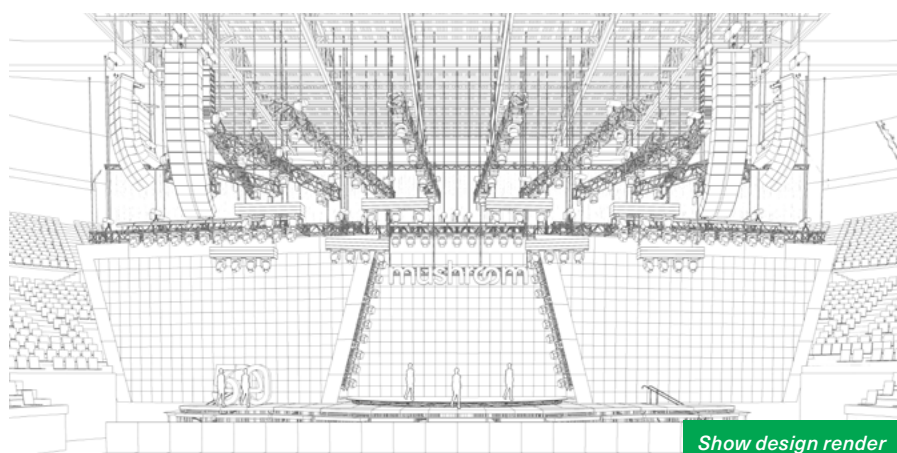
52 x d&b audiotechnik KSL8 line array elements

12 x d&b audiotechnik KSL12 line array elements

12 x d&b audiotechnik SL-SUB subwoofers, flown

8 x d&b audiotechnik SL-SUB, floor stacked

8 x d&b audiotechnik Y10P in-fill



Show design render

Audio Crew

Audio Director, Mushroom, Mix engineer feature acts - James 'Oysters' Kilpatrick

Mix engineer, house band and guest artists - Jimmy Foster

Monitor engineer for house band and guest artists - David Darlington

Spectrum Management - Peter Twartz and Anthony Murdoch for PRM

Broadcast engineer, house band - Ernie Rose, with The Two Nicks on assist

Broadcast engineer, feature acts - Doug Brady with Brian 'Scoob' McMahon assist

Downstream OB audio engineer/director - Kelvin Mustica



James 'Oysters' Kilpatrick



Dan Aulich and Simon Johnson

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Needless to say, the show sounded absolutely amazing. Oysters' PA of choice was a mighty d&b audiotechnik KSL rig with 52 elements of KSL8, 12 elements of KSL12, 12 flown SL-SUB subwoofers augmented with eight ground stacked, and eight d&b audiotechnik Y10Ps as in-fill. I find the vocal clarity especially worthy of praise, across all of the various genres of music on the night.

While Oysters was balancing levels, Lighting Director Hugh Taranto was balancing a spectacular amount of LED screen, a rock'n'roll light show, and a TV broadcast. The biggest screen ever built in Rod Laver, comprising 915 panels of ROE MC5 and taking up 204 sqm, was separated into left, centre and right, and filled the venue with about a foot to spare each side.

"It's all about balance," posited Hugh. "In the tech rehearsals, we made sure the front light and screen intensity are balanced through each song so the cameras aren't having to wind irises in and out. The screens can't overpower the lights and the lights can't overpower the screens. All the cameras are irised down so the exposure is right for the artist's faces; if the screen content is too bright, they bleed out and become oversaturated. Ultimately, we're trying to capture a concert instead of creating a TV show, so I'm still using saturated colour on faces, and it still looks like a rock concert."

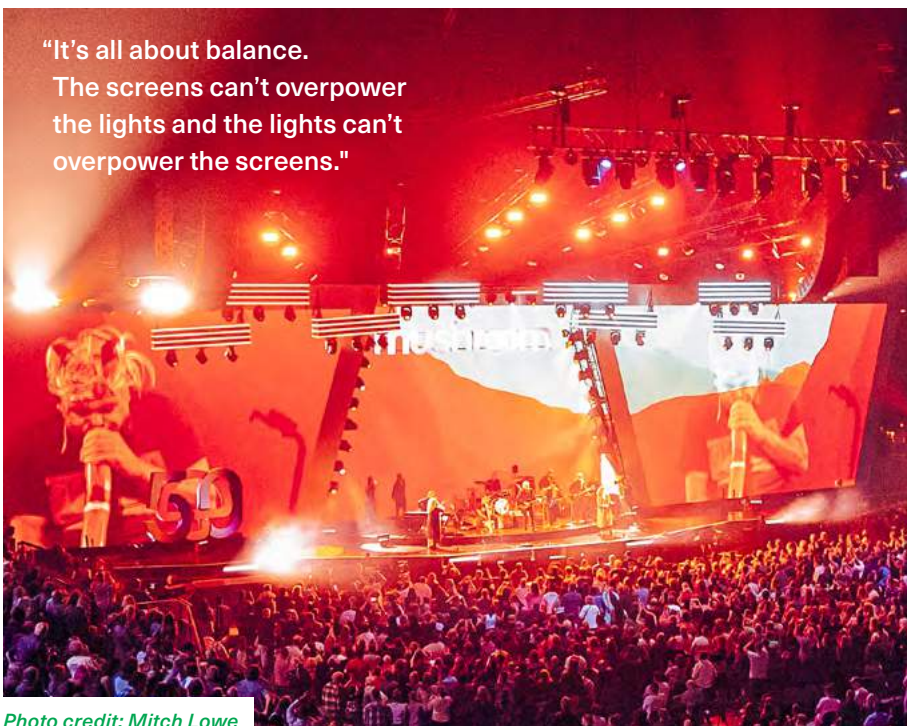


Photo credit: Mitch Lowe



Gordi & Lotte Gallagher. Photo credit: Mitch Lowe



Amy Shark. Photo credit: Tim Lambert

JPJ Audio

JPJ audio Crew Chief
- Sebastian 'Bass' Gauci

System engineer, mix engineer for acoustic stage and high level returns
- Josh 'The Colonel' DeJong

System engineer, acoustic stage patch
- Tim Jones

Monitor engineer for feature acts, playback, timecode, and edits - Ryan Fallis, SD5

RF Tech - Tim Seconi

RF Tech assist - Stacy 'Stanley' Hanley

Stage patch - Lewis 'Daddy' Webbe, Haley Thor



Jimmy Barnes. Photo credit: Tim Lambert



L to R - Matt Drinkwater, Hugh Taranto, Andrew Vaughan, Chad Spencer, Ellie Garnett, Al Blaney

With the rig designed by Travis Hogan and Simon Johnson, Hugh came in to finesse the details and work with broadcast to get it right. "We made a couple of changes for broadcast like bringing the lights down lower into view and moving a couple of things to better places for the cameras," Hugh continues. "The original plan was to use the house follow spot positions in the gantry, but because broadcast brought in Spidercam, we've gone with four PRG GroundControl spots rigged on the FoH truss, which gives Spidercam a defined path to avoid."

Along with a stable of concert mainstay fixtures from GLP, Martin, Claypaky, and Ayrton, lighting distributors ULA Group and Showtools came to the party with both custom-built elements and new toys. Hanging above the proscenium were eight pod fascias custom built by Showtools, fitted with four strips of LED tape, with 96 controllable LEDs per metre. They contributed to some great old-

school looks reminiscent of Countdown, did some animated chases, and could also work with video and pixel map, which was used to great effect in Dan Sultan's set, with the screen and strips became a giant campfire.

"The pixel tape in the pods is mapped and controlled by a PRG Mbox Studio+ that I brought along with my kit," says Hugh. "We are running some generic content through them, as well as taking an SDI feed from the disguise media server. We're using 72 Universes to control 12,288 LED chips."

Another Showtools addition was 24 COLORado PXL Curve 12s, a fully pixel mappable motorised RGBW LED batten with individual control of zoom, tilt, and colour across twelve independent heads. "That is a cool fixture!" beamed Hugh. "We had them all round the base of stage, on the house band side of the revolve, and on the acoustic stage. We're using them as effect lights, footlights, beams, and more."

Lighting Crew

Production Design - Travis Hogan, Simon Johnson

Lighting Director - Hugh Taranto

Lighting Console programmer/operator - Chad Spencer

Followspot Ops - Ben Ralph, Zane Simmell, Jude Doomernik, Mark Kupenga

PRG Account Manager - Fergal Sullivan

Lead Lighting System Technicians - Al Blaney, Matt Drinkwater

Lighting Technicians - Ellie Garnett, Andrew Vaughan

Advance prep and system design - Gus Wimmer

Lighting Gear

60 x GLP X4

8 x GLP X4 XL

20 x Martin MAC Quantum wash

20 x GLP JDC1

27 x GLP X4 Bar 20

12 x Martin MAC Viper Performance

45 x Ayrton Perseo

28 x Claypaky Mythos 2

40 x PRG Best Boy HP

4 x PRG Bad Boy GroundControl

24 x Martin Rush Pars

24 x Chauvet Professional Colorado PXL Curve 12

16 x ACME Gemini

8 x ArenaCob 4FC

3 x MA Lighting grandma2 full size

1 x MA Lighting grandma2 light

6 x MA Lighting MA NPU



Photo credit: Mitch Lowe



Jimmy Barnes. Photo credit: Mitch Lowe

Pyro by ShowFX

ULA Group supplied 16 ACME Geminis, a dual-function bar and strobe fixture. "They've got individual cells on a rotating yoke with continuous pan and tilt," enthuses Hugh. "On one side there's a 36 LED strobe, and on the other there's five RGBW, so if you send them tumbling around, they can create some really cool effects. It's like getting two lights for one."

With massive LED screens dominating the design, Mushroom's in-house creatives made custom content for every song. "We're up

to 3.6TB of content," says Dan Aulich, Head of Video. "We're running two disguise vx 4 servers, outputting three 4K outputs, so we're 12K wide. It's a lot of pixels! The ROE LED panels are only running at 3%, and they're still punching through nicely."

As expected on a live broadcast, there are a lot of cameras in the room. "Between us and broadcast, there are close to 40 cameras on the gig," Dan continues. "On our side, we're doing IMAG integrated through disguise,

running GrassValley FoH long lenses, and Panasonic PTZs on the band, and taking some feeds from broadcast."

The venue itself has been pushed to the limit by Mushroom 50. "The LED screens alone are 21 tonnes," says Production Manager Simon Johnson. "We're about 5 tonne off the front grid weight limit. The screens are about a foot either side of the wall. It's a beast! We designed the show for this venue, and it just fits in."



Kate Ceberano. Photo credit: Tim Lambert



Ross Wilson & Red Symons. Photo credit: Tim Lambert

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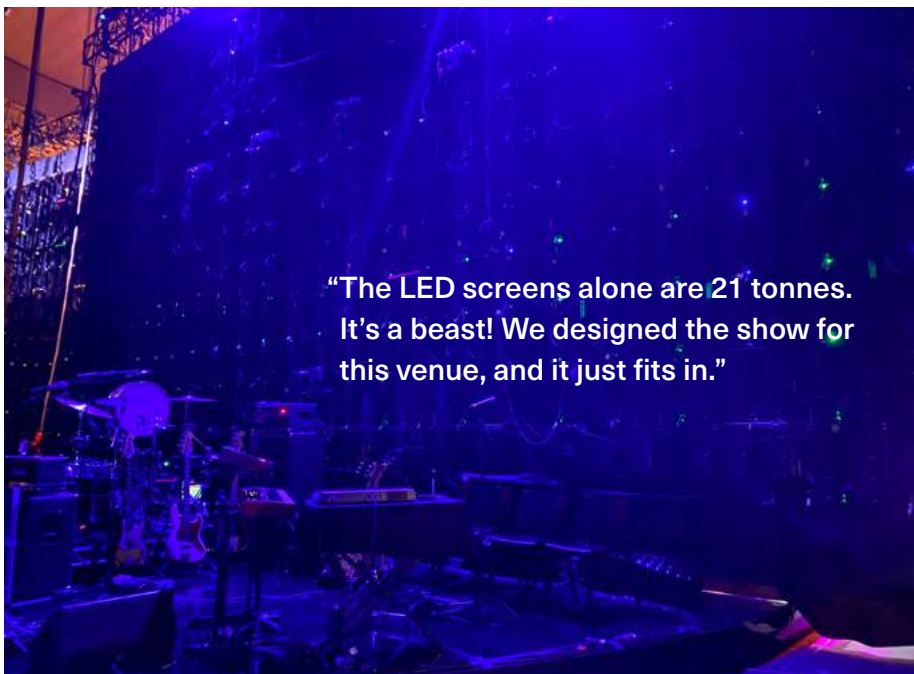
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“The LED screens alone are 21 tonnes. It’s a beast! We designed the show for this venue, and it just fits in.”

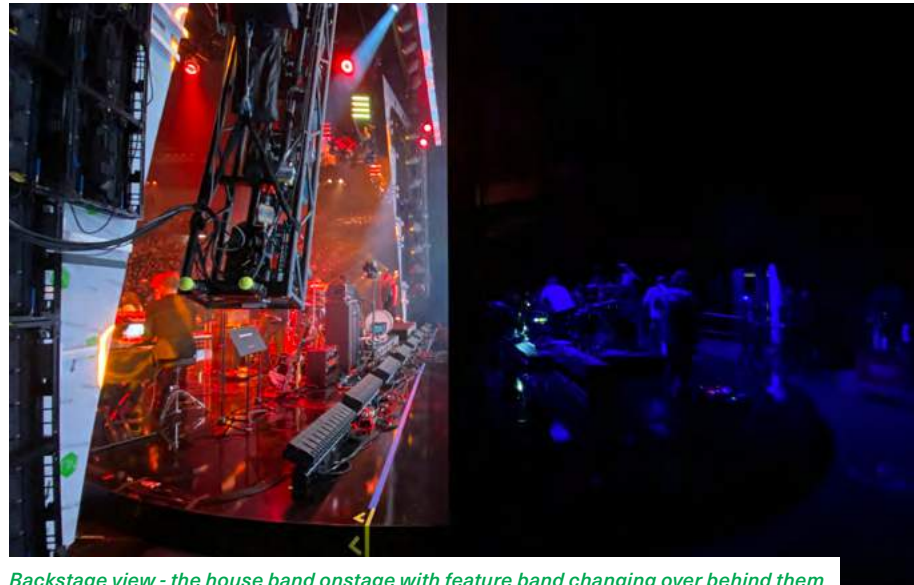


Birds of Tokyo. Photo credit: Mitch Lowe



PRG GroundControl

With so many moving parts, clear communication and long-standing working relationships were essential to Mushroom 50’s success. “Because of broadcast partner Creative Technology’s relationship with Tennis Australia, and Mushroom and Frontiers’ relationship with Melbourne Park, we work as one team,” states Simon. “For us, Rod Laver is like no other venue in Australia. We can come here and push things to the limit because we’ve got the backing of the staff. The challenge is this gig’s sheer scale and the tight schedule to get it in. We started marking up at 5 am on Tuesday and had everything in by Wednesday evening.”



Backstage view - the house band onstage with feature band changing over behind them

Video
 Creative Technology, an NEP company
 915 x ROE Visual MC5 LED Panels
 Roe Visual EVISION Z6 4K processing

Video Crew
 Peter Gibbs - IMAG/House Director
 Daniel Aulich - Senior Project Manager
 Hamish Phillips - Broadcast Engineer
 Harley McLeod - Broadcast Technician
 Matthew Cattolico - LED Crew Chief
 Dean Pentz - Senior LED Technician
 Taylor Davison - LED Technician
 Sean Killa - disguise/D3 Operator
 Scott Thorneycroft
 - Broadcast Camera Operator
 Nicholas Carter
 - Broadcast Camera Operator



Temper Trap. Photo credit: Mitch Lowe

Staging and Rigging
 Capricorn Stages and Rigging
 Clifton Productions
Backline
 Deluxe Backline



Backline risers lined up backstage



Goanna. Photo credit: ZENNIESHIA

It was a bump-in planned with military precision. "There are 140 rigging points," illustrates Simon. "Capricorn Stages and Rigging did a fantastic job; we had every point in the air in three hours. After that, all the gear had to go up in a certain order. Audio, then lighting, then video. Melbourne Park are using a rolling stage at the moment, so we had that in the northern end of the arena while we hung the show in the south, which gave Clifton Productions time to build the revolve on it. Another big challenge was getting set pieces like the screen surrounds in. It's a very tightly rigged show, and there's a lot of motors 750mm apart. We had to make sure everything went up in the right order, and we have to make sure it'll all come out in the right order."



The Rubens. Photo credit: Tim Lambert

Audio Rentals

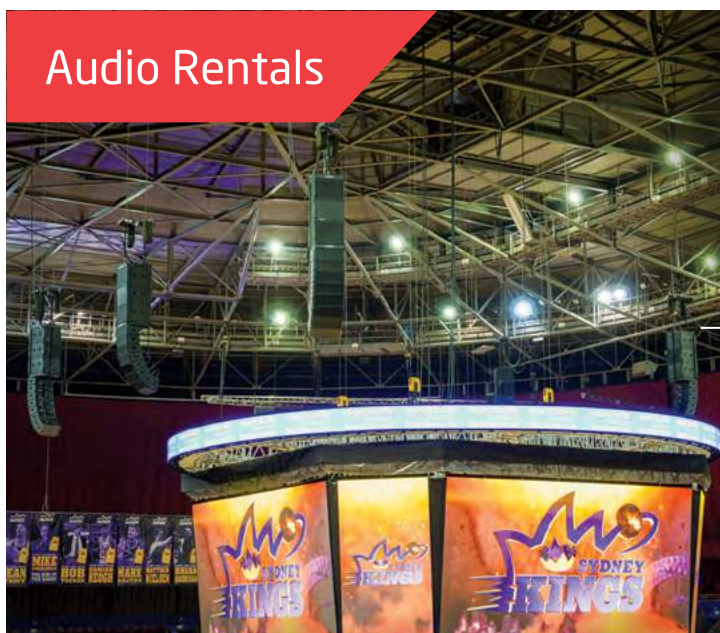


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Hunters & Collectors. Photo credit: Mitch Lowe

An epic like Mushroom 50 has an epic backstory. "This show has been a concept for 25 years," says Head of Production Travis Hogan. "It's genesis dates back to when we did Mushroom 25, and it's something Michael Gudinski was planning for a long time before he passed. We've been working on it solidly for the last nine months. I think one of the hardest decisions we had to make is which artists we have and who we don't, because you can only fit so much in, and we have a live audience that is here for the best part of five hours."



Paul Kelly. Photo credit: Mitch Lowe



Photo credit: Mitch Lowe



Photo credit: Mitch Lowe

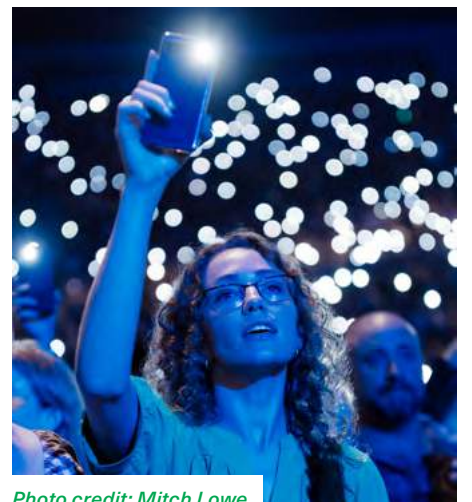


Photo credit: Mitch Lowe



Photo credit: Mitch Lowe



Ian Moss. Photo credit: Mitch Lowe



Production Director Travis Hogan at rehearsals

Mushroom 50 won the ratings on the live broadcast, and set the standard for live concert production. "All of the design was fully produced in house by Mushroom," concludes Travis. "All of the production and stage management is Mushroom staff, supplemented by experts like Hugh and Oysters. There are physical and logistical challenges, and the live broadcast to contend with, but we're all one big family and that's what this thing is about."

Mushroom Group

Production Director - Travis Hogan

Production Manager - Simon Johnson

Stage & Backline Manager - Hayden Vassallo

Assistant Stage Manager - Luke Stabb

Floor Manager - Brett Millikan

Production Coordinator - Jeff Chalmers

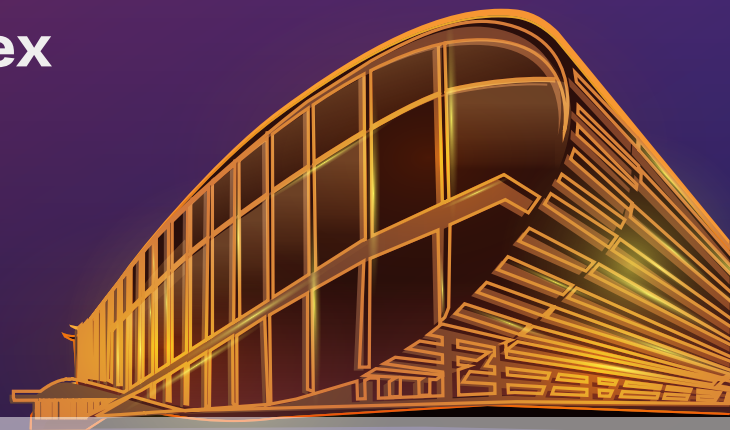
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WICKED

Tours the Land of Oz

by Jason Allen



Courtney Monsma (Glinda), Sheridan Adams (Elphaba) and the Australian cast of WICKED

While celebrating its 20th year on Broadway, the musical **WICKED** is currently on its third tour of Australia, having first graced our stages in 2008. There's been quite a few advances in audio technology in the intervening 15 years, and the original sound design by Tony Meola has been updated over time to include new loudspeakers and processing from Tony's preferred manufacturer, Meyer Sound.

Australian theatre stalwarts System Sound are in charge of all things audio in the Land of Oz, with David Greasley in the position of Associate Sound Designer, and Anthony 'Anto' Shaw Head of Department. Both have had a long association with the show; David has been involved in every professional Australian production, and Anto originally mixed the show on an 80 module Cadac analogue desk!

While the show still uses the same sound design in terms of where loudspeakers are placed, the original Meyer Sound M1D and M2D line arrays have been replaced with the more recent LINA and LEOPARD line arrays,

respectively. In the back end, the Meyer Sound Galileo processors have now been swapped out for the newer Galileo GALAXY processors. And out the front, the venerable Cadac is long gone, and is now a shiny DiGiCo SD7-T Quantum running at 96kHz.

"The sound design is basically the same as the original Broadway production," relates David Greasley. "Its central idea is that the vocals come from two split centre arrays, due to there being a very large dragon hanging from the centre of the proscenium. The vocal arrays are split by around three metres and turn out 20 degrees. The last time we did WICKED, these

arrays were M1Ds, which were great, but the coverage in the middle where the two arrays crossed over could be problematic. This time around, we're using LINA, which doesn't suffer from that. Not that the audience would ever hear it, because they don't walk between them!"

The LINAs are joined by upper and lower left and right LEOPARD arrays, primarily for the band, as per Tony Meola's design, with a little vocal sent into the lowers. "I mixed WICKED on the first generation of Meyer Sound line arrays," says Anto Shaw. "The improvement in sonic quality in LINA and



Anthony Shaw (Head of Department), David Greasley (Associate Sound Designer), and David Letch (Production Sound Engineer)

LEOPARD is extraordinary; it's a huge step up. We are achieving incredibly even coverage throughout the venue, quicker than ever before. They rig faster, they pack faster, they sound better. There are improvements to every single aspect of performance."

The advances in product design are making Anto's day-to-day a lot less stressful. "It is absolutely easier to deal with vocals, and the

step up in clarity from the first generation is massive," he confirms. "It takes a lot less effort to get voices heard and understood. There's less channel EQ and compression being used. We're running everything pretty flat; all our Countryman B6 hairline mics are generally flat, and the system EQs are pretty gentle. The design of the show doesn't incorporate much compression, and the show is quite dynamic. I've found LINA and LEOPARD to be a lot more

dynamic. When we have those big moments, they don't break a sweat."

All of this helps when you're running eight shows a week. "WICKED is a complex show, visually and musically," observes Anto. "There's not a lot of four-on-the-floor rock songs. It's sonically complicated, and it can get quite busy mixing it. There are some pretty unforgiving sections that if you don't nail them, it's noticeable. There's a real challenge there, which means working on this show doesn't get boring."

Five Galileo GALAXY 816 (eight in, 16 out) processors are handling speaker processing, including multiple delay rings, and David Greasley is utterly convinced of their superiority. "I did one version of the musical Matilda with Meyer Sound M'elodie line arrays on Galileo, and then another version with exactly the same speakers on Galileo GALAXYs, and it is absolutely a better sound," David asserts. "The phase coherence is better. High frequency clarity is stronger, lower frequencies are smoother, and different loudspeakers are smoother together. The system sounds like one big loudspeaker, rather than multiple systems of different models. For example, we're using 60 Meyer Sound UPM-1Ps as delays and fills, which are a classic, although still current. They are so clear and transparent, and with GALAXY processing I've never heard them sound better."



Liam Head (Fiyero), Courtney Monsma (Glinda) and Robyn Nevin (Madame Morrible)



Sheridan Adams (Elphaba)

Another newer product from Meyer Sound gracing the theatre are 16 MM-4XPs as front fill. Being a mere 10cm square with 14.5cm depth, the tiny speakers mounted on the pit rail itself. "I really like having them on the pit rail," comments David. "Because they're not on the front edge of the stage, you don't have the front fill at volume trying to push over an open orchestra pit and all your pit microphones. It makes the pit quieter, and you don't get vocals going into the pit mics. This solution works really well."

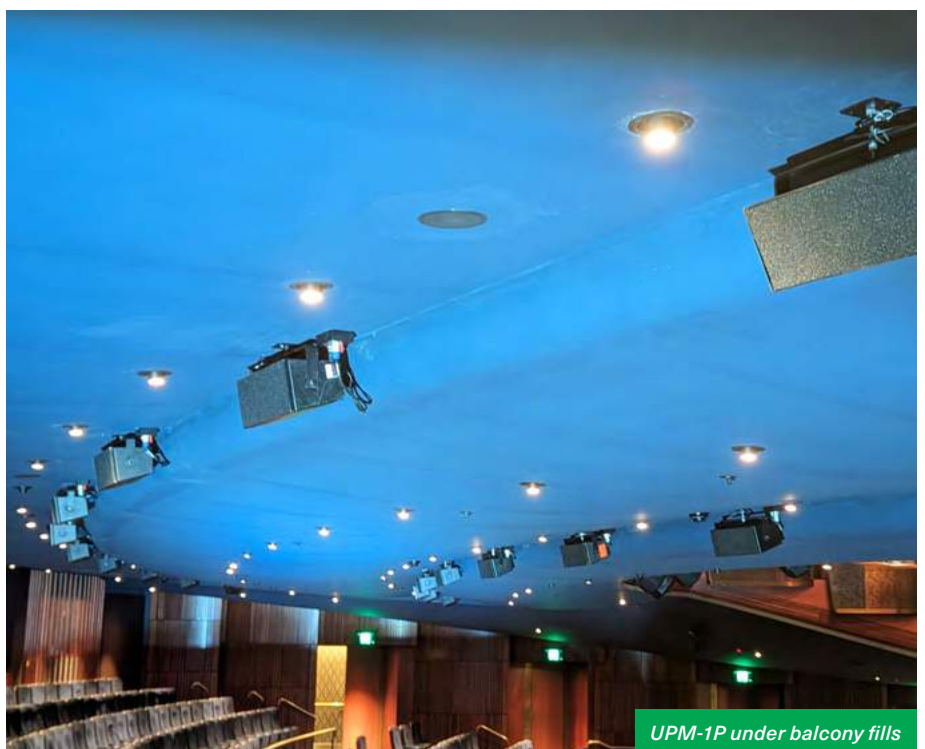
At the FoH mix position, Anto and FoH deputy Jake Goodsell take turns mixing on the DiGiCo SD7-T Quantum. "The old Cadac was a beautiful machine and sounded amazing," reminisces Anto. "But it was time consuming, heavy, high maintenance, and took up a lot of truck space! You can do a lot more on the DiGiCo, and it's half the size and less expensive. The optical fibre loop that's running all our signal transport helps a lot on bump-ins; it's a lot quicker to move and set up than 100 channels of copper multicore through the floor of the venue. Everyone loves the SD7-T; the 'Theatre' version of the software is the huge advantage for us, because of all its advanced cast and cue management features."

Next to the DiGiCo sits a rack of external reverbs. "Last time the reverb was Lexicon 960L, but now it's a TC Electronic M6000-II," adds David. "We're still using Lexicon PCM81s for vocal effects. The original design used XTA multiband EQs, but now we're using the SD7-T's onboard EQ and compression."

Things are different backstage and in the pit, too. "We used to have a foldback desk backstage, with passive splitters and all of that," outlines David. "That's all gone now. All band foldback is straight from the SD7-T to



Lower right LEOPARDS



UPM-1P under balcony fills

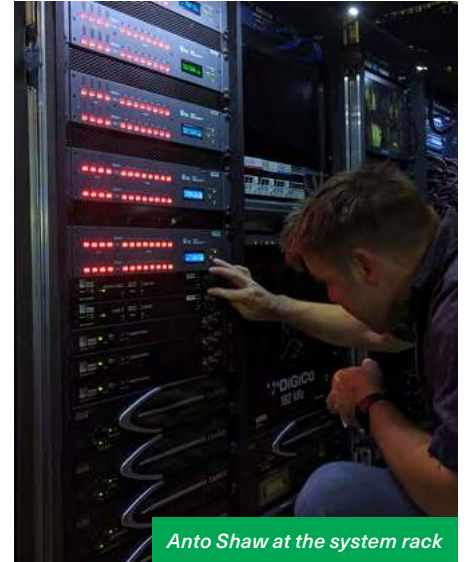
Aviom A-360 personal monitoring systems, and the band bring their own ears. Last time there were a lot of foldback speakers in the pit, but now there's none, and it's so much quieter."

With Meyer Sound dominant in theatre sound design for so long, what do Anto and David think makes them the go-to for massive Broadway shows like WICKED? "Meyer Sound's voicing is classically theatrical," notes Anto. "They're honest and neutral, which makes them design-friendly. The uniformity and predictability of Meyer Sound loudspeakers is a huge advantage in a theatre."



"It makes the pit quieter, and you don't get vocals going into the pit mics."

16 MM-4XPs mounted on the pit rail itself.

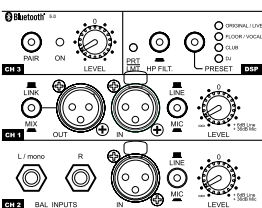


Anto Shaw at the system rack

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"To me, they're clearer than other products, especially for vocals," states David. "The amplifiers are right at the driver, so it's such a quick response. Once you start running speaker cables, there's variables that affect performance like length and gauge. In theatre, you can't necessarily put the amp racks at the base of the array. You might have 15 metres of cable one side and 50 metres on the other; sometimes you have no choice and the amps have to go in a basement or on a lighting bridge. With Meyer Sound, what you expect to get, you get. They don't change, there's no surprises, and you feel more in control."

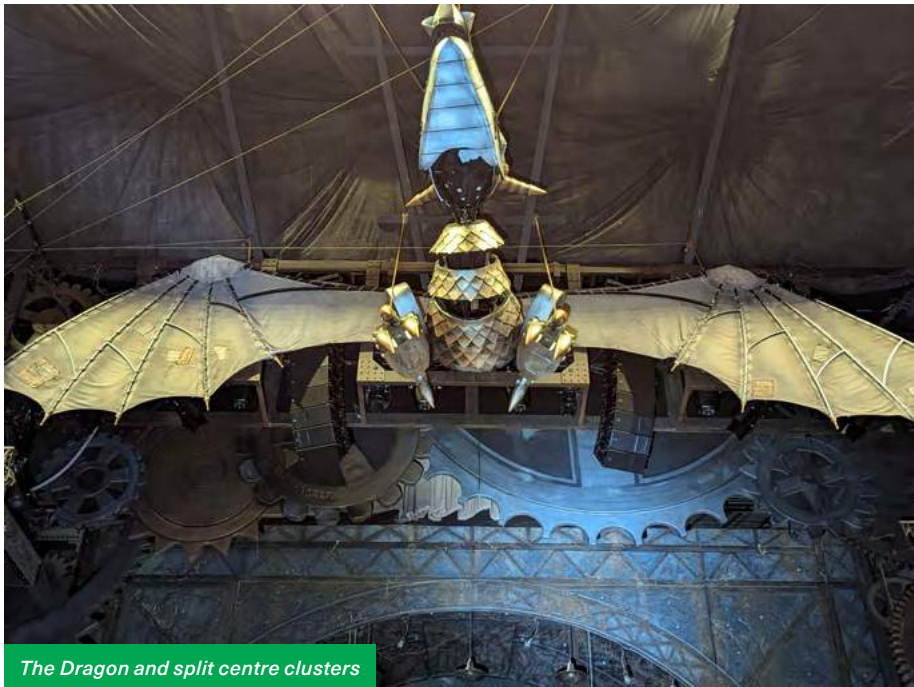
Currently at Sydney's Lyric Theatre, the show will move to Melbourne to open in The Regent in March 2024. "The Regent is big for more intimate shows, but WICKED is designed to fill a big house," concludes Anto.



Courtney Monsma (Glinda) and Sheridan Adams (Elphaba)

Sydney PA Spec

- Mixer**
- DiGiCo SD7-T Quantum
- Radio Microphones**
- 40 x Sennheiser SK-5212 systems
- Loudspeakers**
- 22 x Meyer Sound LINA, two arrays, centre
- 16 x Meyer Sound LEOPARD, four arrays left and right
- 4 x Meyer Sound 750-LFC subwoofers
- 4 x Meyer Sound 900-LFC subwoofers
- 4 x Meyer Sound 700-HP subwoofers for SFX
- 4 x Meyer Sound UPJ-1P loudspeakers, stage foldback left and right
- 16 x Meyer Sound MM-4XP, front fills
- 9 x Meyer Sound MM-4, deck foldback (in the stage floor)
- 60 x Meyer Sound UPM-1P, delay lines and fills
- Controllers, Amplifiers, and Processing**
- 5 x Meyer Sound Galileo GALAXY 816 processors
- 1 x TC Electronic M6000-II reverb
- 2 x Lexicon PCM-81
- Orchestra Pit Monitoring**
- Aviom A-360 personal mixers
- Computers And Playback Equipment**
- 2 x Mac mini with QLab, ProAudio and ProMIDI



The Dragon and split centre clusters



Todd McKenney (The Wizard) and Sheridan Adams (Elphaba)



L-R: Chris Pratt, Jake Goodsell (Dep HOD), Owen Arnold (PSE), David Greasley, John Scandrett, Brooke Simmonds (Stage), Blake Aldridge (Swing) and Anto Shaw



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Collaborative approach pays dividends for Tākina



Photo Credit: Smoke Photography and Video

Te Papa's AV team contribute to Wellington's new convention centre

Wellington's brand-new convention centre Tākina offers local, national, and international conference industry professionals and suppliers state-of-the-art audio-visual technology, aligning the capital with Auckland and Christchurch in the lucrative business events market.

Opened in June 2023 the name Tākina, gifted by Kura Moeahu, Taranaki Whānui means to invoke, to summon, to connect, to bring forth. The stunning building, located opposite Te Papa, is expected to contribute \$44 million a year to the local economy, attracting hundreds of thousands of visitors each year to attend conferences and exhibitions.

Whilst the building and system infrastructure is owned by Wellington City Council, the new Convention Centre is operated by Te Papa, bringing together two world-class venues, managed by one local, experienced team under the brand 'Tākina Events'. Project managers Willis Bond and architects Studio Pacific took full advantage of this insider knowledge.

The Building

The glass encased convention centre is spread over 18,000 sqm, with three main levels plus mezzanine floors. Two levels

are dedicated to convention and business events, able to be hired separately or together and feature two flexible plenary spaces seating up to 700 people and 1,600 people respectively. This is accompanied by 2,770 sqm of exhibition or pre-function space across both floors. The ground floor encompasses an exhibition space, offices and café.

The AV System Design

Andrew Bruce, Manager of Creative Technology and Development, had spent the previous twelve years overseeing the AV infrastructure at Te Papa and was set to expand his role to encompass Tākina. He became involved in the new build in early 2020 alongside Futureworks, a local Wellington company specialising in integrated control systems who had been engaged by Wellington City Council. Project managers Willis Bond and architects Studio Pacific were keen to

bring all parties to the table to work on the system design. Andrew recalls, "It was a highly collaborative approach. My team were very well established at Te Papa and knew what was required from a live events perspective and the user end, and Futureworks were brought in as the control system design and programming experts."

"Our number one focus was flexibility and number two was user experience. We wanted the spaces to be able to be completely customised to a client's needs and for any external technology to simply plug and play. The AV system is a networked based solution allowing for any AV signal to be routed to anywhere in the building. There are also two physically separate networks, one for business IT usage and one designed specifically to run our AV system."

The solution was around the QSC Q-SYS ecosystem as the audio, video and control platform.

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Photo Credit: Smoke Photography and Video

The Technology

The real challenge for the collaborative team was not the control system but the balancing exercise that every venue faces of aesthetics versus practicality, “The architects really listened to us and took on board what we suggested. For example, they wanted the speakers to be invisible but respected our need for quality, so we compromised by designing the QSC KLA12 line array speakers to be installed in a manner that is as aesthetically pleasing as possible. We wanted more steel to be installed to support an extra rigging point, and the architects understood our reasoning.”

Other suggestions adopted as a result of Andrew and his AV team’s input included bigger screens, opting for Screen Technics 325, and brighter Panasonic 3-chip 20,000 Lumen projectors, “We also changed the room and AV configuration from longways to sideways and added an SDI video distribution system for improved latency and lower compression. We also pushed for Dante, thinking of the end users, and matched the speaker prep network across the two buildings.”

“The AV team seized the opportunity to install a new hearing assistance system across both

buildings as the Te Papa one was due for an upgrade. The new system covers the main and peripheral function spaces, removing the need for installation on a per-event basis, making for a highly cost-effective model for clients. A baseline truss and lighting system was also purchased including an Art-Net control network. Futureworks also integrated this into the control system.”

The installation included the Panasonic hi-spec 20,000 lumens laser projectors for impactful onscreen visual display, energy efficient long-life LED stage and room lighting fixtures, and mounted pre-tuned QSC PA systems. The same staging system, as used by other local companies, StageDev was also sourced, “We have good relationships with Wellington AV suppliers and venues. They hire from us, and we hire from them, and we wanted to maintain and grow those local networks and support local business, so we made sure everything integrates.”

The Team

The Tākina Events team is led by General Manager Andrew Dorrington, who brought his fifteen years’ experience at the helm of Te Papa Venues, supported by Project Sponsor Syd Dufrou and Project Manager Sarah Delahunt, for Te Papa.

The two AV teams, the infrastructure team and a client facing event services team, are led by previously introduced Andrew Bruce and by Tom O’Sullivan, Manager of Audio-Visual Event Services, respectively. AV technician and coordinator roles have increased by four full time employees and the number of casuals has grown from eight to 16.

In addition to the in-house service, Tākina engages with the wide array of specialist industry suppliers that Wellington and NZ have to offer.

From General Manager Andrew Dorrington’s perspective, the AV design and installation has been a phenomenal success, “Considering we had to deal with COVID, that the building was handed over on time is testament to the hard work and efforts of everyone involved. Due to the experience in our in-house AV team, we were in a good position to establish our operating rhythm and our clients to date have been very impressed with the technical team’s event delivery. AV has been, alongside our focus on our people and our quality local food, the heroes of what Tākina has to offer.”



Photo Credit: New Zealand Dental Association

Installed Technology

Audio systems

- Audio DSPs – QSC Q-SYS Core 510, Core 110f
- Audio Amplifiers – QSC
- Speakers Main Plenary Line Arrays – QSC KLA12; KLA181
- Speakers Meeting Spaces – QSC KW152, KW122; QSC Ceiling Speakers
- Patching – Dante network and Q-SYS Atterotech XLR-Dante Wallplates and Stageboxes
- Assisted Listening System – Williams AV WaveCAST

Video Systems

- Video over IP – AMX SVSI encoders and decoders
- Projectors Main Plenary – Panasonic PT-RZ24k; PT-MZ16KL
- Projection Screens Main Plenary – Screen Technics 16:9, 325"
- Projectors Meeting rooms – Panasonic PT-RZ120; PT-FRZ50
- Projection Screens Meeting Rooms – Screen Technics 16:9, 275", 200"; 150"
- SDI distribution – Blackmagic Matrix Switchers, Fibre-optic Transceivers; HDMI to SDI converters

Control Systems

- QSC Q-SYS control systems
- QSC Touch Panels

Digital Signage

- Samsung LED displays
- Samsung Signage Monitors
- Samsung MagicINFO Signage Software

Audio-Visual Network

- Cisco Core Switch
- Cisco Network (edge) Switches
- Truss and Lighting
- Truss systems - Milos 290V Heavy Duty Black
- Lighting – Fresnels Chauvet Ovation F-915FC, Profile Spots Chauvet Ovation REVE E3 (25-50) and Parcans Prolights VersaPar 12
- Lighting Control Distribution – Artnet network and Swisson DMX mergers, splitters, nodes and converters.
- Pharos LPC Controllers and TPC Touch Panel Controller

Computer Technology

- HP Presentation Computers
- HP Speaker Presentation Server and Distribution
- Extron USB network interfaces

The Events

At the time of opening there were 118 multi-day conferences and events on the calendar, and the internationally acclaimed interactive LEGO brick exhibition, Jurassic World by Brickman, opened in the ground floor exhibition space on Saturday 3rd June. This is being followed in December by the world premiere of Marvel: Earth's Mightiest Exhibition.

Conferences to date have included MEETINGS 2023, the tradeshow for the Business Events industry, the first time that Wellington had the capacity and capability to host such a national event; Water NZ with 1700 conference delegates and 180 trade delegates; and The Festival for the Future, Aotearoa's biggest leadership and innovation summit. Upcoming international events include the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) in 2024, iPRES 2025 - International Conference on Digital Preservation in 2025, and the International Sedimentological Congress in 2026.

All events to date have gone off smoothly without a hitch. Andrew Bruce explains, "We knew we shouldn't tie the final programming down until after we had run a few events as we weren't sure how we would use everything, so we have done some fine tuning since opening but I am really pleased with the result and confident that we have achieved the flexibility and ease of use that we wanted."

Portable Systems

Audio

- Allen & Heath SQ series consoles with Dante
- Shure Wireless Microphone Systems
- Shure & DPA Lectern Microphones
- QSC K series portable speakers

Video

- BlackMagic ATEM Production Switchers
- Monitors – HP, Samsung and BlackMagic
- Streaming – Epiphan Pearl, Vmix and Zoom
- Cameras – BirdDog P200 PTZ and controllers
- Panasonic 86" portable Display and Trolley

Lighting

- Lighting consoles – ETC ColourSource AV
- Interfaces – Swisson DMX-Artnet nodes XND-4

Staging

- Prolyte StageDex Staging Systems
- Custom Digital Lecterns (Lectrum L20 tops)
- Custom Lectern Plinths
- Drapes and Tech Drape systems

The Benefits of Collaboration

A gravel carpark, a couple of old, derelict buildings and a small car rental place have been transformed into a modern purpose-built conference venue. With stunning architecture, intelligent spaces, and cutting-edge technology, this venue alongside neighbouring Te Papa, is a game changer for Wellington.

Tākina was constructed on time and with only a \$5.75m budget overspend for a total of \$185m. The AV team were invited in at the design stages and given an opportunity to share their valuable practical experience with the wider project team. This advice was taken on board to positive effect. Teething problems were negligible and the convention centre has opened to rapturous reviews. In the words of the General Manager Andrew Dorrington, "We understood the market because of our backgrounds with Te Papa Venues and a lot of people spent a lot of time together planning. The end result is thanks to all those individuals and their blue sky thinking."



Photo Credit: Smoke Photography and Video

Suppliers

- Installed AV Systems Design – Futureworks in consultation with Te Papa's Technology team
- Installed AV Systems Install – Futureworks
- Installed AV Systems Commissioning – Futureworks and Te Papa's Technology team
- Truss, Lighting and Staging Integrators – Metro Productions and Grouse Lighting

Equipment Suppliers

- Futureworks
- Metro Productions
- Gencom
- Toulouse
- Grouse Lighting
- MDR Lighting
- Showtechnix
- HP NZ
- Lighthaus

NOW



AND THEN

The Beatles put a new song out recently with more than a little help from their friends Pete and MAL. But was it a Beatles tune really, does that matter anyway, and will the wholesale adoption of new AI-Technology open the floodgates or lead to the end of the world?

While I was in the US recently, an odd thing happened. The Beatles released a new song, a track originally recorded on cassette by John Lennon called 'Now and Then'.

Presumably most of you have come across this song by now. Some of you might have listened to it dozens of times already, or at least leant the song a cursory ear. Others among you might have shrugged your shoulders and seen it as just another day in your life, or maybe you missed the fanfare altogether.

For me, what I found interesting about the song – which was created from the combination of the original vocal recording by John Lennon (albeit without his piano accompaniment), some '90s-era Beatles overdubs, new drums by Ringo Starr and recordings by Paul McCartney and a string section at Capitol Studios – was how it sounded.

It sounded, well... it sounded good, I suppose.

But...

Listening to it again, today, this time in the studio, something about 'Now and Then' still feels contrived, derivative, and even slightly unethical to me. I know that might seem like a strong group of adjectives to throw at a well-meaning song recorded by a band without peer, and of course the remaining Beatles have every right to do whatever the hell they like with any music they release, and frankly, who am I to criticise them?

But my observations here are neither meant as criticism of The Beatles themselves, nor the song per se. I quite like the track, even though I feel a nagging doubt that the arrangement could have been bolder (and if Geoff Emerick were still with us, I'm sure he would have had something to say about it).

But whether right or wrong, wise or tactless, or how awesome or pedestrian the new release might seem to Beatles fans worldwide, the song itself, and the process by which it was made, has significance. It marks a point in time where, although The Beatles are arguably old news in many respects, the band has set the stage for a new era of record production once again.

The band hasn't managed this on the back of one song alone, of course; I'm not suggesting that. But given the nature of its construction and the band's enormous fame, the song production itself represents a significant milestone in audio, where arguably the most iconic rock 'n' roll band of all time came to a certain crossroad, took a left, and used AI technology to make the impossible possible. But at what cost, and to what end?

That's hard to say, although I suspect it makes Paul McCartney and Ringo Starr feel better than it does their fans. I reckon many listeners will find 'Now and Then' a little odd, a touch unnatural and possibly even a little twisted.

Get Back Tracking

To recap briefly how 'Now and Then' came to be released in 2023, not 1995, the new song is described by Paul McCartney as having been a piece of music the three remaining Beatles tried to pull together back in 1994 with Geoff Lynne, while they were augmenting 'Free as a Bird' and 'Real Love', which were also songs recorded by John Lennon in his flat in New York City.

But unlike these other two, which eventually saw the light of day in 1995, 'Now and Then' was shelved out of – as Paul McCartney has stated – a combination of "running out of

steam, and time." They also found it difficult, apparently, to get John Lennon's original vocal and piano cassette recording to work in the band track to anyone's satisfaction.

But more than two decades later (2022), cue Peter Jackson and his so-called 'MAL machine' – a fancy piece of AI machine-learning software that was developed to restore and separate sounds on the original 'Let It Be' recordings from Twickenham – and bingo! A technical marvel is born! The old stereo cassette recording of 'Now and Then' is miraculously turned into isolated vocal and piano tracks via MAL, finally allowing John's vocal to be rendered crystal clear (almost freakishly so) and effortlessly turned up in the mix, giving Sir Paul and Ringo the impetus to "work on the track again, mix it and make a proper record of it," to quote Sir Paul again.

But as Paul McCartney states in the short film version of the 'Now and Then' release; "Making good music in a band is all about chemistry..." a concept few of us would contest, and a concept about which Paul knows plenty.

And yet, there is an inescapable irony here. There was no Beatles band recording of this song, no point where the Fab Four got together in a room and built the song into the track we hear today. On the contrary. The track was originally a solo recording by John alone in his flat, and only then after more than a decade did three Beatles (not four) get together to try and resuscitate the song by, at first, deleting a good deal of it entirely, and then adding new parts. This then got shelved for nearly three more decades, at which juncture the two remaining Beatles (not three), with the aid of Peter Jackson and his cybermate MAL, decided to have another crack at it. Paul and Ringo



added more drums, bass and vocals, flew in some additional 'ahhh' BVs from 'Because', and added some new strings at Capitol, which ironically were played by musicians who were purposefully kept in the dark about who's song exactly they were adding their symphonic tones to. So much for 'band chemistry'.

MAL Practise

You may sense by now that I have mixed feelings about the Fab Four's 'Now and Then' release, on many different levels both from the perspective of a fan and a producer of music.

All those involved seem convinced that by manipulating John Lennon's voice all these years later with AI, editing the song, removing John's piano performance and then adding new parts, that the song can somehow be called "a Beatles tune." Maybe it is, maybe it isn't. It's not my job to define it, obviously. But something tells me Mr. Lennon may not be so sure either. And let me just add: if you're on the fence about any of this, don't – whatever you do – watch the video!

But how I feel about the song itself is almost irrelevant in many ways. What will be interesting to see is what comes of the Beatles' tacit (and somewhat naive) endorsement of AI, and how quickly manufacturers of audio software worldwide will get their own equivalent of MAL to market.

We're pushing well into the 2020s now, and I suspect by the time this decade begins to wane, we'll be using programs like MAL, JON and VINNI without a second thought, both consciously, and in many other ways, unwittingly. We may not be using AI controversially to teleport dead bandmates into the 21st century, but I reckon we'll be embracing it in countless other more practical ways.

For me this is where AI is going to be a dead-set game changer. Gone will be the days where bass amp spill ghosts a drum track with bum notes from another take and the only solution is to rip all the bottom-end out of the room mics. Bleed from a click track will no longer haunt the main vocal recording at the end of every phrase or beset that quiet acoustic guitar

overdub. Errant aeroplanes flying over your house, or motorbikes tearing up your street will be able to be expertly removed by MAL's little brother JON at the press of a button, after only a few seconds' learning time. My personal favourite will be my ability to remove the neighbour's electric fence tick, tick, ticking in the background of my piano takes or single-coil electric guitar overdubs when the grass grows tall and shorts the fence.

The real question then will only be whether or not, while we're getting used to deploying AI in more practical, mundane, helpful and even downright revolutionary ways, that it becomes self-aware, takes over the studio, or the gig (or wherever it is you're working) and demands that we all submit to a new world order where robots recline on sunlounges and we just serve the drinks.

Andy Stewart owns and operates The Mill studio in Victoria, a world-class production, mixing and mastering facility. He's happy to respond to any pleas for pro audio help... contact him at: andy@themill.net.au or visit: www.themillstudio.com.au

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WHEN THE AV HAS TO BE THE BEST

If teamwork makes the dream work, then this collaborative installation between Monto Projects, Pro AV Solutions and WSP is a perfect anecdote of how teams do make the dreams a reality.

A family-owned company office located in Richmond, Melbourne, are the recipients of this major high-end AV fitout, with a brief that demanded exceptional quality and nothing but the best. Project Manager David Castro

from Monto Projects relays how they were approached by the customer through their reputation from bigger clients. As project and development management experts, Monto brings the whole team together, finding solutions for their clients based on their briefs, ensuring they're instrumental in every stage of the process.

AV Consultant Manoj Indraharan from WSP, a company dedicated to incorporating AV, ICT and technology elements into spaces, was approached by Monto to come up with solutions that would work within a budget and blend in with the interior designs. AV Installer/Integrator John McKernan and Head of Design

and Engineering Steven Nayler from Pro AV Solutions completes the team, noting their ability to come up with a good budget and demonstrated expertise. Being able to come up with contingency plans was also essential for this project, due to a certain pandemic that threw a giant AV spanner in the works.

With a healthy budget and brief that insisted on leaving an impression on its clients and technology that "must work quickly, efficiently and work every time," Manoj notes the client's expectations for this small office were that they needed the technology to blend in, rather than looking like something that was tacked on later. Mission accomplished!

Despite design commencing in September 2021, the construction did not begin till March 2022, with an expected completion in August 2022. WSP designed a great control system which then had to be mitigated due to lead times and availability. According to John, the supply chain disruptions led WSP to re-engineering the system, which wasn't without its challenges. This then entailed Pro AV Solutions having to re-do all their quotes and engineering, making sure it met its functional requirements.

When it came to making the switch midway through the project, "some things worked on paper but not in the physical environment," John notes. Communication with other parties and replanning around new ETAs and hardware was required, which almost became a new project from scratch.

With the new contingencies now in place, the team worked with architects to adapt the technology into the different spaces, according to Manoj. A large LED 130-inch video wall in the boardroom became a proud feature of the project, which was downgraded from an entire wall due to its hindrance to the acoustic performance, as a large hard surface along with camera positioning would have taken away from the full immersive experience. Dual cameras, digital mics, Extron Crosspoint, native Microsoft Teams with BYOD and Foxtel were utilised in the impressive space.

In keeping with the theme of creating the 'best' of everything and leaving an impression, a creative solution was found when it came to a wall blocking the outside terrace views from the open work area. Manoj put forward the idea of installing two large panel screens back-to-back on the wall with small cameras on either side, fashioning a virtual window that can be viewed on either side. David concedes this idea was quirky, simple, inexpensive and avoids compromising on the acoustics, which alternatives like one-way mirrors would cause. Looking out onto the terrace and staff break area ties the spaces together, providing an outlook beyond the wall; a room with a virtual view!

Returning to the client's need for everything to "work quickly, efficiently and work every time," Manoj ensured the technology's user experience was the same in every room, according to David. Logitech Team touch panels in the rooms with an Extron backend control system are simple to use and only need to be learnt once and applied thereafter. The entire office's audio system, linked by a central processor can also connect the whole space with a theme going through, Manoj explains. This allows music in the lobby during office hours to spill into the boardroom and a full expansion of audio throughout the entire office and balcony for functions and parties. Pro AV Solutions also made background music a custom interface that they programmed themselves on an Extron touch panel, with users picking a zone, selecting their music or pairing with their own devices.

The extent of scope by Pro AV Solutions included AV, microphones, speakers, screens, control system, virtual window, video conferencing, Apple TV, matrix switcher, audio, occupancy sensors and integration. Two Samsung Frame displays were deployed in the founder's office as their primary displays, showcasing artwork akin to the real thing. In keeping with the elegant seamless aesthetic finishes, the giant connection box with inputs and source selection was hidden in the ceiling.

Reflecting on the project and collaboration with other parties, David expressed the quality and attention to detail Pro AV Solutions and WSP brought with them. John noted the co-working between all parties being a positive and enjoyable experience, adding an example of "builders working with AV working with consultants working with project managers to have custom size cabinetry around the video walls to house AV equipment," all leading to quality finishes without having to bother the client through the process.

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In the first section, you can browse equipment hire companies with multiple locations across Australia. In the second part, you can browse by State or Territory.



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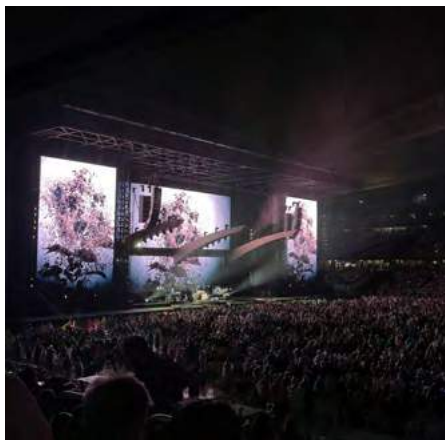


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dplr is a full-service production AV company that focuses on creating unforgettable events and experiences. We are a turn-key supplier for activities of any size or scope, locally or nationally, working with creatives, brands, festivals, local government and community groups to deliver technical solutions through innovation. Our hire equipment includes lighting fixtures from Chauvet and Ayrton, audio systems from d&b and QSC, and a large range of LED screens, commercial displays, projectors and staging. All of this is supported by our diverse and highly skilled team of technicians.



NSW

Eventspec

18 Garling Road, Kings Park, NSW, 2148

T: 0477 898 189

W: www.eventspec.com.au



Eventspec is a comprehensive event production, technical direction, and streaming company based in Sydney, providing a wide range of services. Our extensive inventory features state-of-the-art equipment, including line array PA Systems, LED video screens, moving lights, staging, and drapes, complemented by a complete array of control gear. We offer versatile solutions for hire, dry hire, and turnkey production, ensuring seamless and sophisticated execution for all your event needs.

NSW

Focal Point Rental

1575A Botany Rd, Botany, NSW, 2019

T: (02) 7208 4485

E: info@focalpoint.rentals

W: focalpoint.rentals



Specialising in lighting for film, television and the entertainment market. Focal Point provides comprehensive rental support along with a wide range of new lighting technology, equipment and accessories from brands such as ARRI, Block Battery, Creamsource, DoPchoice, Fiilex, LiteGear, Litemover, Matthews and Sumolight. Featuring pre-delivery training, customer service, support, in house lighting designers and service technicians, Focal Point have your lighting needs covered.

NSW

Forefront Productions

Unit 2/246 Macquarie Rd,
Warners Bay, NSW, 2282

T: (02) 4954 4771

E: hire@ffp.com.au

W: www.ffp.com.au



Audio. Lighting. Video. Over 30 years of excellence in events, across Australia and around the globe. For a one-stop-shop for dry-hire, a truck full of gear for your regional tour, an expert team to design and execute your vision from end-to-end, or anything else in between... think Forefront.

NSW

Illawarra Production Services

47 Auburn St, Wollongong, NSW, 2500
 T: (02) 4226 5595
 E: info@ipsonline.com.au
 W: ipsonline.com.au



For over 30 years, Illawarra Production Services has been providing audio, vision and lighting services to the Illawarra, South Coast, Southern Highlands and Sydney. We have installed, serviced, repaired, sold, hired, and provided technical production to thousands of customers both small and large. We are proudly based in Wollongong and have a passion for what we do. Our goal is to listen to and understand your requirements, and then provide professional, reliable, cost effective, creative solutions.



NSW

Live Event Services

WH 5, 36 Mid Dural Road,
 Galston, NSW, 2159
 T: (02) 9651 7555 or 0417 407 219
 E: info@liveeventservices.com.au
 W: LiveEventServices.com.au



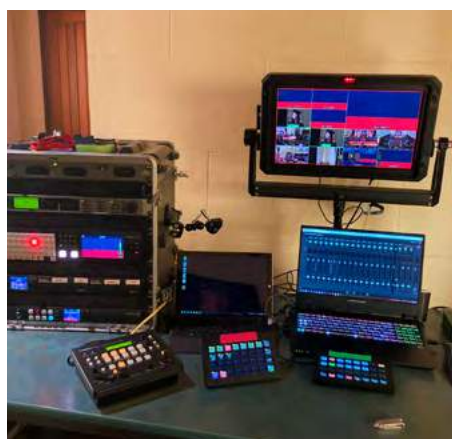
One of Australia's most experienced event production companies, delivering seamless events for over 45 years. Live Event Services provides technical support and production services catering to a wide range of events; from gala award ceremonies, to concerts and festivals, product launches, conferences, activations, road shows, AGMs, exhibitions, media events, and many more.



NSW

Start Webcast

Based in Blacktown, NSW, 2148,
 servicing Australia-wide
 T: 0430 333 064
 E: wecanhelp@startwebcast.com
 W: www.StartWebcast.com



B2B technical engineering and speciality equipment hire. We assist AV production companies to deliver engaging interactive real-time and multimedia experiences to local, national, and international audiences, becoming an extension of their business. Specialising in the less common stuff like bespoke hardware/software development, (e.g. gameshows, interactive exhibits), broadcast quality webcasts, best-in-class video conferencing links using Poly and Cisco, lipstick cameras, wireless video, XPression graphics, remote system control, management and monitoring. The weirder the better!



NSW

The Cue Company

5/18 Stockyard Place
 West Gosford, NSW, 2250
 T: 1300 146 165
 E: hello@thecueco.com.au
 W: www.thecueco.com.au

At The Cue Company, we connect people, technology, and ideas to create unforgettable and engaging experiences. Through our holistic solutions and deep industry expertise, we enable our clients to exceed their ambitions. With a focus on eco-conscious practices, our suite of services spanning technical precision, digital innovation, and bespoke installations, bring your unique vision to life, whilst honouring our commitment to a more sustainable future. Services include audio visual, event and stage lighting, widescreen projection, projection mapping, LED walls, drapery and scenery, rigging, staging, ICT and data, hybrid and virtual event solutions, webcasting, broadcasting, technical consultation and technical production management. Partner with The Cue Company and elevate your next event.



THE CUE COMPANY

NSW

The P.A. People

9-11 Leeds Street, Rhodes, NSW, 2138
 T: (02) 8755 8700
 E: eventcomms@papeople.com.au
 E: sales@papeople.com.au
 W: papeople.com.au

The P.A. People boast one of the largest independent Clear-Com rental fleets globally. Our comprehensive inventory includes FreeSpeak II wireless full-duplex systems, Helixnet partyline systems and LQ network interfaces, Motorola two-way radios, distributed audio systems and control equipment, CCTV and (SPL) sound pressure level monitoring, and full audio systems and consoles. We stock an extensive range of Yamaha consoles including the new DM7, Rivage PM5s, QL1s and QL5s along with a comprehensive range of arrays and speakers from Bose Professional, Community, and JBL. Our systems are capable, scalable and can be supported by an experienced service team. The P.A. People operate Australia-wide.



QLD

BSG - Brisbane Sound Group

73 Toombul Road, Northgate, QLD, 4013
 T: (07) 3257 1040
 E: Hire@brisbanesound.com.au
 W: brisound.com.au/pages/hire

Since its inception in 1986, BSG has been a mainstay of Brisbane's vibrant music and live events scene. Our commitment and passion for delivering exceptional audio visual experiences has made us a trusted name in the industry. Our Hire department boasts an extensive inventory of sound, vision, and lighting equipment including renowned brands such as L-Acoustics, DiGiCo, Allen & Heath, AVID, Yamaha, Shure, Sennheiser, ROBE, Unilumin, VuePix, RCF, EV, and many more. Beyond dry hire, BSG offers comprehensive production services tailored to events of all scales. Whether you're organizing a small community choir performance or a large-scale festival, we have you covered. Our experienced team caters to every aspect of your event, providing full production packages meticulously designed to elevate its impact.



QLD

Creative Productions Australia

U7 8 Anisar Court, Molendinar, QLD, 4214
 T: 1300 278 848
 E: info@cp-au.com
 W: www.cp-au.com



At Creative Productions, we understand the transformative power of live events and the impact they have on audiences. We take a holistic approach to each project, working closely with artists, event organisers, and production teams, to understand their vision and bring it to life. By blending our technical expertise with creative flair, we ensure that every event is a harmonious fusion of innovation and artistry. With a wide range of Robe, Ayrton, GLP, Martin, BlackMagic, NovaStar, and Dicolor products, Creative Productions Australia are the go-to experts in Australia.



QLD

ELS Productions

30 Taree Street,
 Burleigh Heads, QLD, 4220
 T: (07) 5593 5105
 E: info@els-productions.com.au
 W: www.els-productions.com.au



Established in 1984, ELS is a full-service event and entertainment technology supplier. We service the corporate, entertainment, touring, and community markets. Our rental inventory includes L-Acoustics, Yamaha, Midas, AVID, Martin, ClayPaky, Ayrton, Hog, GrandMA, Global and CLS trussing and structures, LED Vision LED screens, NovaStar, Barco and BlackMagic video processing, and 4K SMPTE fibre camera chains.



QLD

Events Fantastic Australia

3b/45 Leda Drive, Burleigh Heads, QLD, 4220
 T: 07 5520 4648
 E: hire@eventsfantastic.com.au
 W: eventsfantastic.com.au



Events Fantastic offers an extensive range of event decor and inventory for hire, making us the go-to choice for event managers, event producers, venues, and audio visual professionals in the Australian corporate event production industry. Our diverse decor selection includes everything from bespoke hand-painted Backdrops Fantastic themed backdrops to conference and gala modular backdrops, draping, inflatables, illuminated furniture, light-up letters, dance floors, props, linens, and centrepieces. With our extensive inventory, you can save time and effort by sourcing all your event decor needs in one place. We are based on the Gold Coast but ship our event decor Australia-wide daily.



SA

AJS Lighting Sound Events

- Andy J Sound

10, 12 William St, Mile End South, SA, 5031

T: 08 8221 5551

E: info@ajsound.com.au

W: www.ajsound.com.au



Established in 1996, we are a proud family-owned company that combines the latest in vision, sound and lighting technology to achieve cutting-edge, creative and engaging experiences. AJS collaborates with clients to provide customised solutions and our technical superiority and service excellence ensures that each of your events is unforgettable. We boast a large and dedicated staff collectively considered to be superior in excellence and service throughout the industry.

SA

Novatech Creative Event Technology

153 Holbrooks Road, Underdale, SA, 5032

T: (08) 8352 0300

E: hello@ncet.co

W: ncet.co



Novatech is one of Australia's leading and most respected family-owned audio-visual production companies. Since their inception in 2001, they have been driven by a passion and commitment to staging exceptional events across Australia, using leading brands such as L-Acoustics, ROE Visual, Brompton, Barco, disguise, MA Lighting, ClayPaky, Ayrton, Shure, Riedel, and more. Whether you need equipment for dry hire, long term hire, or a full turn-key solution, Novatech can offer competitive rates right across Australia. Backed by experienced staff and an ever-increasing inventory of the world's best brands, Novatech provides you with confidence and peace of mind when staging your next event. Check out our equipment fleet at ncet.co/equipment/

VIC

Clearlight Shows

5 Horscroft Place, Moorabbin, VIC, 3189

T: (03) 9553 1688

E: hire@clearlight.com.au

W: www.clearlight.com.au



With a focus of supplying cutting edge stage lighting equipment for corporate events, schools, theatres, churches, and film and television, Clearlight Shows hire department has been a major supplier to the entertainment industry for over 40 years. Stocking the latest products, we have invested heavily in the equipment designers and venues ask for from leading brands including Infinity, Wentex, Swefog, Astera, ETC, Robe, Showtec, LDR, Martin, Chauvet, Vari-Lite, Zero88, and Selecon. Boasting a well-equipped showroom at our Moorabbin warehouse, designers can evaluate the latest hire products in an accurate setting to push their creativity to the limits. Adding to the hire experience, we can complement your rental with a full range of accessories and consumables including tapes, gels, fluids and spare lamps.



VIC

Concert Lighting Systems Australia

1 Rogers Street, Port Melbourne, VIC, 3207

T: (03) 9646 8890

E: hire@clsa.com.au

W: www.clsa.com.au

Since 1976, CLSA has continuously evolved, keeping pace with advancements in lighting technology, staging and rigging, to offer state-of-the-art equipment. With its team of skilled professionals and a commitment to excellence, CLSA has become a trusted partner in design, fabrication, equipment supplies and service for concerts, festivals, theatrical productions, and more. We hire stage decks, steps, access ramps, handrails, truss, stands, base plates, ballast, chain hoists, power distribution, drapes, smoke and haze machines, stage lighting, and outdoor stages. We also supply licenced riggers and experienced crew to install rigging, staging, and stage canopies, and can assist with your designs.



VIC

Impress AV

4 Trinity Way, Pakenham, VIC, 3810

T: 0401 750 607

E: aaron@impressav.com

W: www.impressav.com

Impress AV is a premier audio and visual production company, delivering end-to-end production for all events. With the latest in AV technology, touring-grade PA systems, lighting, LED video walls, and broadcast vision, we can bring your performance to the level expected at the world stage. No event too big or too small. If you want your event to leave a lasting impression, leave it to Impress.



IMPRESS AV

VIC

Outlook Communications

29 Reserve Street, Preston, VIC, 3072

T: (03) 9495 1755 or 0431 818 620

E: jack@outlookcomms.com.au

W: www.outlookcomms.com.au

Outlook Communications (a division of The Big Production Group Pty Ltd) provides innovative technical solutions for theatrical productions, concerts, and events. Our wide range of audio, lighting, and video gear, and experienced technicians allows us to exceed expectations. From providing a speaker and mic, to providing technical elements for a full theatrical production, and everything in between, Outlook will help bring your event to life.



outlook

VIC

PRG - Production Resource Group Pty Ltd.

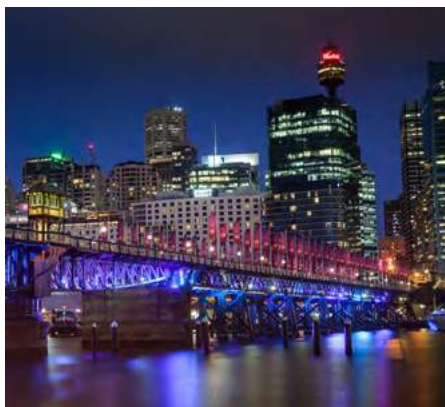
88 Nathan Road,
Dandenong South, VIC, 3175

T: (03) 8710 2500

E: info@prg.com

W: www.prg.com

PRG provides a wide array of cutting-edge products and services tailored to meet even the most demanding event's technical needs. From advanced lighting and video, we offer solutions designed for seamless integration and superior performance. Our extensive lineup includes lighting, video, staging, screens, LED, cameras, and generators. We provide large scale event delivery including concert touring, corporate events, theatrical productions, and sporting events. Our proven expertise ensures flawless execution and technical precision. With PRG, you can count on our in-depth technical knowledge and global access to equipment solutions to deliver exceptional results.



WA

EventEx

10 Dyer Road, Bassendean, WA, 6054

T: (08) 9371 6400

E: info@eventex.com.au

W: www.eventex.com.au

EventEx is the brightest star on the stage as Perth's leading full-service event company, delivering many of the awesome events staged in Perth over the past 20 years. We work within your budget to create the most impressive theming, staging, lighting, projection, and sound combinations, ensuring your event is dazzling and memorable beyond all expectations. Offering all event production services including staging, lighting, rigging, AV, and draping, EventEx are the one-stop-shop for your next event. Whether it's a large Ground Support structure and stage for a festival, overhead rigging and AV for an exhibition, mood lighting and draping for a wedding or private event; we've got you covered!



WA

Megavision Australia

25 Gordon Road (West),
Osborne Park, WA, 6017

T: (08) 9444 6556

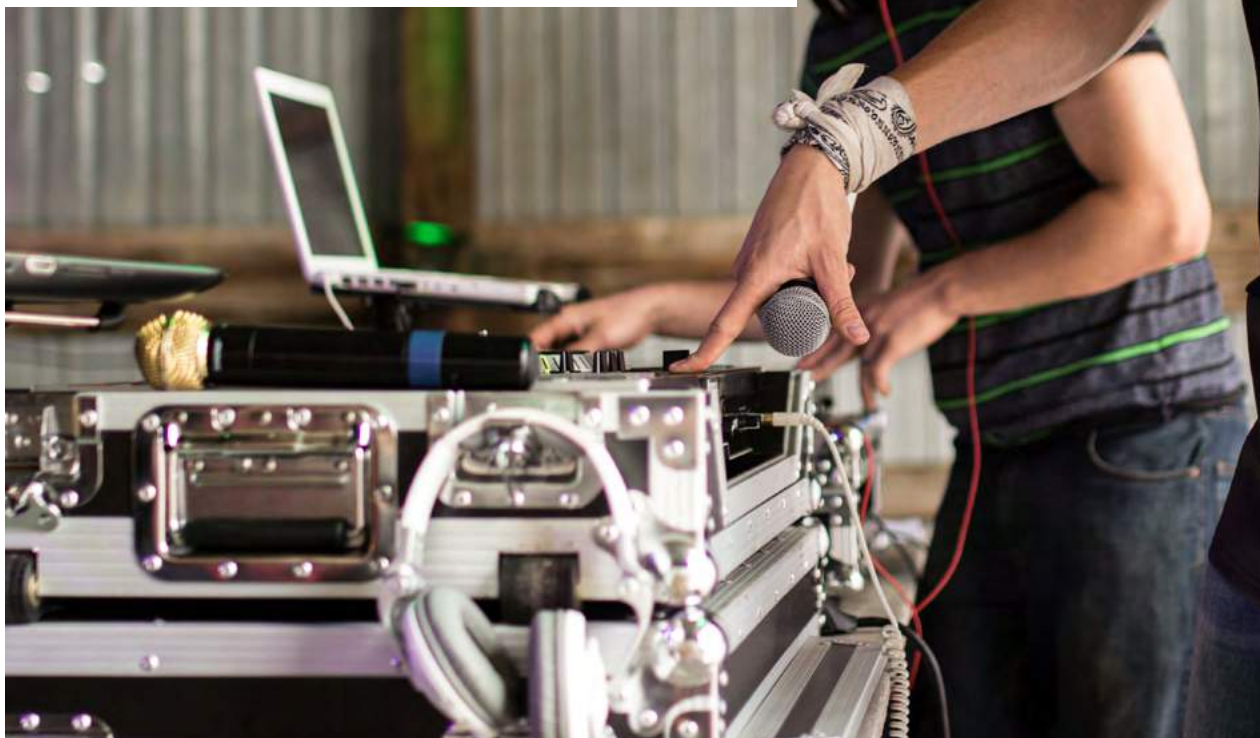
E: talk2us@megavision.com.au

W: www.megavision.com.au

Since our establishment in 2001, Mega Vision has consistently set the benchmark for excellence in AV hire. With a steadfast commitment to delivering exceptional audio, visual, and lighting solutions, we've been the trusted choice for businesses and households across Western Australia for the past two decades. Our extensive inventory of cutting-edge equipment caters to gatherings of any size, from small private parties to grand music festivals. Our seasoned experts guide you through the process, ensuring tailored solutions that meet your specific requirements, with meticulous attention to detail for a seamless integration of audio, visual, and lighting elements.



RENTING OUT THE RIG



Considerations when buying equipment to hire out

With lots of talk these days about extra sources of income and 'side hustles', it's worth having a look at one of the more common ways people in our industry derive a bit of extra cash; by purchasing gear to rent out to a production company or a venue.

On the surface, it is really simple. Buy gear, rent it out, collect money. Of course, if it were really as simple as that, everyone would be doing it.

As an individual renting out equipment on a small scale you are filling a niche or a more specific need in the market, perhaps one that is not covered by the rental companies. Usually, your purchase is tailor-made with a client or an agreement already in mind.

Start with a clear plan in mind. Writing it out would be a good idea. Even though you may be doing it for a bit of fun on the side, take a businesslike approach to it, have a goal in mind to make it worth your while. You are aiming to solve a problem by providing a solution.

Sourcing/Buying the Equipment

Don't overlook the price you pay for the gear initially. If you are in a position to negotiate the purchase price, do it. A saving of a couple thousand or even a couple hundred dollars can drastically alter your returns down the line.

Use the tax code to your advantage. Does it make a difference if you buy it as a company as opposed to a sole trader? What can you

claim? A few things you might be able to claim for include transport, storage, maintenance costs, loan interest, amongst other things, depending on your individual circumstances. A chat with an accountant or similar professional will be well worth your while before you start out. While it is true that you should not pay a cent more tax than you have to, make sure this side is handled properly, ie: legally. In taking on a venture like this, you are also taking a lot of different types of risk; don't add to them with dodgy tax returns.

How much would you be looking to spend? Realistically there is probably only so much you can invest without being a rental company yourself or overcapitalising. \$100,000 might be near the top end for an individual looking to buy an extra bit of kit to rent out on the side.

What could \$100,000 or under get you these days anyway?

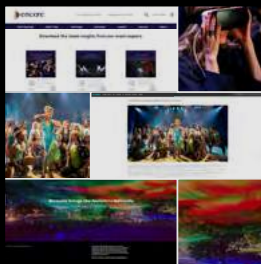
- Decent camera set up
- Respectable audio console
- Good lighting console
- 3 ton truck w/ fit out

Finance

How would you be looking to finance the purchase?
Cash, bank loan, payment plan from seller?

What would the weekly repayments be on a \$100,000 loan if you went down that path? At the time of writing a personal loan is about 7.99%. This equals \$360 per week paid off over seven years, with total repayments of \$130,549. The same loan paid off over five years is \$468 per week, with total repayments \$121,320. Same loan again, over three years it is \$724 per week with total repayments of \$112,507. Obviously, the shorter the loan period the less you will pay in interest, but how viable it is to make the higher repayments is up to you to decide. If you are in any position to shop around or negotiate for a better rate, do so. A 1% saving on the interest rate would save you \$11 per week and about \$4,000 overall on the seven year term. It would be a few hours well spent.

Creative Services for the AV and Entertainment Technology Industries.



Specialist Content Creation



Integrated Print & Digital Media



Marketing & Business Development



Professional Event Services

VCS Creative understands your products and services because we've used them professionally. We are AV, sound, lighting, video, comms, and staging professionals working as content creators and AV and entertainment technology business specialists. You don't have to explain your products to us; we know how to sell them to your potential customers.



The most important thing is to do your research and due diligence, regardless of how you are funding your venture. Cover your downside and your risk as much as possible.

Returns

How much can you reasonably expect to charge for your equipment?

A rule of thumb that has been floated in the past for a ball-park hiring price is to take the purchase price and divide it by 41. \$100,000 divided by 41 gives us a starting price of about \$2,400. It sounds great, but is it realistic? It may sound like a bit of a cop out, but it all really does depend on the individual situation. Experience tells me this rule does not seem to apply to higher priced items, and gear that is brought in by someone and charged as extra typically does not exceed a standard day rate for an operator. Although not always the case, generally your equipment will be cheaper than you.

It is likely that you have leveraged a friendship or a solid working relationship in order to be in a position to supply a bit of extra equipment. In an industry that can run on 'mates rates' and discounts, how much can you really charge?

To walk through an example, let's assume the following. You spend \$100,000 on equipment. You get a personal loan to pay off over seven years, which is \$360 per week. You charge out your equipment for \$300 per day, it gets used twice per week, 52 weeks of the year. For the sake of simplicity, we will keep deductions off the table, but we will include \$1,000 per year in maintenance and \$50 per week in insurance.

- \$600 per week for 52 weeks is \$31,200
- \$50 per week for 52 weeks is \$2,600
- \$360 per week for 52 weeks is \$18,720
- \$1,000 per year in maintenance

In this example, you will make \$31,200 in income with \$22,320 in outgoings.

Your net position is + \$8,880 or \$170 per week.

For this example, you are looking at just under a 9% return. This number will likely increase once you factor in what you can write off.

To scale it back: it would be like putting up \$1,000 for a return of \$1.70 per week. What kind of return would you be happy with? At the time of writing, the current yield on a government treasury bond is about 5%. This is often considered to be the safest risk-free return on your money you can get. With the amount of risk you are taking on buying equipment to rent out you would want to clear this hurdle quite comfortably. For comparison, \$1,000 invested in a government bond paying 5% would still get you \$0.96 per week.

You can play around with the figures (and you should) to get to something that seems more acceptable given the risk (and work) you will be taking on. For example, if you were to double what you charged or rent the gear out four days instead of two, you would be left with \$40,040 per year or an extra \$770 per week. You have gone from about a 9% return to a 40% return. The reason it has gone up more than double is because the costs are mostly fixed. Obviously it makes sense to have your equipment out there as often as possible and to be charging as much as you can. It helps to know your market so you know what is realistic.

Extra Considerations

You need to make sure that you are setting up and maintaining an agreement that is mutually beneficial for both yourself and the venue/production house you intend to hire your equipment to. You need to be able to see it through their eyes too. Chances are they need to be able to see a way to make or save money.

Taking on a venture such as this one is going to involve risk. You can't avoid risk, but you can manage it. A good way to manage the risk is to ensure there is a market for what you intend to provide. If you had an agreement with a company/venue to supply something that helps.

Another good way to mitigate risk is to consult with an accountant or similar specialist who may be able to provide you with a few useful insights that could save you thousands.

The technological risk of becoming outdated is very real in our industry. Don't buy equipment with a 10 year horizon when it will likely be obsolete in five years' time.

Will you be setting up, packing up the gear and operating it, or will it be a dry hire? Even though most people are respectful and will act with pure intentions, nobody cares about your stuff more than you. The dry hire could get your equipment used more, but could also shorten the lifespan it has.

It is typically a good idea to have insurance in case anything breaks or goes wrong. It can be a small price to pay upfront to save a massive headache later on.

Transport storage and maintenance needs to be considered. How will all of these be handled and who will be doing it? Will it be covered by your or will you be outsourcing (and paying) someone else to do it for you?

It is very important to have an exit strategy in place too. It won't last forever and how you exit can be crucial to the success of your venture. Do you look to sell it to the company you were hiring it to? Do you sell it second hand to someone else and go buy a newer and better version? Do you donate it to a school or an amateur theatre company and write it off as a donation?

Just running it into the ground is an exit strategy, but perhaps not the best one. At some stage repairs will be more frequent, the equipment would become less reliable, and you may be in a position where you are having to cancel work because of it.

The most important thing is to do your research and due diligence, regardless of how you are funding your venture. Cover your downside and your risk as much as possible. It is very possible to do very well running a side business hiring out equipment. The important work starts long before you make your first purchase.



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2,400 printed copies reach **6,000+ readers** every month.



CX News

Emailed to our database of **18,000+ recipients** every Wednesday.



CXnetwork.com.au

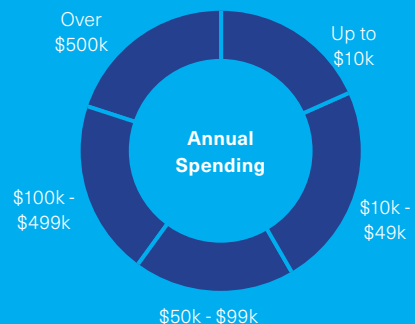
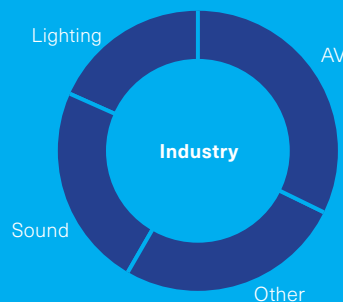
The website makes over **40,000 impressions** per month.



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Email jason@vcscreative.com or call 0407 735 920 for more information.

Ayrton Argo 6 FX



IP65-rated LED effects wash light

A 19 x 40W RGBW LED moving head wash with 4 to 56 degree zoom, 13,000 lumens, 19 x 50mm frontal lens, 14:1 zoom high resolution optic system, and up to 86 CRI. What's not to like?

The Ayrton Argo 6 FX is an IP65-rated LED wash light with a built-in effects spiderweb running between its LEDs that the manufacturer calls 'LiquidEffect'. Driven by an RGBW LED engine, this cutting-edge, weather-sealed effects light is also available as an Argo wash, which is essentially the same light albeit without the LiquidEffect between the LEDs. Here, the gap is simply blacked out and serves no lighting function.

The Argo 6 FX boasts a couple of impressive statistics: a zoom ratio of 14:1 and a zoom range between 4 and 56 degrees. Onboard, the light has nineteen 40W LEDs with an RGBW additive colour mixing system that can obtain light output of 13,000 lumens.

For those familiar with the Ayrton range, the Argo 6 FX is essentially like an IP65-rated Zonda FX – think Zonda 9 FX without the outside ring of LEDs or IP65 rating.

Light Construction

Central to the construction of the Argo 6 FX is its minimalist, weather-sealed design that tastefully avoids those bulky, crude hard plastic looks common to so many other IP65 fixtures. The light is so refined looking, you might be

forgiven for thinking that it's an IP20-rated fixture that's only capable of indoor use.

Ayrton have done a great job on the light's aesthetics, making for an attractive looking, simple and lightweight fixture that's capable of working in all weather conditions.

The Argo 6 FX weighs a touch over 23kg. By comparison, the Zonda 9 weighs 28kg and the Zonda 3 weighs 11kg. The light draws 950W of power; pretty thirsty for a medium-sized LED fixture, which essentially means only two lights can be accommodated on a single 10A circuit.

One thing Ayrton has done to improve weight reduction on the Argo 6 FX is to move the pan and tilt motor into the head and base of the light, not the yoke, which makes a difference on an IP65-rated fixture where the head and base are sealed and there's no access for internal maintenance. But even with the emphasis on reductions to both weight and size, the 6 FX still feels like a sturdy, solid wash light with a high-end finish.

Optics, Colour, and Brightness

The Argo 6 FX contains 19 individual 40W RGBW LEDs coupled with 16-bit dimming. Theoretically, the colour choices are almost

unlimited here (4.29 billion colours). The open white is a crisp, cool white, which maintains the same colour temperature across the entire dimmer curve.

Output is also measured at 13,000 lumens; bright enough for most stage applications, although given that many modern outdoor spots and profiles are heading up into the 50,000-lumen range nowadays, you may have to think about how many Argo 6 FXs you'd need and what you'd spec them with.

In between each of the LEDs runs the aforementioned 'spider web' described by Ayrton as LiquidEffect. This feature is only found on the FX model and this is where you run content through the fixture. It's described by Ayrton as a high-definition liquid effect fitted between the main lenses of the luminaire used for creating complex graphic effects. Using RGB-signalling LEDs, equipped with a black enclosure and internal reflector provides a greater level of contrast. The 6mm space between pixels guarantees quality diffusion of the liquid effect. To send light through the system, the guide's convergent profile channels all the light to the output surface between lenses. Its shape prevents any leakage of light to the main lenses.



RIVALE PROFILE

the ultimate revolution

RIVALE PROFILE is the first ultra-equipped luminaire in AYRTON's brand new 'ULTIMATE' series, all models being perfectly homothetic and sharing common features, delivering previously unimaginable weight to output ratios.

Developed for mixed use indoors and outdoors, and in all conditions, RIVALE PROFILE, with its unique visual signature, is unparalleled on the market.

Weight determines performance, and RIVALE PROFILE weighs only 28 kilos.

To allow you more creativity and freedom in your lighting design, RIVALE PROFILE has been provided with continuous rotation of the pan and tilt movement.

RIVALE PROFILE, a unique projector that boasts performance, creativity, subtlety and power, is the most versatile fixture created by AYRTON to date.

A truly innovative luminaire with no equivalent on the market...

3 Series - Source
450 W - 6500 K

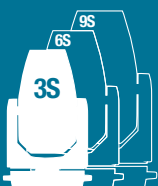
Lumens
30,000

Zoom aperture
4° to 52°

Frontal Lens
160 mm

IP Rating
IP65

Weight
28 kg



www.ayrton.eu



AYRTON

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Applications and Features

The Argo 6 FX is effectively a two-in-one fixture: a wash and an effects light. The wash light has a large zoom range starting at a tight four degrees, expanding from there to 56. For reference, a MAC 101 pin spot has a 7-degree beam, and most lights are considered 'floods' from about 45 degrees outwards. The zoom range sounds impressive on paper, but it's even better in the metal. It also goes from narrowest to widest point very quickly, as well as zooming in and out smoothly and effortlessly. The light is also a quick mover, fast and accurate, with infinite pan and tilt, and with options for 8- or 16-bit movement.

Each of the Argo 6 FX's RGBW LED engines can be individually controlled, giving choice to innumerable colours and intensities, making it a great 'eye candy' fixture, and the light has a Colour Rendering Index in the high 80s, which is excellent.

The face of the light is a respectable 280mm in diameter, and judging by the rest of the Ayrton range, it's likely that the Argo 6 FX will eventually sit in the middle of the range if smaller and larger IP-rated units become available at some point. The size of the light's face means that it will also show up well when having content run through it. For those familiar, the lens face would be similar in diameter to that of a Quantum Wash.

Control and Programming

The Argo 6 FX can be controlled via five-pin DMX, wireless DMX and through an ethernet cable. It's also RDM compatible. There are three DMX modes available, the largest being 127 channels. They can also be pixel mapped and have video content run through them. But if none of that matters, the Argo 6 FX can simply be used as a standard wash light. In its extended mode you can fit four to a DMX universe – just. They look neat with content running through them, the LiquidEffect adding an interesting layer of visual texture.

As the lines between vision and lighting continue to blur, this fixture will certainly find countless

uses next to, above or below an LED wall.

The Verdict

After bursting onto the moving-head profile scene a little over five years ago with the popular Ghibli, Ayrton has leveraged this success by expanding its product range, saturating every corner of the intelligent lighting market. And with the release of the Argo 6 FX, Ayrton is moving confidently into IP-rated wash/effects fixtures.

The Argo 6 FX works beautifully by itself as a wash light suitable for TV, while the FX component represents the icing on the cake, making it a significant player in the market into the foreseeable future.

We are already almost exclusively LED-based when it comes to new moving-head wash lights, and companies are starting to refine their offerings in the space. As far as current trends are concerned, moving-head wash lights that are compatible with content run via media servers as well as being IP rated, are becoming the norm. In the Argo 6 FX, you tick both these boxes.

Point it at the stage or point it at the audience; the Ayrton Argo 6 FX is a quality fixture that we'll be seeing more and more of in the future.

Product Info: www.ayrton.eu

Distributor Australia and New Zealand: www.showtech.com.au

The Specs

Beam aperture: 4° to 56°

19 x 1,000 lumens RGB+W high-power LED sources.

Total luminaire output: up to 13,000 lumens.

CRI: up to 86

Rated life: L70: up to 40,000 hours

Moving-head range: infinite pan & tilt rotation

Sophisticated RGBW colour mixing
4.29 billion colours

Virtual colour wheel, including variable colour temperature

2D & 3D graphical effects capabilities

Effects can be coupled with beam, wash or matrix applications

Built-in pattern effects with speed and fade controls for scenic applications

Individual control of each pixel

Dynamic, eye-catching LiquidEffect

Dimensions: 436 x 536 x 280 mm (l x h x d)

Weight: 23.2kg



ROBE IFORTE

**IP rated,
all-purpose
lighting
fixture**



Alive Technologies recently invested in 20 Robe iForte fixtures. We were at the point where we needed to expand our lighting inventory to cover decent sized A and B rigs. The A rig has Robe BMFL and 600s, which are great indoors, but our B rig of Spiiders and 600s needed some more punch to match the A rig. We'd been looking hard for an LED replacement for a profile or spot.

With a large MOFO event on the horizon and knowing how wet Tasmanian weather can be, the iForte had to be our pick. It ticked all our boxes - being IP rated, we could exchange gobos in it without having to use external pressure test tools - and it is one of the highest output fixtures that we could find. The weight

of the unit was a huge part as well, being only 1.5kg heavier than the non-IP rated Forte version.

They are such a good general all-purpose fixture. The zoom on them is amazing, so when we need to do a framing shot, we utilise that. It's incredible and so clear and even across the output. We are often using it just for our primary. They are pretty quiet too and have been great for recent corporate events or TSO shows that we've done.

The colour output is beautiful. It stays exactly true to how all Robe fixtures are, so it carries that same colour spectrum. They are also very harmonious with the BMFLs, even though they are lamp based.

The framing shutters are really sharp and straight. The speed in them is absolutely amazing, so you can jump from, say a square to a diamond, to a line - doing a change like that can look awesome. For the size and weight of the fixture, the pan/tilt speed is also really good. If they pop out of alignment, you can tell them a unit to recalibrate and it will actually fix its alignment itself.

Most fixtures come with one or two OK gobos and then fillers. The iForte gobo selection has an excellent fully fledged set that we are really happy with, covering all different aspects from breakups to effects. If you do need to change gobos, it's a lot easier than with most IP rated units. There is no gasket replacement or expensive external pressure tester required. Just pop off the case, change the gobo, put the case back on and use the internal pressure test function to tell you if it's sealed up and good to go. You do have to torque the screws in the correct pattern to make sure it seals up.

At 45kg, they are a two person lift but they are incredibly robust. The hard cast casings, made of magnesium alloy covers, with an aluminium alloy structure, should hold up better to wear and tear than the plastic of so many other lights.

The iFortes have NFC on the front of them, so you can actually address them using your phone. With their an internal battery, you don't even have to power the fixture up in order to do that. You tap your phone on all your fixtures and it grabs all the information on your phone and then you address all of them from there. It's very handy for show preparation.

Overall, we are really happy with this light. We've had them out in the rain, had them in the cold, and they've been absolutely great. We haven't seen any moisture in them at all. They run multiple gel packs inside, which absorb the moisture and are easy to swap out and change. These gel packs are so efficient that you need to do your repair or swap quickly and get the case sealed back up before they suck up all the ambient humidity.

Robe have built the iFortes really well. They are very modular inside for repair and maintenance. We haven't been able to fault the fixture so far. It really goes so well on all aspects.

Product Info: www.robe.cz
Distributor Australia: www.jands.com.au
Distributor New Zealand: www.jands.co.nz

Nathaniel Collins

Nathaniel started in Tasmanian events during the early 2000s. Five years in Adelaide with Novatech was followed by a few years freelancing in Melbourne and Tasmania. Lighting is his forte but describes himself as "a jack of all trades - everything and anything."

Alive Technologies

Hobart local production company made good, Alive Technologies now boasts four divisions: lighting, audio, video, and staging/rigging. They also have a fabrication side, building everything from trailer stages to bespoke art. They do "everything and anything" too.

<https://alivetechnologies.com.au/>

The Specs

Light source type: TE 1.000W iSE HP White LED engine

LED engine output: 82,000 lm

Colour temperature output: 6,700 K

CRI: 70, remotely selectable filters for CRI 80 and CRI 90

Zoom range: 5° - 55°

Variable CTO: 3,000K - 6,700K

Rotating gobo wheel x 2, each with: 6 rotating, indexable and replaceable breakup and aerial gobos + open, patented slot & lock system

Animation wheel: Aluminium animation wheel, used alone or in combination with gobos, rotating in both directions at variable speed

Multi-Level Prisms allow multiple prisms to be "stacked" while retaining individual speed and direction control

Setting & Addressing: ROBE Navigation System 2 (RNS2)

Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN



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Who's for Hire?

by John O'Brien



"There is no production vehicle quite so fast as the hire car." Until the recent batch of all-power-instantly electro-rockets, that maxim held pretty true. The only other ICE (Internal Combustion Engine) vehicle to come close was the taxi, and these are being Uber-ed out of existence.

Driver for Rent

See, I have experience with both. Before joining the rock circus, I drove taxis for a year. Five nights a week, I'd walk around to the depot - a convenient five-minute stroll from our Richmond share house - and jump behind the wheel of a Silver Top. Changeover was at 6pm and it was usually best to get cracking straight away before the night got too long. Which meant contending with the dregs of peak hour traffic while picking up as many late commuters as possible.

Initially approaching it as a rough and ready cabbie for hire, I soon realised that this gig was all about customer service. Do you drive fast, or slow? Do you talk, listen, or travel in silence? How far do you go to assist passengers, either personally or with luggage? These questions must be answered quickly to set the appropriate tone for the journey right from the outset.

I got very good at summing people up in a matter of seconds. When you are in a confined space with random strangers, it is crucial to get this call correct. Particularly when they are off their heads or generally unbalanced. In the enclosed bubble of a car cabin, personal safety dictated identifying whether the client was a physical threat or not. Get that wrong, and it's a trip to hospital or worse.

Opening the door for the old ladies before driving sedately and cautiously, helping with suitcases or shopping, identifying when to yack or shut up - these nuances went a long way at payment time. I got more tips than most in our depot. And not always for playing nice. Some punters would offer extra to hit their destination quick; more than a few mad rushes to the airport were well rewarded.

Road rules seemed more guidelines than fixed boundaries at times. These got well and truly broken when I launched a car full of teenagers

across Dandenong Rd. They'd jumped in at Brighton and said, "how fast does this car go, driver?" "Buckle up and hang on" was my response. I gave them a thrill and they emptied their pockets of change at the other end for providing exactly the service they wanted.

The XE and XF Ford Falcons we drove were extraordinarily average but very predictable to throw around. We got some early Series 1 EAs, but they were awful to drive, so I stuck with the trusty old boilers. Take a standard sedan, attach a dome light and it's like unlocking a secret upgrade to your favourite Need For Speed roadster.

88 was my regular, a smooth XF with only about 350,000km on the clock. It had a really good radio until some casual got it swapped out one night. Dispatch was all analogue back then and being able to win a job by hitting the button quickest made a big difference to payday.



Rental and/or General

The previous anecdotes are about chartered vehicles. Live events also have plenty more rental requirements. PAs, light shows, video gear - few acts could afford to own all this equipment. Even the production companies that they hire from may not fully own the show gadgets. Such a large capital investment can result in multiple lease arrangements and funky deals with the bank, renting someone else's money to top up the inventory with the latest shiny things demanded on tour riders. A veritable ongoing Ponzi.

If you own the trucks that move all that gear around, you'll likely take care of them. If you rent them from someone else, they might just be the fastest rigs on the road. One production company I worked for had mostly sensible Hinos or Isuzus. They also had a V8 petrol powered 13 ton International. Fully loaded, it drank juice like a convention of winos. Unladen, it was an absolute rocketship and was super easy to get the front wheels off the ground. A lot of fun was had dragging off hot cars at traffic lights, but it proved way too thirsty to keep in a profitable working fleet.

Nowadays, I rent out my keyboard and mind. When I get the two functioning together, it produces an income. It's less exhilarating, but a whole lot safer than going sideways on the road for a living.

Body and brain for rent. When it comes to commerce, that's what you are, what we all are. Workers for hire, whether casual, part-time or full-time. Unless you own the business, then you get to rent out the staff on your employ. Kind of like a landlord for human capital. You can use those mad profits to lease an exotic urban tractor. At least you'll look stylee on the traffic cameras as you speed past them on the way to losing your license.

The Hire Car

One year of taxis was enough to start driving me crazy. I fell into the rock world and upgraded to hire cars as my regular mode of transport. Falcons, Commodores, and Taragos were the mainstay of 90s touring. Without having to worry if your day driver had a ride, these things got put through hell. If it broke, you could just call up the hire company and get it replaced.

Which is what happened when PK drove a near new Holden wagon at 200+kph from the 'Gong to Sydney. Wouldn't start next morning, so we rang up and demanded a new one. I mean, how could they provide us with such a lemon? They probably knew we'd thrashed it, but car hire business was still good at the end of the golden age of touring. So, they promptly brought us out a new vehicle to (ab)use.

Another case of outright debasement occurred anecdotally in Perth. DH and BP were hooning through Perth, chasing another hire car at great speed. The lead car slowed in time, but

DH went straight through a roundabout at 160+, taking out several telco sub stations, going through a fence and ploughing into a field. Neither were harmed but the car was a write-off. From memory, they blamed brake failure and got away with it.

Post show one night the singer took off in the tour car, more than a few beers in. He was trying to impress his new lady friend. She wasn't so enamoured when he totalled the vehicle. He swore he hit a 'roo but we knew he'd done some accidental cross country manoeuvres cos he was pissed.

The worst crime with hire cars I can admit to was leaving a chocolate bar in the centre console of one wagon. It melted in the heat and got all around the transmission selector. I fudged a cleanup, but the hire folks were on to us. For the next year, every time it was my name (or that band's name) on the pickup, we'd get that exact same unit back, even when there were better options on the lot. And it still had brown smudges next to the gear lever.

Are you concerned about your mate's mental health?

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

Support those around you and register for free mental health training



www.entertainmentassist.org.au

Supporting the mental health of Australian entertainment industry workers

¹Passion, Pride, Pitfalls Dec 2014

MEN IN PINK



The Delltones live at the Glasshouse Theatre Port Macquarie 2011

The Delltones: Doo-Wop Days

Snippets from the archives of a bygone era

It's been 65 years since The Delltones, who only disbanded in 2016, first graced Australian stages in 1958. I was fortunate to catch up with them in 2011 at the Glasshouse Theatre, Port Macquarie, for a picture shoot and article for CX. At the time, things were changing, with the group reverting to their original line-up of a quartet. Twelve years on, I caught up with Ian (Peewee) Wilson and his wife and group manager, Carla, to talk about the doo-wop days and if there was a chance we would again see The Delltones back in pink.

In the 2011 interview, Peewee made mention of a 1959 concert at the Sydney Stadium where The Delltones opened the show, then sang backing vocals for Johnny O'Keefe and American singer Fabian. The 1959 Stadium concert, which was a seven-camera shoot on 35mm film, was commissioned by the show's promoter, Lee Gordon. However, due to some managerial and distribution disputes, which included Fabian's management having the headliner's footage removed from the film, it faded into obscurity and was thought to be lost.

I only recently learned that the film, now entitled *Rock 'n' Roll (1959)*, was found in a rusty can at a Melbourne auction in March 2020, and a restored version premiered at Dendy Cinemas Newtown on May 22, 2023. The trailer for the film and a couple of short clips can be seen on various internet video channels.

"We only had about half a dozen songs when we did our first professional gig at Sydney Stadium. We auditioned for Bob Rogers, the disc jockey, in the hope that he could steer us and secure a record deal for us. He sent us down to meet Lee Gordon in the hope that we could secure a spot on the next live show," said Peewee.

That 'next live show' was the 1959 Sydney Stadium Concert, which became the launch pad for The Delltones enduring career.

"When we went to Lee Gordon's office, we met Johnny O'Keefe for the very first time, and he handed us some of his records," said Peewee, who says The Delltones were then asked by O'Keefe if they'd learn the backing vocals for his songs."

"I remember Lee Gordon saying, 'You've got your own spot to open the show', three songs.

'You've got the backups for Johnny O'Keefe, and do the backups for Fabian'. That was our first professional encounter."

Peewee says it was mind-blowing for the boys to come out of obscurity and find themselves in front of four thousand kids screaming their heads off.

"They'd never heard of us; we hadn't recorded at that stage, but they went just as crazy for us as they did for all the other acts."

There was no audition tape offered at Lee Gordon's office. "We went into the office and did a couple of acapella songs, and it was a thumbs up from that moment on. And then he (Johnny O'Keefe) used us as his vocal backing band for his records, including 'Shout' and a whole bunch of other songs," said Peewee.

Apart from hearing their hit songs on the



Johnny O' Keefe with The Delltones

radio, which included 'Get a Little Dirt on Your Hands', 'Hangin' Five', and 'Come a Little Bit Closer', and seeing their numerous television performances, I had never seen The Delltones live until 1992, when they performed in the Starlight Room at Wentworthville. I was the house sound engineer and the employer of the lighting and follow spot guys at Wenty's, but I didn't get to mix the band because they brought in their own sound and lighting gear and crew.

In that era, there were a lot of acts just using the house PA and lights, not carrying their own crews or PA and lighting equipment, and if they'd had a hit song or a few television performances under their belt, they just traded on their name. That wasn't the case with The Delltones, who put a lot of their money back into the touring gear and costumes and progressively built up a very impressive sound and lighting show, which was a far cry from the Bose system that went into a Bongo van when they were touring in the early days.

"We ended up at the peak of our career with a Meyer Sound system. It was a big system, and we had six in the crew at that time. But we wanted to get all of our own gear so we could be independent. We were fiercely independent because we knew we weren't going to get a lot of assistance from the music industry. They were into contemporary music, and we were into doo-wop and crossover music," says Peewee.

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Carla Wilson, Delltones Manager with Stage Manager Tony Fraser



The Delltones, 1959, Sydney Stadium

Towards the end of 2015, the costs of touring with a huge system and other overheads became a cause for concern. Carla was looking at ways to change the business model, but says that things just got too hard.

“We were still touring around with a huge analogue system, which was great because it was just the right system that we’d honed and perfected with Allan Griffin our sound guy, who is a legend. We were going to do some gigs in 2016, but we pulled out because it was time to pull the plug for a while. It was getting a little tedious. I thought, ‘It’s not really fun anymore if you’re always looking at the pennies and trying to make things work’. Our last show was in October 2015 at Taree.”

“We’re still mates (with Allan Griffin), and that’s the same with Steve Wright, our lighting guy. We still talk, and they say, ‘Oh, come on, Mum (they used to call me Mum), please put it together again’, but I tell them I’ve got to play in the garden for a bit longer,” says Carla.

Prior to packing my bags for the 2011 trip to Port Macquarie for the Glasshouse Theatre performance, Carla had asked me to take some press photos of the group because they were reforming as a quartet. So the pictures didn’t include lead singer Danny Mayers, who had announced his imminent departure. I was only proficient in concert photography, where you

don’t set lighting, arrange posture, or direct talent because you can’t; it’s all point-and-shoot. You just make sure you have the right camera settings. However, a mate I’d worked with in the 70s used to say, ad nauseam, “When the spotlight hits you, you’ve got to dance.”

Prior to the performance, the band got dressed in their pink outfits, which reflected the theme of their 1984 album, *Tickled Pink*, and *Peewee* said, “What do you want us to do?” I went for my comfort zone and suggested that the band sing. We arranged some mics, and the guys armed themselves with instruments. The guitars and microphones were plugged in for authenticity, but nothing was turned on. As I snapped away, I couldn’t believe what I was hearing: an acappella performance with chemically sharpened harmonies. The pick of the shots (pictured) did appear on The Delltones website for a time before being replaced with a more up-to-date picture.

Reflecting on that photo some 12 years later, Carla said, “We have used that shot on numerous publicity promotions.”

The Delltones went through a number of line-up changes after the death of Noel Widerberg in a car accident in 1962. Widerberg was replaced by Col Loughnan, formerly the lead singer of *The Crescents*, who also appeared in the *Rock ‘n’ Roll* (1959) film at the Sydney

Stadium. Up until 2016, some 22 members have performed in The Delltones.

2023 has been the year of The Rolling Stones and The Beatles releasing new songs highlighted by videos using restored vintage footage. And Stephen Sanchez had a huge hit in 2021 with his 50s-sounding hit, ‘Until I Found You’. In light of the fully restored footage of the 1959 Sydney Stadium show, I asked Peewee if this could be a platform for a Delltones revival.

“I haven’t seen the full movie yet, but I’m hoping to catch up with it and watch it,” said Peewee.

Although invigorated by the restoration of the 1959 Sydney Stadium footage, Peewee adds a note of caution regarding the compatibility of the genre of new material and the vintage of the artist performing that material.

“They will take a contemporary artist and give them a song, or they (the artist) can write a song or record a song that has all the flavours of the 50s or the 60s sound, but if a 50s and 60s artist does it they tend to shy away from it. It doesn’t get the same sort of attention,” said Peewee.

But Peewee hasn’t totally ruled out some kind of revival. “Whether the band reforms or not, I really don’t know. We have talked about it just briefly, but at the moment, it’s still up in the air.”



Ian (Peewee) Wilson



Peewee's stage leaps

aceta

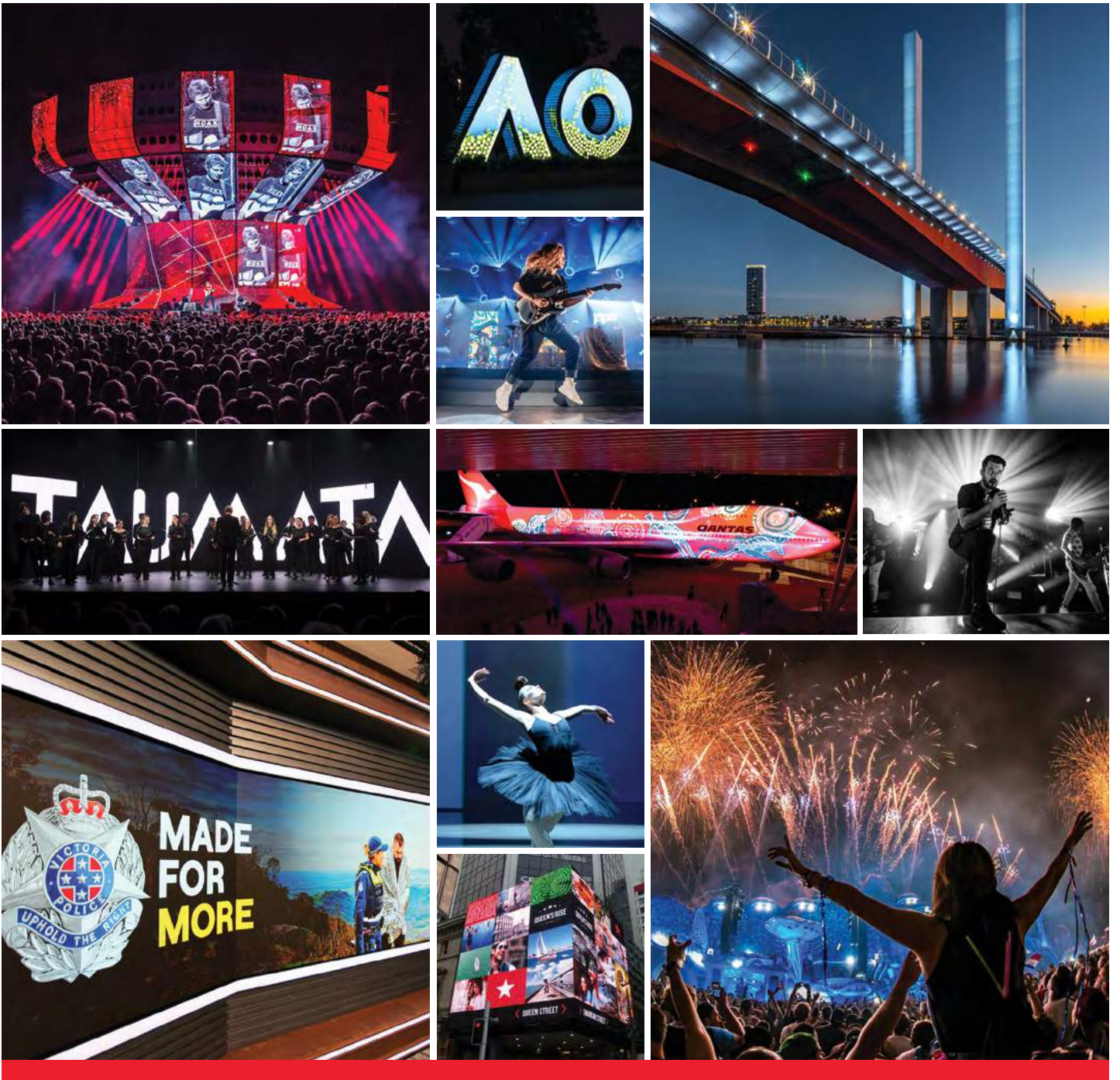
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