

CX

INTEGRATION / AUDIO / LIGHTING / VIDEO STAGING

TECH TALK PIXOTOPE

Alter Your Reality Through the Lens

LIVE

KAGAMI

Ryuichi Sakamoto and Tin Drum's Groundbreaking Mixed Reality Concert

THEATRE

A Sonic Vision for Broadway's *Redwood*

A vibrant, breathing forest where every sound envelops you

TRADESHOWS

ISE 2025

Let There Be Lighting Hall Six!

THE PEOPLE ISSUE

We put out the call to celebrate the most important thing in our industry – our people. So here's to everyone who put down in words why they appreciate the people they work with, and what they do that's so awesome

LIVE

Disco meets Orchestra

The Sydney Symphony Orchestra, a band and vocalists for a disco show – *what's not to like?*

News

- / AV1 and AVE's ROE Topaz Investment
- / BSG is Australia's First L Series Rental Partner
- / LSC appoints lighting specialist
- / L-Acoustics and Treble Technologies Partnership
- / Powersoft Acquires 51% of K-array
- / Shure Celebrates 100 Years!
- / Scene Change Brisbane turns 10!
- / The P.A. People at Stage Queensland
- / Cosentino and ACME Gemini
- / ULA Group Expands

Regulars

- / Andy Stewart's Listen Here
- / Jenny Barrett in NZ
- / Backstage with John O'Brien
- / Brian Coleman: The Gaffa Tapes

RoadTest

- / Astera QuikSpot
- / Ayrton Karif LT

The new cardioid way.
Next level.
Scaled down.



More art. Less noise.



VIC: (03) 8756 2600
NSW: (02) 9898 0670
sales@nas.solutions
www.nas.solutions



SHURE

EXPANDABLE. FLEXIBLE. UNSTOPPABLE.

Transform performances from everyday to epic with Axient® Digital PSM.



Unparalleled transmission quality and flexibility, check.
Complex productions that push creative boundaries, check.
Up to 28 channels in a single 6 MHz band, check.
Simpler, quicker setup that frees up more time for mixing, check.

Axient Digital PSM checks all the boxes, setting the new standard for wireless, in-ear monitoring. Built on Shure's extraordinary legacy, it delivers a balanced, clear mix in any venue, any time.

proudly distributed by



JANDS

jands.com.au

CONTENTS

News

AV1 and AVE expand LED capabilities with ROE Topaz Investment	4
Brisbane Sound Group Becomes Australia's First L-Acoustics L Series Rental Partner	6
LSC appoints lighting specialist to lead Avolites representation	8
L-Acoustics and Treble Technologies Announce Strategic Partnership and Investment	8
Powersoft Acquires 51% of K-array, with Option to Reach 100%	10
Shure Celebrates 100 Years of Audio Innovation	10
Scene Change Brisbane Celebrates 10 Years	14
The P.A. People deliver at Stage Queensland	16
Cosentino Brings the Magic with ACME Gemini	18
ULA Group Expands	19
New Gear	20

Features

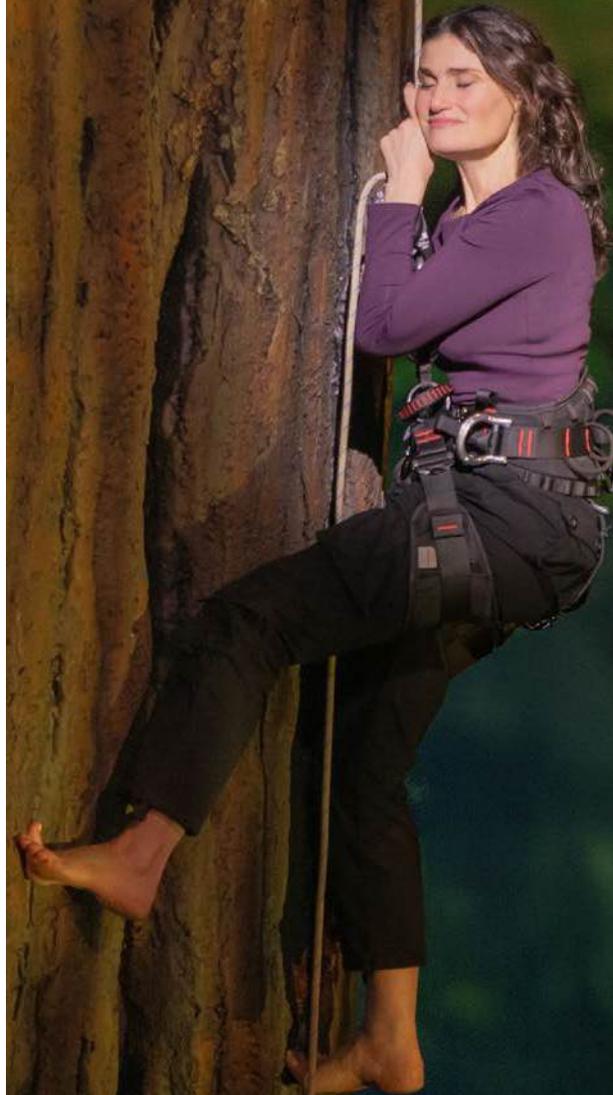
Tradeshows: ISE 2025 – Let There Be Lighting Hall Six <i>by Marcus Pugh</i>	26
Live: Disco Wonderland <i>by Julius Grafton</i>	36
Live: Kagami <i>by Jason Allen</i>	40
The People Issue <i>by Jason Allen</i>	45
People: The Perfect Employer! <i>by Julius Grafton</i>	54
Backstage: Working Backstage, Part 1 <i>by Julius Grafton</i>	56
Tech Talk: Pixotope – Alter Your Reality Through the Lens <i>by Jason Allen</i>	60
Theatre: Meyer Sound System Helps Jonathan Deans Achieve Sonic Vision for Broadway's Redwood	62

Regulars

New Zealand: Droneshows Takes Flight <i>by Jenny Barrett</i>	31
Listen Here: Balance, and the New World Order <i>by Andy Stewart</i>	34
Backstage: Bods or bots? <i>by John O'Brien</i>	70
The Gaffa Tapes: The Good, the Bad, and the Ugly Promotions <i>by Brian Coleman</i>	72

Road Test

Astera QuikSpot <i>by Kurtis Hammer</i>	66
Ayrton Karif LT <i>by Kurtis Hammer</i>	68



Cover Photo – Disco Wonderland. Image courtesy of Sydney Symphony Orchestra. Photo by Jay Patel.
Contents Photo – Idina Menzel in Redwood. Photo Credit: Matthew Murphy and Evan Zimmerman for Murphy Made.

CX is published by VCS Creative Publishing Pty Ltd
PO Box 1045, Ascot Vale, VIC, 3032
Phone +61 (0)407 735 920 | Email jason@vcscreative.com

Editor and Publisher: Jason Allen
Layout: Hush Creative Productions – Mark Underwood and Alisha Hill

All contents COPYRIGHT CX Network Pty Ltd 2025.
Nothing herein to be reproduced in any format without express written consent.



AV1 and AVE expand LED capabilities with **ROE Topaz Investment**

AV1 and Audio Visual Events (AVE), both Sydney-based AV companies, have announced a strategic joint purchase of ROE Visual Topaz 2.6mm LED panels, solidifying their commitment to delivering exceptional high-end vision solutions for the Australian events market. This substantial investment encompasses over 180 square metres of Topaz 2.6 LED, including standard, corner, and curved panels.

The addition of Topaz to their inventories unlocks a new level of creative potential for both companies. The technology's ability to form curved displays, seamless corners, and innovative shapes such as cubes and cylinders offers clients more visually striking and adaptable LED solutions. This means greater creative freedom for event planners and more engaging experiences for audiences.

By pooling resources, AV1 and AVE have ensured access to a larger inventory of premium LED technology, allowing both businesses to scale up for bigger productions while maintaining consistency in quality. Sourcing the panels from the same manufacturing batch guarantees seamless colour matching and uniform performance across projects.

For AV1 and AVE, this partnership represents a shared commitment to investing in industry-leading technology. By working together, both companies can provide greater availability of Topaz LED to the market, ensuring that corporate events, conferences, gala dinners, and hybrid productions benefit from the latest in LED display innovation.

"Clients are always looking for fresh concepts," says Paul Keating, Director, Sales and Marketing Manager at AVE, "so Topaz's ability to combine convex and concave shapes via in-panel curves, corners, cubes and straight panels opens a world of creative possibilities. This batch buy with AV1, a respected and trusted industry colleague, ensures we have market-leading LED offerings on a larger scale. It also reinforces AVE's ethos to continue to invest in premium industry standard products that our technicians are proud to use."

"After rigorous testing and comparison of the industry leaders of LED rental technology, we chose ROE for their outstanding image quality, high contrast and deep blacks," says Mark Shepherd, Director, Head of Production at AVE. "Topaz's build quality is second to none, and we've backed that up with Brompton processing, making our ROE solution a complete package suited for a variety of work. The sales support we received throughout the process was outstanding. Based on the factory acceptance tour, post-sales support and training programs for our production and service technicians, we are very confident of ensuring the best possible outcomes on every show we deliver with Topaz."

"We are always looking for ways to deliver new and exciting offerings for our clients, and this is no different," says Nigel Mintern, Managing Director at AV1. "We can now deliver LED designs that break the mold for clients who are looking for new ways to make an impact. Whether that's curved walls, seamless corners, or immersive LED environments. The flexibility of this system means we can shape content

around the audience experience, rather than the other way around. By partnering with AVE, a trusted partner, on this investment, we're ensuring that clients have access to the highest-quality LED on the market at any scale. It's not just about bigger screens - it's about smarter, more creative solutions that solve real-world production challenges and elevate the standard of event experiences across Australia."

"We are thrilled to see AV1 and AVE take this bold step forward in elevating the Australian events market with their investment in ROE Visual Topaz 2.6mm LED panels," adds Grace Kuo, Sales Director at ROE Visual. "This strategic move not only underscores their commitment to innovation and excellence but also sets a new benchmark for high-end visual solutions in the industry."

"The versatility of the Topaz panels, combined with their exceptional image quality and build, aligns perfectly with the demands of today's creative and technical landscape. It's inspiring to see industry leaders like AV1 and AVE pushing boundaries and delivering premium experiences for their clients."

"We look forward to witnessing the incredible productions that will undoubtedly come to life through this collaboration and investment. Congratulations to both teams on this exciting milestone!"

av1.com.au
audiovisualevents.com.au



The new cardioid way. Next level. Scaled down.

Single-channel broadband directivity for all. CCL is a compact cardioid line array. A big idea, right sized for the most accessible range of applications and audiences.

Experience more at dbaudio.com/cl-series



More art. Less noise.





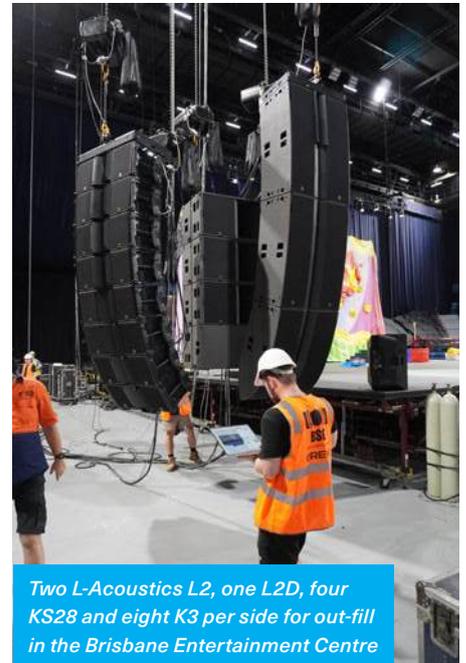
Brisbane Sound Group applied their L Series training at the Brisbane Entertainment Centre for The Wiggles' performance



L Series training delivered by L-Acoustics



BSG's brand new L-Acoustics L2 and L2D



Two L-Acoustics L2, one L2D, four KS28 and eight K3 per side for out-fill in the Brisbane Entertainment Centre

Brisbane Sound Group Becomes Australia's First L-Acoustics L Series Rental Partner

Brisbane Sound Group (BSG) has marked a significant milestone in Australia's professional audio landscape by becoming the country's first L-Acoustics Rental Network partner for the L Series concert sound system. This strategic expansion of their L-Acoustics inventory positions the company to deliver enhanced live sound solutions for major productions across southeast Queensland.

The decision to invest in L Series follows BSG's successful track record with L-Acoustics solutions since 2020. "Our journey with L-Acoustics has been one of continuous growth, starting with A15 and Kiva II systems, then expanding to K3 in 2023," explains Josh Bonnici, Operations and Marketing Director at BSG. "Adding L Series was a natural progression that aligned perfectly with our operational needs and growth strategy."

BSG's investment includes four L2 and two L2D elements, complemented by LA-RAK III

touring racks and additional KS28 subwoofers. For the team at BSG, the decision was driven by practical considerations. "We conducted extensive analysis using Soundvision to compare L Series' performance against our existing inventory in familiar venues. The results were compelling – L Series not only promised superior performance efficiency but also expanded our capabilities significantly," explains BSG's Head of Technical Resources, Rob Bird.

The system's cardioid design, offering enhanced rear rejection and clarity, combined with its lightweight construction and streamlined deployment processes, were key factors in BSG's decision. "In our business, time efficiency is crucial," notes Bonnici. "L Series' design allows us to maintain our high service standards while taking on more ambitious projects, from arena concerts to major outdoor festivals."

To achieve L Series Rental Network Partner status, BSG's technical staff completed comprehensive L Series training delivered by L-Acoustics at their Northgate facility. The training covered both stereo and L-ISA immersive audio applications, ensuring the team could fully leverage the system's capabilities. Within a week of certification, BSG put their expertise to work for The Wiggles performance at the Brisbane Entertainment Centre, where the system exceeded expectations in its first major deployment.

Established in 1985, BSG has built its reputation through almost 40 years of excellence in professional audio solutions. With a team of over 25 technical professionals, many boasting decade-plus tenures, the company maintains high standards across sound system sales, hire, service, and installation for various event productions.

www.brisound.com.au



Talkback
Control the talkback from these buttons.

Program Mix
Listen to the program audio mix

Source Select Buttons
Input buttons for live switching from the front panel!

Source and Control
Downstream keyer, media players, fade to black and transition selection.

Spin Knob Control
Knob allows scrolling through on screen menus.

Menu Button
Select menus, change switcher settings and control audio mixer.

USB Connection
Supports live webcam video out, or it can be used for ATEM Software Control.

Reference In
Supports black burst or tri-sync reference for connecting to broadcast systems.

Standards Converted Inputs
40 x 12G-SDI video inputs for all 720p, 1080i, 1080p and 2160p video standards.

24 Independent Aux Outputs
Multiple 12G-SDI outputs can be set to PGM, PWV, Sources, AUX and more.

Multiview Outputs
Monitor all inputs, media players, PGM, PWV and more on a single display.

Introducing the New ATEM 4 M/E Constellation 4K!

Introducing the world's most powerful 4K live production switcher! ATEM Constellation includes advanced features such as DVEs, media players, advanced chroma keyers, multiviews, and more! The built in Fairlight audio mixer includes a compressor, limiter, 6 band parametric EQ on each input. With the new ATEM 4 M/E Constellation 4K, now you get an affordable way to upgrade to Ultra HD!

Standards Converted 12G-SDI Inputs!

The ATEM 4 M/E Constellation 4K features 40 independent 12G-SDI inputs, with each input featuring its own dedicated up and cross converter. That means it's possible to convert any 1080p input source to the video standard of the switcher! That means each switcher SDI input can run a completely different television standard and it all just works!

Customizable 12G-SDI Outputs

ATEM Constellation has a massive number of independent 12G-SDI outputs. These SDI outputs are very powerful because you can independently route any SDI input or any internal source to each SDI output. That's perfect for running independent feeds to stage screens, master recorders and streaming processors. All SDI outputs contain RP-188 timecode, SDI camera control, tally and talkback.

Includes Multiview with Labels, Tally and Meters

The built in multiview lets you monitor multiple sources on a single monitor. All external SDI inputs, plus all internal video sources can be routed to any view. The multiviews are fully customizable and can be independently set to 4, 7, 10, 13 or 16 simultaneous views. That's a massive 64 views across 4 monitors! You can also add a tally indicator, source label and VU meters as an overlay on each view.

Choose from Hardware or Software Control Panels

Included with ATEM Constellation is a free software based control panel for Mac and Windows. Then, when you need more power, you can add an ATEM Advanced Panel with broadcast quality buttons, knobs and a t-bar fader. These panels work with all ATEM switchers, even the powerful ATEM Constellation 8K, meaning you are always ready for future video standards.

ATEM 4 M/E Constellation 4K **\$14,715**
ATEM Advanced Panels **From \$4,905**



Add the speed and power of an ATEM Hardware Panel!



LSC appoints *lighting specialist* to lead Avolites representation

Following the news that LSC Control Systems will distribute the products of UK-based Avolites in Australia and New Zealand, LSC has announced the appointment of a dedicated Avolites specialist. Clare Springett, as Business Development Manager Avolites Australia and New Zealand, will head up sales and support for the famous lighting control brand in the region, beginning with immediate effect.



A well-known presence in Australia's professional show production world, Clare is an experienced lighting designer, production manager, arts practitioner, venue manager and theatre technician. She holds a Bachelor of Arts in Theatre Performance, a diploma in Live Production Theatre & Events and within a remarkably diverse skill set has a forklift license, Basic and Intermediate Rigging qualifications and a heavy vehicle driver's license.

Most recently she worked as Sales and Hire Manager at Concert Lighting Systems Australia and was the touring LD and operator for Tim Minchin's 2024 tour UNFUNNY – An Evening with Tim Minchin and his Piano. Also on her resumé, she is a Green Room Award nominee (Lighting Design) and was Acting Chairperson for the VAPAC Technical Managers Network in 2018 and 2019.

Clare is looking forward to working with existing Avolites customers, as well as building new connections and introducing designers, programmers, and operators to the company's

range of consoles. She says, "We have an exciting opportunity to build a really strong and supportive Avolites community here, and I'm very chuffed to be a part of it as it takes off."

With a broad and varied career in lighting, Clare has a strong track record in the industry and a unique perspective on the needs of the market. "I want the ever-growing Avolites community to know that they are supported, and that they are being listened to," she says.

LSC, the Melbourne, Australia-based manufacturer of advanced dimming, power distribution and power management solutions, was acquired by Robe lighting s.r.o. in early 2024, joining Avolites as part of the Robe group of businesses. In August it was announced that LSC would represent the Avolites brand in its home territory, and the search began for a professional to lead that effort.

Having encountered LSC many times over the years, Clare says, "One thing has never changed – the quality of the products and the knowledge and support offered by the staff." She adds, "To have these two companies now working together is kind of mind-blowing. The possibilities are almost endless."

Welcoming Clare to the company, LSC's General Manager Greg Lowe comments, "We're delighted that Clare has joined us to take on this challenge. With her range of skills and experience we have no doubt that she will play a valuable role in our expanding operation."

L-Acoustics and Treble Technologies Announce Strategic Partnership and Investment

L-Acoustics have announced its participation in Treble Technologies' Series A funding round, alongside a strategic partnership between the two companies.

This strategic partnership unites two industry leaders in a shared mission to transform how audio professionals design and optimise sound experiences. By combining L-Acoustics' renowned sound system expertise with Treble's breakthrough acoustic modelling technology, the brands are creating a more powerful and efficient workflow for their partners, from venue acoustics to system design.



Treble's wave-based simulation technology brings unique capabilities to the partnership, addressing complex acoustic phenomena including diffraction, phase effects, and wave interference - particularly in the low-frequency domain. Their hybrid solver achieves these detailed calculations up to 100 times faster than conventional solutions, enabling partners to analyse and optimize sound behaviour more comprehensively and efficiently than ever before. This collaboration represents a significant advancement in giving sound designers the tools they need to create exceptional audio experiences with greater confidence and precision.

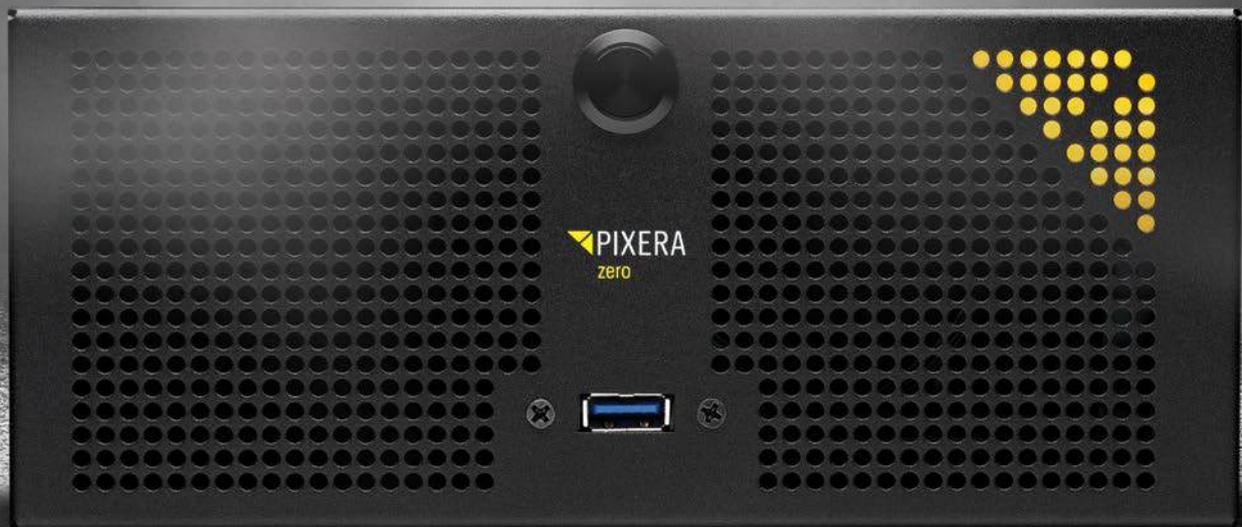
"Treble's approach to room acoustics simulation perfectly complements our commitment to delivering exceptional sound experiences," said Guillaume Le Nost, Executive Director of R&D, Research and

Innovation at L-Acoustics. "By integrating our expertise, we'll enhance our clients' ability to optimize system performance while accounting for room acoustics – ultimately creating more impactful audio experiences for audiences worldwide."

Finnur Pind, Co-founder & CEO at Treble Technologies, expressed his enthusiasm about the partnership: "We are proud to partner with one of the world's leading audio technology companies. The rising trend of virtual prototyping using simulations and synthetic data is transforming our industry, and by joining forces with L-Acoustics, we can accelerate this transformation to create better sounding spaces worldwide. This partnership represents a shared vision for the future of acoustic design and audio excellence."

PIXERA zero

ZERO COMPROMISE



www.pixera.one



For all enquiries and sales, contact your nearest Show Technology below or email sales@showtech.com.au

Australia | Sydney 02 9748 1122 | Melbourne 03 9681 7511 | Perth 08 9248 8119 | Brisbane 07 3267 3177

New Zealand | Auckland +64 9-8693293



Powersoft Acquires 51% of K-array, with Option to Reach 100%



Back Row L-R: Massimo Ferrati (K-array CEO/co-founder), Claudio Lastrucci (Powersoft R&D director/co-founder), Alessandro Tatini (K-Array chairman/CEO), Luca Lastrucci (Powersoft CEO/co-founder), Antonio Peruch, (Powersoft production engineering director/co-founder). Front Row L-R: Carlo Tatini (executive board member/co-founder), Carlo Lastrucci (Powersoft President)

Powersoft, operating worldwide in pro audio systems and listed on Euronext Growth Milan, has announced the signing of a binding investment agreement to acquire 51% of the share capital of K-array, who specialise in the design and manufacture of innovative high-performance, compact design audio systems for a wide range of applications. The agreement also envisages the mutual granting of call and put options in favour of Powersoft and HP Sound, respectively, on the remaining 49% of K-array's share capital.

"We are excited to announce this acquisition," says Luca Lastrucci, CEO of Powersoft. "It's a significant strategic step for our company and the professional audio market. This transaction arises from a successful partnership between two companies that have been collaborating for many years now, with a strong territorial proximity and sharing a creative and innovative spirit, both convinced of the potential to

create important product and technological synergies. We plan to enrich our portfolio with cutting-edge products, leveraging the expertise and resources of K-array to develop new integrated audio solutions for an ever-evolving market. The synergy between Powersoft and K-array is set to generate significant results in technological innovation, allowing us to strengthen our presence in the segments where we already operate while also expanding into new areas. We can't wait to start working with K-array to set new and even higher standards of excellence."

"Massimo Ferrati (CEO and co-founder) and I decided on this strategic step to integrate our company into a solid and constantly growing group like Powersoft," says Alessandro Tatini, Chairman and CEO of K-array. "Our intention is to empower our resources for a promising future filled with opportunities and success. In addition to growth in numbers, the goal is

to strengthen a solid and cohesive foundation capable of tackling future challenges with greater resilience and determination. Our team has been integral to our growth journey, and we believe it is our responsibility to provide them with an even more ambitious vision for our project. We have been collaborating with Powersoft since the beginning, and beyond being neighbours and sharing an identity deeply rooted locally yet globally oriented, we are united by a strong passion for technology and sound. Their innovations have always been an essential part of our work, making it obvious to realise that joining forces could add significant value to the growth that, in recent years, has been in double digits, bringing us immense satisfaction. We are confident that this partnership will allow us to achieve incredible results in synergy. We are excited and eager to unleash our full creativity and potential."

Shure Celebrates 100 Years of Audio Innovation

SHURE 100 YEARS

Shure Incorporated is celebrating its 100th anniversary, marking a century of pioneering innovation, exceptional quality, and unyielding commitment to audio excellence.

The Evolution of Shure

S.N. Shure started the company in downtown Chicago in 1925 selling radio parts kits. In 1932, Shure became one of only a few U.S. microphone manufacturers with the introduction of the Model 33N microphone. Since then, the company has grown into a global technology leader, offering a diverse

portfolio of game-changing wired and wireless microphones, conferencing and meeting solutions, and personal and professional listening products. Over its 100-year history, more than 50,000 different electronics products have been developed by Shure.

Shure products are now sold in more than 120 countries, and through the decades, they have been trusted and used around the world by

such luminaries as Dr. Martin Luther King, Jr., Elvis Presley, Nelson Mandela, The Beatles, and other icons.

Today, Shure products are trusted by performers, content creators, AV and IT professionals, sound engineers, educators, community leaders, and music lovers across the globe in studios, on stages, on playing fields, in meeting rooms, and in everyday life.

SHURE **100** YEARS



+

NEXADYNE MICROPHONES

GIVE GUITARS AND DRUMS THEIR VOICE.

It's a revolutionary approach to live sound. With Revonic™ dual-engine design, guitars and drums come through powerfully and naturally, requiring less work at the board. Two precisely tuned dynamic transducers capture what you hear at the instrument and reproduce it authentically, with little to no additional EQing. And by surpassing real-world reliability standards, Nexadyne mics are the innovative, road-ready choice for modern touring.

SCAN To Find
Out More



proudly distributed by

JANDS

jands.com.au

100 Years of Innovation

Over the past 100 years, Shure has introduced iconic products that have become staples in the audio industry. The legendary Shure SM58 microphone, known for its durability and reliability, has remained the top choice for vocal performances worldwide. The SM7B vocal microphone has equally earned a distinguished reputation, renowned in broadcast, recording, and podcasting industries.

Shure introduced the first wireless microphone in 1953, the Vagabond 88 Wireless Mic, long before wireless technology became popular by the 1990s. The company introduced digital wireless in 2011, and today, Shure digital wireless microphones are used across the world from the biggest sporting events and global concert tours to the top business conferences.

Here is a list of some industry firsts and notable achievements from Shure:

- First Phonograph Cartridge (1937) - Shure's development of the first phonograph cartridge established the company as a leader in high-fidelity audio
- Unidyne Microphone (1939) - The Unidyne Model 55 was the first single-element unidirectional microphone, providing better sound isolation and reducing feedback, making it a popular choice for broadcast and live performance
- First Handheld Wireless Microphone System (1953) - Shure introduced the Vagabond 88, revolutionising the way performers and presenters operated on stage
- SM58 Microphone (1966) - The Shure SM58 became an industry standard for live vocal performance microphones, known for its

durability and reliable sound quality. It is still an icon today

- First Integrated Wireless System (1990s) - The introduction of the Shure UHF (Ultra-High Frequency) wireless systems brought more reliable and higher quality wireless audio transmission, setting new standards in the industry
- Axient Digital Wireless System (2016) - This system introduced innovative features such as interference detection and avoidance, quadversity, and advanced connectivity options, setting a new benchmark for wireless microphone performance
- MXA910 Ceiling Array Microphone (2016) – Conference rooms were changed forever with this remarkable precise audio capture option that inspired a whole new line of ceiling array microphones
- IntelliMix Room (2020) – The first-of-its-kind audio processing software revolutionised the AV industry by optimising audio conferencing with advanced DSP algorithms

Shure's commitment to revolutionising audio has led to significant advances in wireless technology, demonstrated by the evolution of its robust and reliable wireless microphone systems such as Axient Digital. Shure advancements in wireless microphones were built on an explosion of software and networking advances, yielding more intelligent products that work more effectively and sustainably.

Shure's deep experience in acoustics design and software innovation comes together in products like Shure's AONIC line of Bluetooth headphones, professional content creation gear like the MV88+ Video Kit and MV7+ Podcast Mic, and the company's quickly growing enterprise communication portfolio,

the Microflex Ecosystem, which brings award-winning audio quality to boardrooms, governments and educational institutions.

Shure also recently launched ShureCloud, a comprehensive cloud-based platform designed to streamline the management and monitoring of Shure products.

Shure features five global engineering centres dedicated to product development and software excellence: Niles, Ill., USA; Copenhagen, Denmark; Suzhou, China; Edinburgh, Scotland, and Hyderabad, India.

Global Associate Pride

Shure's Core Values were established by Mr. Shure when he founded the company, and today Shure Associates all over the world continue to follow these principles:

- As a company and as individuals, we are ethical, honest, and fair in dealing with Associates, customers, and suppliers
- We manufacture products of unmatched quality, reliability, and durability
- Shure Associates show respect for one another in all circumstances
- Shure is a good corporate citizen, neighbour, and employer

To commemorate this historic anniversary milestone, Shure is launching a series of special activities and products throughout the anniversary year including Associate and customer celebrations. More information about the history of Shure can be found at www.shure.com.

Jands is the exclusive distributor of Shure in Australia, offering access to Shure's legendary range of products, and expert support and guidance. www.jands.com.au



MAMBA

graphical rhapsody



Ayrton presents Mamba, a brand new concept in multi-purpose luminaires featuring a laser source twice as powerful as the Cobra and capable of producing a host of new, breathtakingly spectacular effects. Mamba boasts unrivalled graphics capability, specially dedicated to creating effects. Mamba has been developed as a versatile luminaire that incorporates all the waterproofing functions, while retaining total accessibility and an incredible weight of just 41 kg.

6 Series
500 W

Illuminance at 10 m
2,600,000 lx

IP Rating
IP65

Front Lens
250 mm

Beam Aperture
0.7 ° to 15 °

Weight
41 kg



EXCLUSIVE DISTRIBUTOR FOR AUSTRALIA AND NEW ZEALAND

SHOW TECHNOLOGY - Phone: +61 2 97481122 - sales@showtech.com.au - www.showtech.com.au



Peter Kolevas (Co-Founder, SC), Gareth Percey (SC Brisbane), Ian Whitworth, (Co-Founder, SC) Vicken Hekimian (SC Sydney)



Alicia Thomas, Courtney Hamilton, Harry Upton, Brooke Sharp, Briohny Boater (SC Brisbane)



Tim Connor (SC Brisbane), Steph Connor, Rachel Percey, Gareth Percey (SC Brisbane)

Scene Change Brisbane Celebrates 10 Years



Laura Weston, Larissa Terribile, Natalie Newby, Soon-Mee Draper



Peter Yared, Gareth Percey (SC Brisbane), Samantha Gilmore, Olena Romanova, Victoria Williamson (SC Brisbane), Emily Maddern



Sally Pulford, Emma Kukarin, Dinesh Murugiah, Emma Lydiard



Sally Pulford, Orla Rowe, Jess Dempster, Morgan Mitchell, Kylie Wyatt, Sam Cherry, Hannah Correy, Adriarne De Souza

Scene Change Brisbane celebrated its 10 year anniversary in style in February, coming together with its clients at Bougainvillea House at Howard Smith Wharves.

Over the evening stories were shared, and it was a great reminder of how far they've come and the awesome relationships they've built along the way. The whole team were feeling very proud as they looked around the room, filled with people who have supported them and made every success possible.

One moment that seems to have stood out to everyone present was when Director Gareth Percey took the stage to deliver his emotion-fuelled speech. It was a moment that spoke to how much the past 10 years and the relationships that have been built meant to him. Here is a snippet:

"Each one of you here tonight is here because you have had an impact on our organisation and been part of the Scene Change story. From our longest serving clients, the team at Hotel Grand Chancellor Brisbane, to those who have just given us some of their time to catch up for a chat and a drink of some kind, you have been part of our journey."

"It's fair to say the last 10 years have been a rollercoaster ride as you would expect when starting up a new business. We have achieved great things along the way but have had a few considerable challenges thrown in to remind us that it's not all beer and skittles in the world of business events."

"In January 2015, after two weeks road tripping up from our home state of Tasmania, my wife Rachel, our kids, and I rolled into Brisbane, cars packed to the roof not really knowing what we were about to get ourselves into. No family or friends to lean on or even where to find the best coffee. The adventure was about to get real."

"We had just sold the family home of many years to fund this new venture that is now Scene Change Brisbane, how exciting it was. I really don't think we had any idea of how big a deal it would be."

"What started from humble beginnings in our garage, hiring vans, borrowing extra cables

off competitors, relying on mates of mates to fill shifts, has now turned into an amazing organisation and something to be proud of. An organisation jam-packed with amazing people doing what they love to do. Working alongside the best creative events people in the country. I am very fortunate."

"This month, 10 years on, we start the next phase of our journey, the next evolution in Scene Change Brisbane. The relocation to a larger warehouse and office facility giving us even more space to grow, more space to nurture the next generation of technical talent, more space to develop our technical offerings. It truly is a sign of where we started and where we are now headed."

"It's times like this you need to take a step back and appreciate the journey, celebrate the wins and look to the future. Something that while you are in the thick of it you may forget to do."



Symetrix in Control

Cross platform endpoints
that lift the standard

Symetrix xIO endpoints have a growing library of plug-ins enabling functionality across a wide range of control platforms and ancillary products. Upgrade any popular platform with Symetrix xIO - You will notice the difference.

The xIO Series sets the new standard for performance IO with Dante enabled high definition audio, industrial strength materials, cross platform AV control options and more.



xIO USB Simplify USB audio for unified communications and large AVoIP Systems



xIO RCA and Bluetooth Stereo
RCA and 3.5 analogue IO for the
connection of user supplied devices

Contact PAVT and see how Symetrix quality DSP
can make your next installation a showpiece.



AU: sales@pavt.com.au or +61 3 9264 8000 | NZ: sales@pavt.co.nz or +64 9272 8041

www.pavt.com.au



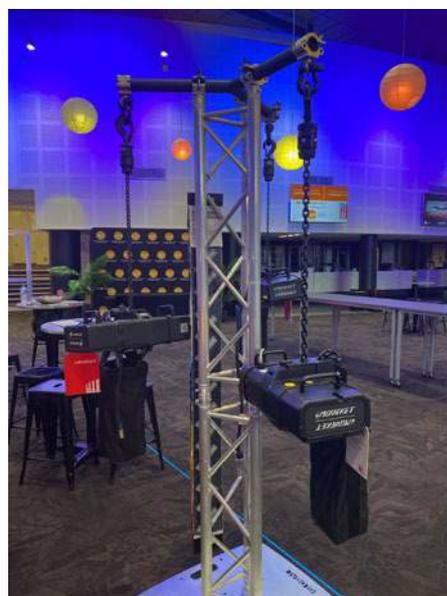
The P.A. People deliver at Stage Queensland

The P.A. People were once again honoured to be the Platinum Sponsor at the Stage Queensland Technical Managers Conference 2025, held in February at the sunny Gladstone Entertainment and Convention Centre.

Andrew Mathieson, Peter Grisard and Tim Pike make the trek north, where they spent three days talking to the delegates and visitors to the conference. Andrew then hosted a very informative Venue Engineering Q&A session, where the team answered both pre-submitted and on the spot questions about stage machinery and safety responsibilities for venues.

Alongside their Venue Engineering presence, Bose Professional also featured on the stand, highlighting their ShowMatch and AMM Series loudspeakers, perfect for performing arts venues and multipurpose environments.

If you are attending the NAPACA Technical Managers Conference 4-5 March in Woollongong, keep an eye out for The P.A. People there too, proudly featuring as a Silver Sponsor, and presenting on 'Venue Engineering, Project Delivery, and Servicing. Find out how The P.A. People can be your delivery partner and installation ally when it comes to design, safety and maintenance in your venue'.



THE DEFINITIVE CONSTANT CURVATURE SERIES



TORUS

TORUS cabinets can be arrayed either vertically or horizontally — offering full configuration flexibility to match the coverage and SPL requirements of the venue. A phase plug mounted in front of the LF driver increases mid-band sensitivity, while multiple high temperature polymer dome neodymium compression drivers deliver greater high frequency extension with low distortion and improved transient response.

martin-audio.com

tag | Technical
Audio
Group

ar@tag.com.au | (02) 9519 0900

Unite Your Audience
The Martin Audio Experience





Cosentino Brings the Magic with ACME Gemini



Gumball Enterprises, producers of the award-winning shows for Australia's #1 magician and illusionist, Cosentino, brought their magic to the stage at The Palms at Crown in Melbourne to kick off his brand-new magic tour, Decennium.

Celebrating 10 years on the scene, Cosentino's new 90-minute live show features his most death-defying escapes, his greatest-ever mind-boggling stage illusions, and cutting-edge street magic that twists your view of reality.

Lighting designer Cam McKaige crafted the spectacular design for the new show, which featured 14 ACME Lighting Gemini multi-functional fixtures, taking the visual spectacle of the performance to the next level. The Gemini fixtures were hung from the upstage bar and served as the main high-impact effect luminaires, adding to the dramatic looks on stage.

Adam Cosentino, the Production Manager for the tour, jumped at the opportunity to utilise the highly flexible Gemini fixtures, providing that extra punch to the stage. The unique design of the ACME Gemini combines a high-powered LED bar with individual pixel control on one side, along

with a high-intensity strobe and individually controlled zones on the reverse side. All of this is packed into one fixture offering infinite pan and tilt, producing unparalleled stage effects.

"The ACME Geminis were a fantastic addition to the overall production; the versatility of the unit is amazing," comments Adam Cosentino.

"The Geminis were an excellent fixture to complement the Cosentino show," confirms Cam McKaige. "Having the option to flip the unit from an LED batten to a strobe brought a new dimension to the show. Versatility is a really important feature when looking at new fixtures."

ULA Group Expands



Mike Davies



Kajal Desai



Jory Enright

ULA Group have started the new year with fresh new talents joining their team. Some of them have been with ULA for a few months already, so here is the official introduction and warm welcome to Mike, Kajal and Jory!

Mike Davies

LED Screens and Digital Technology Sales Executive

Mike is an experienced AV and LED specialist with a strong background in technical production, project management, and sales. He's been on the tools, led teams, and delivered high-end digital solutions for events and installations across the country.

Mike's expertise in fixed installations has seen him deliver multiple projects across the DOOH, stadium, hospitality and gaming sectors.

Outside work, he's all about surfing, playing guitar, and hanging out with his kids at the beach or on the basketball court. He also loves to travel, especially anywhere with great food, drinks, and tropical beaches!

Mike will be based in ULA's new Queensland HQ and servicing their clients predominately in QLD, NT, and northern NSW.

Kajal Desai

Digital Designer and Content Creator

Kajal is a creative powerhouse with a passion for stunning visuals and engaging content. From crafting eye-catching graphics and animations to producing interactive digital experiences, she brings campaigns to life across websites, social media, and various marketing platforms. With a background in digital design, photography, and content strategy, Kajal thrives on collaboration, working closely with teams to create impactful visuals, promotional videos, and engaging blogs.

We are thrilled to have Kajal join our creative team! Based in our Victorian office, you can expect to see her behind the camera, capturing some of the exciting projects and productions of our clients.

When she's not immersed in pixels and palettes, Kajal loves exploring Melbourne, capturing moments through her lens, and finding the best cafes and food spots.

Jory Enright

Technical Sales Executive

Jory is a passionate tech specialist with a strong background in LED screen technology, event production, and technical solutions. From high-profile events like the Australian Open, Melbourne Fashion Festival, and F1 Australia with Harry the hirer, to designing, installing and running large-scale productions with Glow Church, he has honed his skills in vision systems, technical design, and troubleshooting. Now a Technical Sales Executive based in our Victorian office, Jory combines his hands-on experience with a deep understanding of products to provide smart, effective solutions for clients.

Beyond the tech, Jory is passionate about helping houses of worship enhance their spaces to create immersive experiences. Outside of work, he loves discovering new cafes and restaurants with his partner and staying up to date with the latest and most innovative advancements in technology. A lifelong learner, he spends his free time listening to podcasts on topics ranging from politics, to tech, to creativity.



ELATION

THE FUTURE OF LIGHTING IS HERE

SIZED FOR EVERY SCENE



PARAGON S



PARAGON M



PARAGON LT

INTERCHANGEABLE LENSE SYSTEM



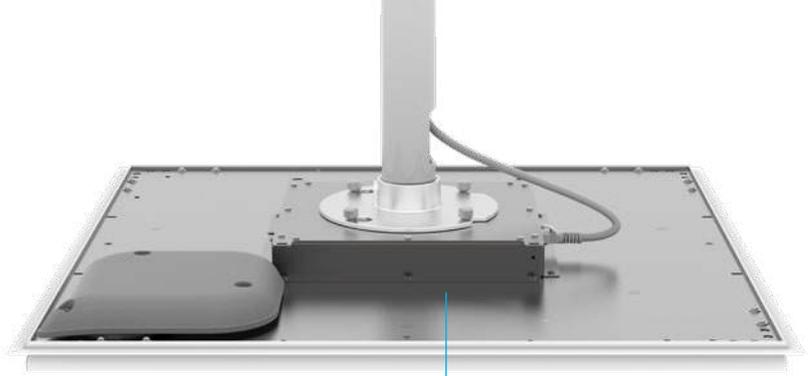


FRESNEL PC SNOOT



BE THE FIRST TO EXPERIENCE THE PARAGON SERIES
BOOK YOUR DEMO AUS 1300 852 476 | NZ 09 218 6532 | info@ulagroup.com | ulagroup.com

QZ MM AA UU



Shure IntelliMix Room Kit

Shure's IntelliMix Room Kits are made to support Windows based Microsoft Teams meeting rooms up to 10 x 5.5m in size. There are four kits in the range. They all include eight channels of IntelliMix Room DSP and an IntelliMix Touch Panel. The IntelliMix Room Kit 30 for Small to Medium Rooms up to 6 x 5.5m adds an MXA902 Ceiling Array Microphone and Loudspeaker and a Huddly IQ camera. The IntelliMix Room Kit 50 is targeted for Medium to Large Rooms up to 10 x 5m. It adds an MXA902 Ceiling Array Microphone and Loudspeaker and a Huddly L1 camera. IntelliMix Room Kit 70, for Large Rooms up to 10 x 5m adds two x MXA902 Ceiling Array Microphone and Loudspeakers and one Huddly L1 camera. IntelliMix Room Kit 80, for Reconfigurable Spaces up to 10 x 5.5m features two x MXA902 Ceiling Array Microphone and Loudspeakers and one Huddly Crew Camera Set.

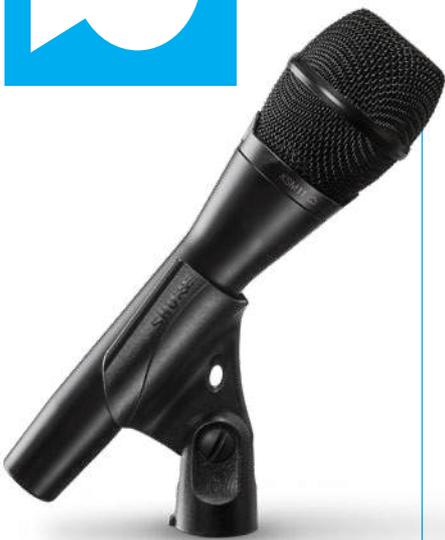
Australia: Jands jands.com.au 02 9582 0909. New Zealand: NSL nsl.co.nz 09 913 6212



Shure SLX-D Quad-Channel Digital Receiver

The SLX-D Quad-Channel Digital Receiver from Shure is available in both standard (SLXD4Q+) and Dante-enabled (SLXD4QDAN+) versions. Each single RU receiver can handle four channels of 24-bit audio. RF cascading makes it possible for two SLX-D Quad Receivers to be linked together to create an eight-channel SLX-D receiver system. At startup, the receiver's display guides users through setup and shows the battery life and health of each channel.

Australia: Jands jands.com.au 02 9582 0909. New Zealand: NSL nsl.co.nz 09 913 6212



Shure KSM11 Cardioid Condenser Vocal Microphone

The KSM11 Condenser microphone now has a wired version, for when an XLR connection is required. It uses the same condenser capsule with 3/4-inch gold diaphragm and premium electronics as the wireless unit. It also features a consistent, deep cardioid polar pattern to reduce off-axis phase distortion and has been designed to provide consistent output, even with mic-cupping performers.

*Australia: Jands jands.com.au 02 9582 0909
New Zealand: NSL nsl.co.nz 09 913 6212*



Shure SM39 Vocal Performance Headset Microphone

The new SM39 Vocal Performance Headset Microphone uses a lightweight, low-profile design to provide a comfortable, secure fit for extended wear. Its contoured construction uses an adjustable boom that is designed to stay in place during energetic performances. The SM39 features a cardioid polar pattern for excellent sound isolation in both indoor and outdoor environments.

*Australia: Jands jands.com.au 02 9582 0909
New Zealand: NSL nsl.co.nz 09 913 6212*



Shure Nexadyne Instrument mics

Shure have released some new dynamic instrument mics. Nexadyne microphones feature two precisely calibrated transducers working together. The three new supercardioid models are: Nexadyne 2 Dynamic Kick Drum Microphone, Nexadyne 5 Dynamic Guitar Amp Microphone, and Nexadyne 6 Tom/Snare Microphone.

*Australia: Jands jands.com.au 02 9582 0909
New Zealand: NSL nsl.co.nz 09 913 6212*

Electro-Voice EVOLVE 70 Column Speaker

The EVOLVE 70 portable powered column loudspeaker features a 15" subwoofer which takes low frequency extension down to 35Hz and maximum SPL of 133dB. EVOLVE 70's eight 4.7" neodymium drivers provide 120° wide by (array-formed asymmetrical) 25° vertical coverage. Inputs include include XLR/TRS combo Mic-Line inputs, XLR and RCA line level inputs, and AES/EBU. Available in black and white finishes.

Australia: JANDS jands.com.au 02 9582 0909

New Zealand: MusicWorks www.musicworks.co.nz 0800 687 429

Electro-Voice EVOLVE 90 Column Speaker

The EVOLVE 90 portable powered column loudspeaker features an 18" subwoofer which takes low frequency extension down to 28 Hz and maximum SPL of 134 dB. EVOLVE 90's eight 4.7" neodymium drivers provide 120° wide by (array-formed asymmetrical) 25° vertical coverage. Inputs include include XLR/TRS combo Mic-Line inputs, XLR and RCA line level inputs, and digital AES/EBU. Available in black and white finishes.

Australia: JANDS jands.com.au 02 9582 0909

New Zealand: MusicWorks www.musicworks.co.nz 0800 687 429



NEW GEAR

FURION SERIES

&infinity S402 Spot Light
INTELLIGENT LIGHT™

LED IP65 rated moving fixture.

CMY colour mixing and colour wheel
with 8 colours + open

GOBOs and Effects

Very wide zoom range from 5.1° to 32.5°



Clearlight Shows Pty Ltd

www.clearlight.com.au

03 9553 1688



AtlasIED Atlas+Fyne IsoFlare FS Series Surface Mount Loudspeakers

Atlas+Fyne's FS Series of surface mount loudspeakers use an IsoFlare driver that enhances harmonic alignment between high-frequency (HF) and low-frequency (LF) sources. They feature a low insertion loss 60W transformer, ideal for 70V or 100V distributed applications. They are built from high-impact ABS with a UV inhibitor, a corrosion-resistant aluminium grille and IP56 rated for long-lasting durability. The loudspeakers are available in 4, 6, and 8-inch versions, with both black and white finishes.

Australia: National Audio Systems nas.solutions 03 8756 2600
New Zealand: National Audio Systems nas.solutions 09 414 4220



JBL Professional Control 400 Enhanced Coverage Series Ceiling Speakers

JBL's Control 400 Series ceiling speakers are installer-centric, including a variety of mounting enhancements to improve installation repeatability and safety while reducing installation time. The core models are the Control 426C/T and the Control 424C/T, two-way coaxial ceiling loudspeakers with 6.5-inch and 4-inch woofers, respectively. For applications where ceiling plenum space is limited, low-profile versions of those models, the Control 426LP and Control 424LP, are available. The Control 426C/T-LS has been certified to the UL1480 Standard, expanding application possibilities into life-safety designs. Finally, the Control 419CS/T is a high power, low distortion 8-inch in-ceiling subwoofer. All models in the series include an all-new, full-face magnetic grille that blends seamlessly with modern decors. The supplied white grille can be easily painted to match any application decor. Optional black and square grilles are also available.

Australia: MadisonAV www.madisonav.com.au 1800 00 77 80
New Zealand: JPRO jpro.co.nz 09 275 8710



SSL 18 Rackmount USB Audio Interface

SSL's next-generation 32-bit/192kHz converters provide the platform for a dynamic range performance of 120dB across all of its microphone, line-level and instrument inputs. It has 26-in/28-out USB-C audio interface for Mac and Windows. Features eight high-performance SSL-designed mic preamplifiers with switchable Mic/Line configuration, SSL 18's inputs offer an ultra-low noise floor and a huge dynamic range. SSL 18 comes equipped with 10 balanced line-level outputs located on the rear of the unit. Line outputs 1&2 and 3&4 can be configured to +9 or +24 dBu, ensuring compatibility with a broad array of studio monitors and vintage equipment. Outputs 3 to 10 operate at +24dBu.

Australia: Amber Technology ambertech.com.au 1800 251 367
New Zealand: Amber Technology amber.co.nz 0800 4 AMBER



Martin MAC Aura Raven XIP

The Martin MAC Aura Raven XIP is a premium moving head head fixture that combines wash, beam, eye-candy, and smart weatherproof functionality. Seven main RGBL LEDs combine with 234 individual backlight LEDs to output over 24,000 lumens. Control via DMX, Art-Net, sACN & Martin P3. Silent and extremely fast zoom system has a range from 6 to 50 degrees.

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

DPA N-Series Digital Wireless Microphone System

DPA have gone cordless with their N-Series Digital Wireless Microphone System. Using fully digital, true diversity wideband, the system operates in the 470–870MHz range. The range includes N-DR1 Digital Dual Channel Receiver, N-BP1 Bodypack transmitters, and N-HH1 Handheld transmitters. It is all controlled and monitored from DPA Audio Controller software, available for both PC or Mac.

Australia: Amber Technology
ambertech.com.au 1800 251 367
New Zealand: Direct Imports
directimports.co.nz 06 873 0129

Luminex GigaCore 16tf Network Switch

The GigaCore 16tf is an up to 10 Gigabit Ethernet switch for professional touring applications in lighting, audio and video. The 10Gb connectivity allows full network convergence of lighting control, audio, intercom, and video. PoE++ implementation on every copper port allows connection of any PoE device available today. For optimised consistency, all GigaCore switches can be managed with a single network-wide management tool: Araneo.

Australia: PAVT
pavt.com.au or 03 9264 8000
Show Technology
showtech.com.au or 02 9748 1122

New Zealand: Show Technology
showtech.com.au/homenz or 09 869 3293



Australia's Leading PORTABLE STAGES

Over 3,000 customers supplied in the past decade. Setting up your stage for events has never been easier with Transtage. Ideal for:

- ✔ EVENT PRODUCTIONS
- ✔ THEATRE STAGES AND SEATING
- ✔ CORPORATE FUNCTIONS
- ✔ SCHOOLS
- ✔ HOTELS & VENUES
- ✔ CHURCHES



Phone: 1300 712 066

Email: info@transtage.com.au

Website: www.transtage.com.au



Powersoft Nota PoE/PoE+ amplifier

Powersoft's Nota is an ultra-compact PoE/PoE+ amplifier, outputting 140W of power across two channels in a tiny footprint. Features include on-board DSP capabilities, speaker health monitoring and full control via both Powersoft's ArmoniaPlus software and third-party APIs. The amplifier's USB-C connectivity allows integration with external devices, doubling as a USB-to-AES6. Set-up automatically matches the impedance curve of connected speakers and applies a high-pass filter. Nota is rated for plenum mounting in enclosed spaces, and the provided kit allows multiple installation configurations on flat surfaces, poles and DIN rails.

Australia: PAVT pavt.com.au 03 9264 8000

New Zealand: PAVT pavt.co.nz 09 272 8041

Robe iESPRITE LTL WashBeam

The iESPRITE LTL WashBeam gets up to 57,000 lumens of sparkle from 750W XP (Xtra Power) and HCF (High Colour Fidelity) White LED engines. Zoom range is 2° - 57° but can go down to 0.7° - 2° in long throw mode. Effects include CMY colour mixing, two colour wheels, framing shutter, two frosts, electronic strobe effect, iris, motorised zoom and focus, animation wheel, static gobo wheel, rotating gobo wheel, and two prisms.

Australia: JANDS

jands.com.au 02 9582 0909

New Zealand: JANDS

jands.co.nz 09 941 9780



Ayrton Nando 502 Wash

IP65-rated Nando 502 Wash is fitted with 12 high-performance 40W LED sources with RGB-L additive colour synthesis and a proprietary optical system made up of a unique 210mm cluster in PMMA. Its 11,000 lumens have a CRI of up to 86 and zoom ratio of 15:1 allows a zoom range of 3.5° to 53°. 3D volumetric and 2D effects can be achieved with individual control of each LED.

Australia: Show Technology

showtech.com.au 02 9748 1122

New Zealand: Show Technology

showtech.com.au 09 869 3293



Robe iSTROBE

Robe's IP65 rated iSTROBE has three rapid motorized zooms, including a unique linear zoom for the central white LED strobe and continuous pan and tilt rotational control. Zoom control provides bright washes and intense beams of light plus a High Intensity Blinder feature. Precise control of every beat is possible with variable flash durations.

Australia: JANDS jands.com.au 02 9582 0909

New Zealand: JANDS jands.co.nz 09 941 9780



Q-SYS AcousticDesign Series ceiling loudspeakers

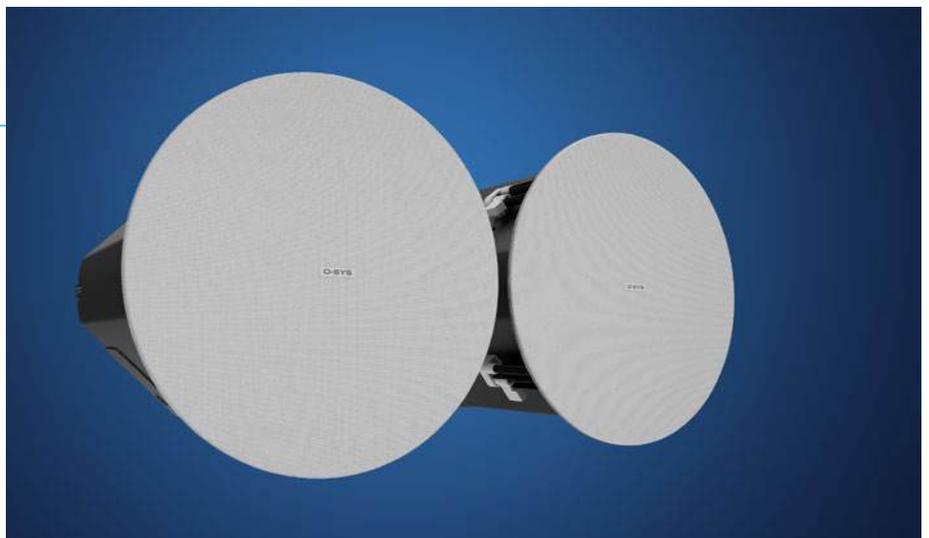
QSC have added some large format ceiling loudspeakers to their AcousticDesign Series. AD-C8T-ZB is an 8-inch, two-way full-range ceiling-mount loudspeaker with a coaxial compression driver. AD-C8T-SWZB is an 8-inch, ceiling-mount subwoofer. AD-C10T-HPZB is a 10-inch, high-power two-way loudspeaker with a coaxial compression driver. They all use a bezel-less, blind-mount design for integration into any environment.

Australia: Technical Audio Group

tag.com.au 02 9009 4322

New Zealand: NSL Group Ltd

nsl.co.nz 09 913 6212



ProLights Astra Profile900

The Astra Profile900 moving head light has two configurations; High Performance (HP) model delivering up to 43,000 lumens, and High Quality (HQ), with a CRI of up to 96. Both use a 185mm front lens with a 5-52° linear zoom. They are equipped with linear CMY+CTO colour mixing and a colour wheel with a high-CRI filter. Additional features include dual rotating gobo wheels, an animation wheel, a four-layer framing system, dual prisms, dual frost filters, and a motorised iris.

ProLights Jet Profile300LT

Jet Profile300LT is a long-throw moving profile fixture. A 300W white LED source shines through a 140mm lens that zooms from 4°-44°. Onboard linear CMY colour mixing system, additional colour and CTO filters, and four-blade framing shutters deliver precise shaping and colour control. Jet Profile300LT includes seven rotating gobos, an animation wheel, dual prisms on independent wheels, and a linear frost filter.

ProLights Smart BatPlus Neo

The Smart BatPlus Neo uses seven RGB+WW emitters to output up to 3,000 lumens during a 3-hour runtime. Its advanced colour-mixing system produces deep, rich tones and precision white light with a CRI of up to 90. Users can choose from selectable runtimes, ranging from 3 to 18 hours. Smart BatPlus Neo supports a range of accessories, including magnetic holders, snoots, lenses, and filters.

ProLights Astra Hybrid260IP

Astra Hybrid260IP is a hybrid moving head luminaire that utilises a 260W White Phosphor Laser source. It combines long-throw beam projection with wide-coverage spot capabilities. The 100x zoom range stretches from 0.6° to 52° and the large 165mm lens keeps it focussed. Infinite Pan and Tilt rotation complement an extensive colour system, featuring linear CMY and CTO mixing along with 27 colour filters on dedicated wheels. The fixture also includes 12 rotating gobos, 29 static gobos, and 8 prisms on dual overlapping wheels, plus two frost filter, soft and heavy. IP65 rated for any weather condition.

Australia: Show Technology showtech.com.au 02 9748 1122

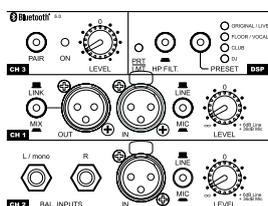
New Zealand: Show Technology showtech.com.au 09 869 3293



FBT

X-Series

Processed Active Speakers & Subwoofers



10" & 12" full range powered speakers

12" powered coaxial stage monitor

15" & 18" powered subwoofers

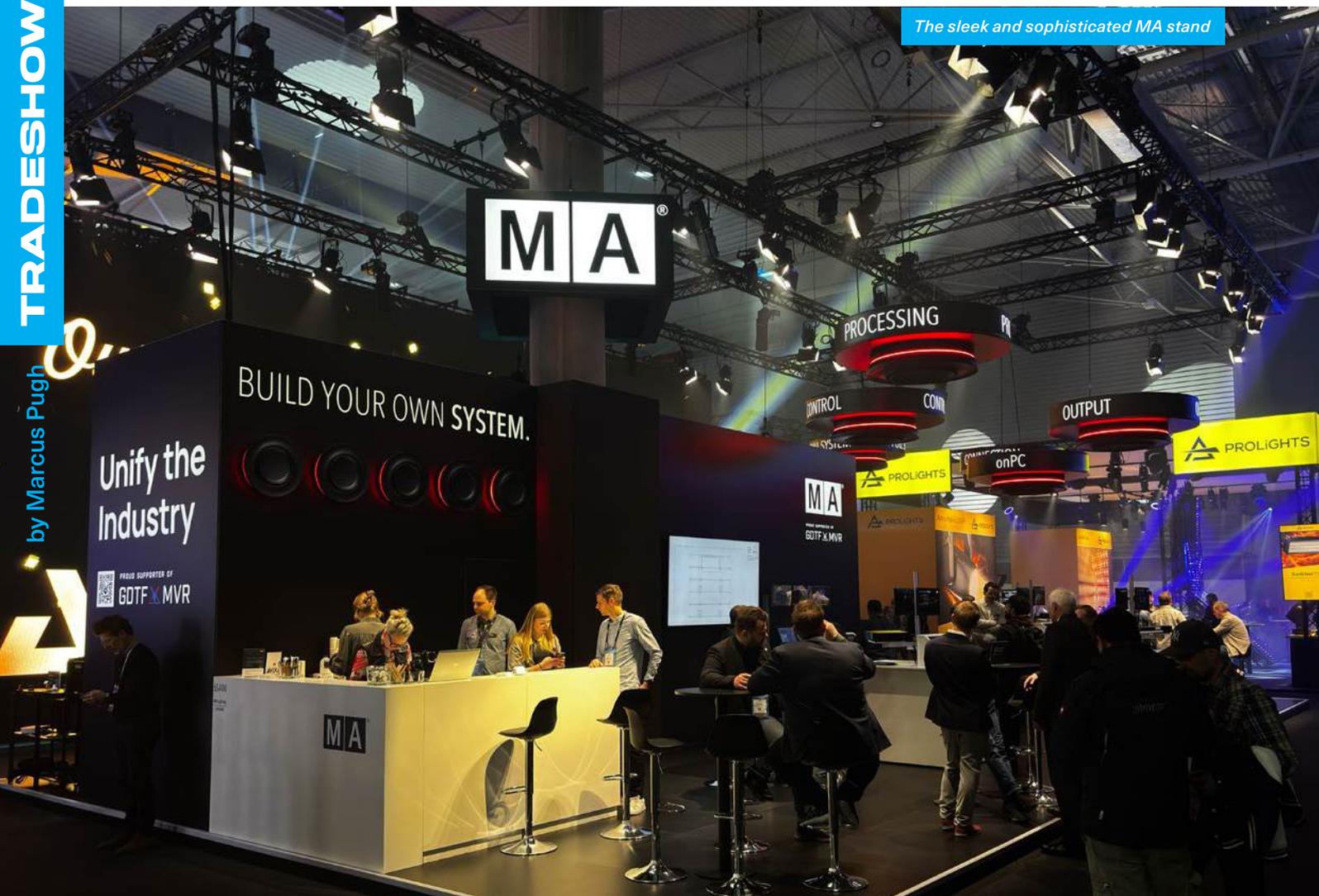
Polypropylene (X-LITE) & Plywood (X-PRO/X-SUB) construction

Two mic/line inputs & Bluetooth 5.0 on full range models

Optional wall brackets & padded covers

AUDIO BRANDS
AUSTRALIA

Audio Brands Australia Pty. Ltd.
Unit 10, 7 Meridian Place, Bella Vista NSW 2153
02 9659 7711 | sales@audiobrand.com.au
www.audiobrand.com.au



ISE 2025

Let There Be Lighting Hall Six

February saw Fira Barcelona host the 20th annual Integrated Systems Europe (ISE) trade show, being the largest gathering of technology brands and AV nerds that this lighting guy has ever witnessed. With 85,351 unique visitors through the doors, (15% up on 2024's record year), 1,605 exhibitors spread out over 92,000 square metres (that's nearly five MCGs) of exhibition space over eight halls. Even the most seasoned trade show attendee couldn't possibly hope to see everything at a show of this size. With this in mind, this article will cover the lighting tech on show in Hall Six.

Lighting brands have had a presence at ISE in previous years, and in 2025, the Lighting and Staging dedicated hall had tripled in size from 2024. Unlike many of the other halls at ISE, Hall Six had a similar feel to an LDI or Prolight + Sound show, with plenty of haze, colour and movement, not to mention beers and swag flowing. All of the major lighting brands had a presence on the floor, with one notable omission in VariLite, which was a surprise given they had just released the impressive and super innovative VL Hive 151 at LDI in December.

Entering Hall Six, MA Lighting had the primo position with a great stand design using MA Encoders as a motif for the look of the stand. Rental and sales giants the AED Group were also an imposing presence at the hall entry, with a booth built entirely of LED screen on four sides.

Elation Lighting and their subsidiaries (Obsidian Consoles, Acclaim architectural, ADJ) had strong offerings with the new Elation Paragon movers as their centrepiece. The Paragon comes in small, medium and large

with the refreshingly simple naming protocol (I'm looking at you Ayrton). The small being the Paragon S (550 Watt), medium Paragon M (900 Watt), and large, the Paragon LT. Each boasts an IP54 rating, selectable high CRI or high output modes, and interchangeable lens to turn your profile into a wash without having to buy separate units. The Paragon units don't have the marine grade weatherproofing of their cousins like the Maximus or Brutus in the Prometheus range, and they also don't have anywhere near the same weight or price tag. Elation



Elation Lighting's Paragon range. L-R: Paragon S, Paragon M and Paragon LT

also displayed pieces from their Teatro theatrical range and expanding KL range of static fixtures, all of which are worth a look.

To the other side of the Hall Six entry sat the Italian PROLiGHTS brand, whose range keeps growing in size. The hero of the stand was definitely the HaluPix Duo, which looks like the unholy union of a LED screen and a Jarrag/Elidy. The HaluPix gave the graphical colour and movement of a super bright low-res LED screen combined with a set of tungsten-esq LED chips that punched out warm beams that dance in the air as the content moves.

German Lighting Products (GLP) had a strong presence at ISE, from their well-stocked bar, their friendly and accommodating staff, and their latest release in the Mad Maxx, which is a fat beam (750mm) sky tracker; a physically domineering fitting and a sight to behold, clocking in at 1,248mm high and 1,043mm wide, and a whopping 208kg. While other manufacturers have opted for laser sources in their sky trackers with the likes of the ClayPaky Skylos, Robe iBolt and Ayrton Mamba, the mad genius at the helm of GLP, Udo Künzler, has instead gone with 19x90W LEDs each with its own colour wheel. All of this produces an output that rivals a traditional 7kW Zenon searchlight with a chunkier beam that can be shaped and have multiple colours at once and only requires a 2,400W power supply. GLP also showed the awesome JDC2 and JDC1 Burst, which is an IP65 version of perennial JDC1 produced at a price point to beat out the JDC clones in the market.



GLP Mad Maxx at the front of Barcelona Football Club



GLP Mad Maxx

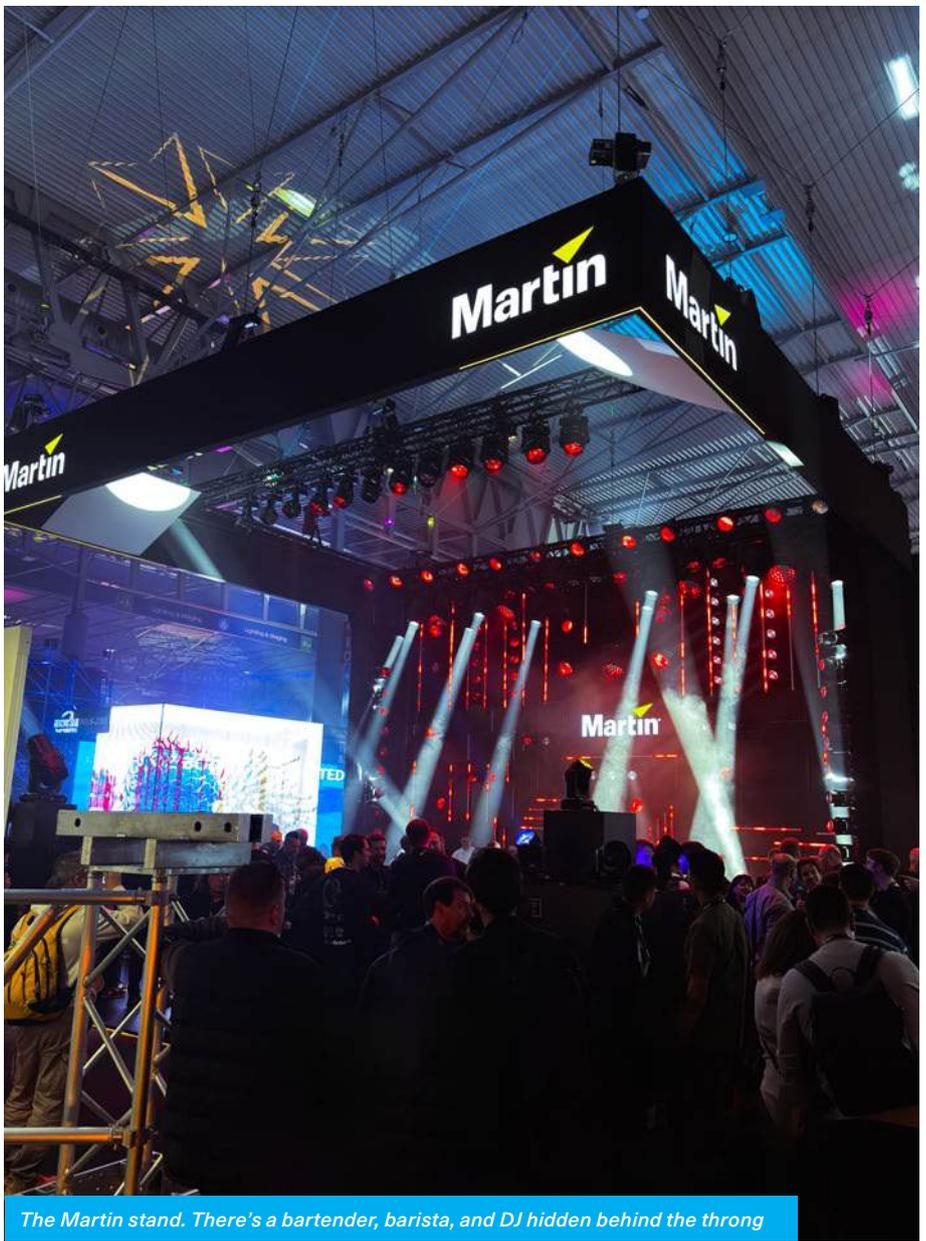


GLP stand complete with a couple of Mad Maxx standing guard

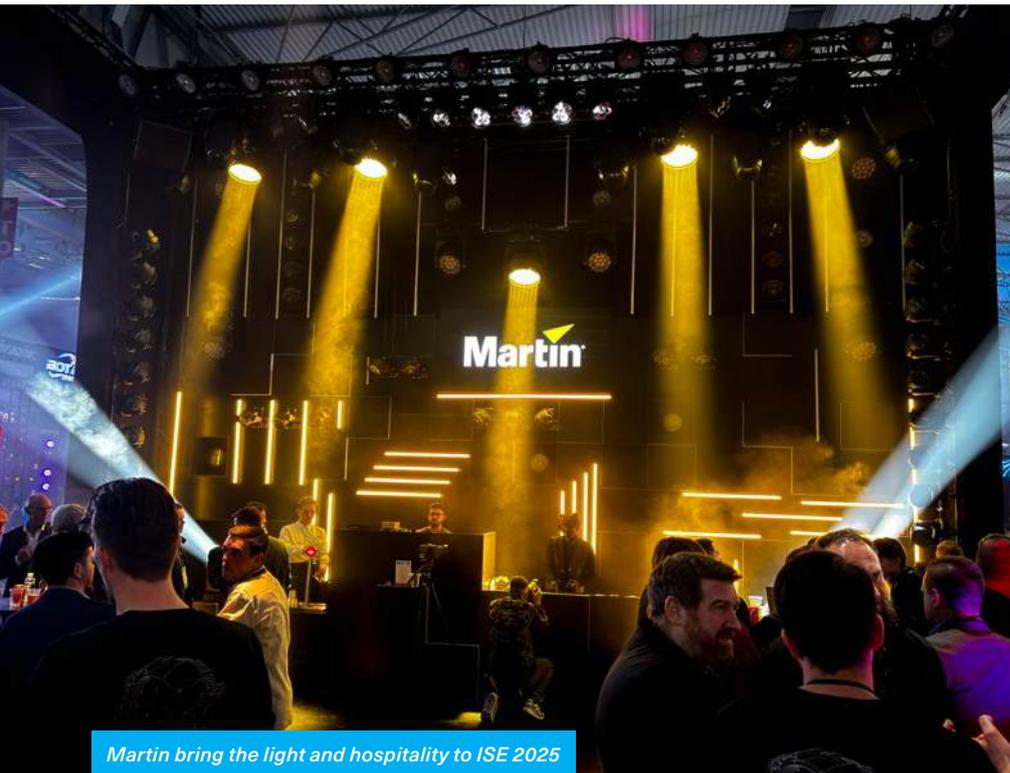
The most notable lighting fixture release at the show had to go to Martin, with the release of the long-awaited MAC Aura Raven. The Raven caps off the new Aura range growing from the XIP and PXL. The Raven is a large format IP54 moving head wash with a massive 353mm front lens with 37 x 40W RGLB (Red, Green, Blue, Lime) main emitters and 234 x 0.25W backlight 'Aura' LEDs. It looks a bit like an Aura PXL on steroids. There's a LOT of LEDs, and in 'Ludicrous Mode' requires a mind melting 851 channels of control per fixture, but does incorporate some more manageable control modes. The Martin stand also featured the Viper XIP and many of the super successful MAC Ones, which continue to be the darling of the lighting industry.



The Martin MAC Aura Raven XIP with it's smaller cousin the Aura PXL



The Martin stand. There's a bartender, barista, and DJ hidden behind the throng



Martin bring the light and hospitality to ISE 2025

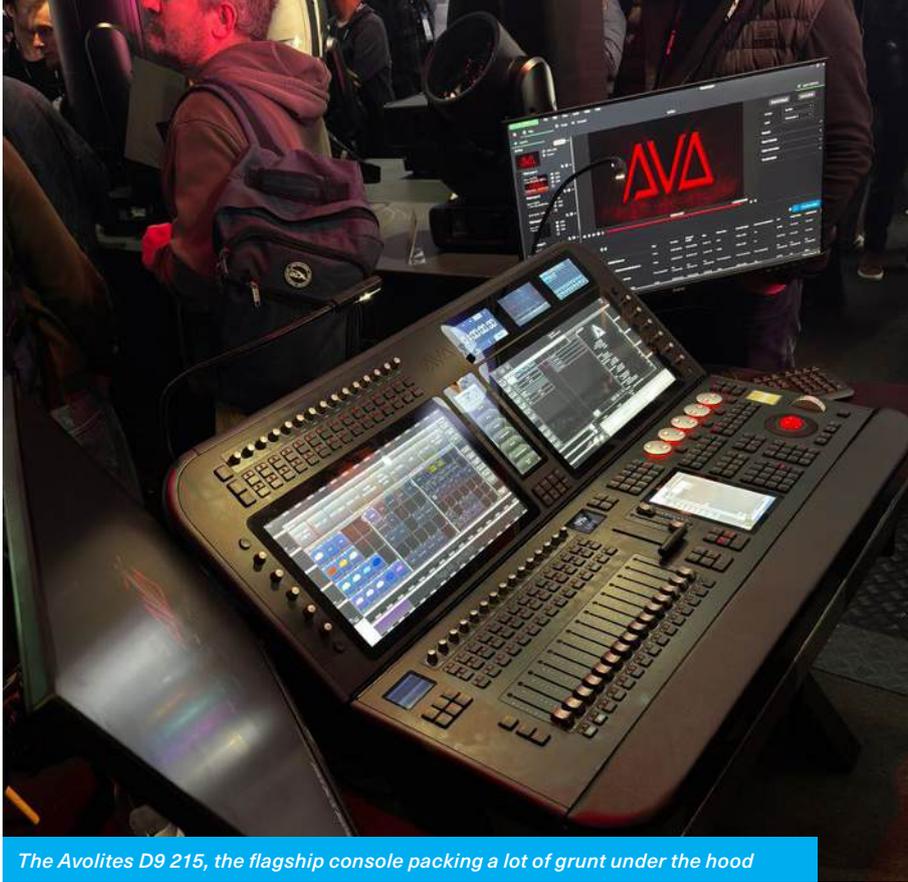


Wouter Verlinden (Martin Product Manager) is very proud to finally officially launch the Aura Raven

Chauvet Professional brought a compact but impactful stand design to ISE 2025



Ayrton Mamba



The Avolites D9 215, the flagship console packing a lot of grunt under the hood

The Robe juggernaut was in full effect in Hall Six with their flotilla of brands including Avolites consoles, the legendary Aussie dimmer and distro maker LSC, Anolis architectural lighting and Artistic License. Robe always produce a good exhibition stand and manage to keep focus on live performance by constructing a stage with regular performances from an acrobat on a vertical pole.

Avolites had a great showing with their full range of consoles on display, which led all the way up to their flagship D9, with loads of friendly experts on-hand demo-ing the product and showing why Avolites is still the king of the busking desks. Robe used ISE to release

two new products, in the iStrobe and the SVB1. The iStrobe is an IP65 panning and tilting LED strobe utilising 16 x 60W RGBW LEDs and 72 x 20W white strobe LEDs, all of which produce an absolutely blinding 164,000 lux. When will the Strobe Wars end? The SVB1 continues on from last year's release of the Robe SVO Patt (a take on the legendary theatrical Svoboda fitting). The SVB1 is a small form factor moving head wash beam featuring 7 x 40W RGBW multichips and 20 x 10W white strobe.

ClayPaky have kept growing their Arolla IP65 mover range, and Ayrton dropped the big brother to Cobra in the laser source, called Mamba.



**YOUR VENUE
ENGINEERING
SPECIALISTS**

Event Communications

Venue Engineering

Installed Systems

Sales & Service

papeople.com.au

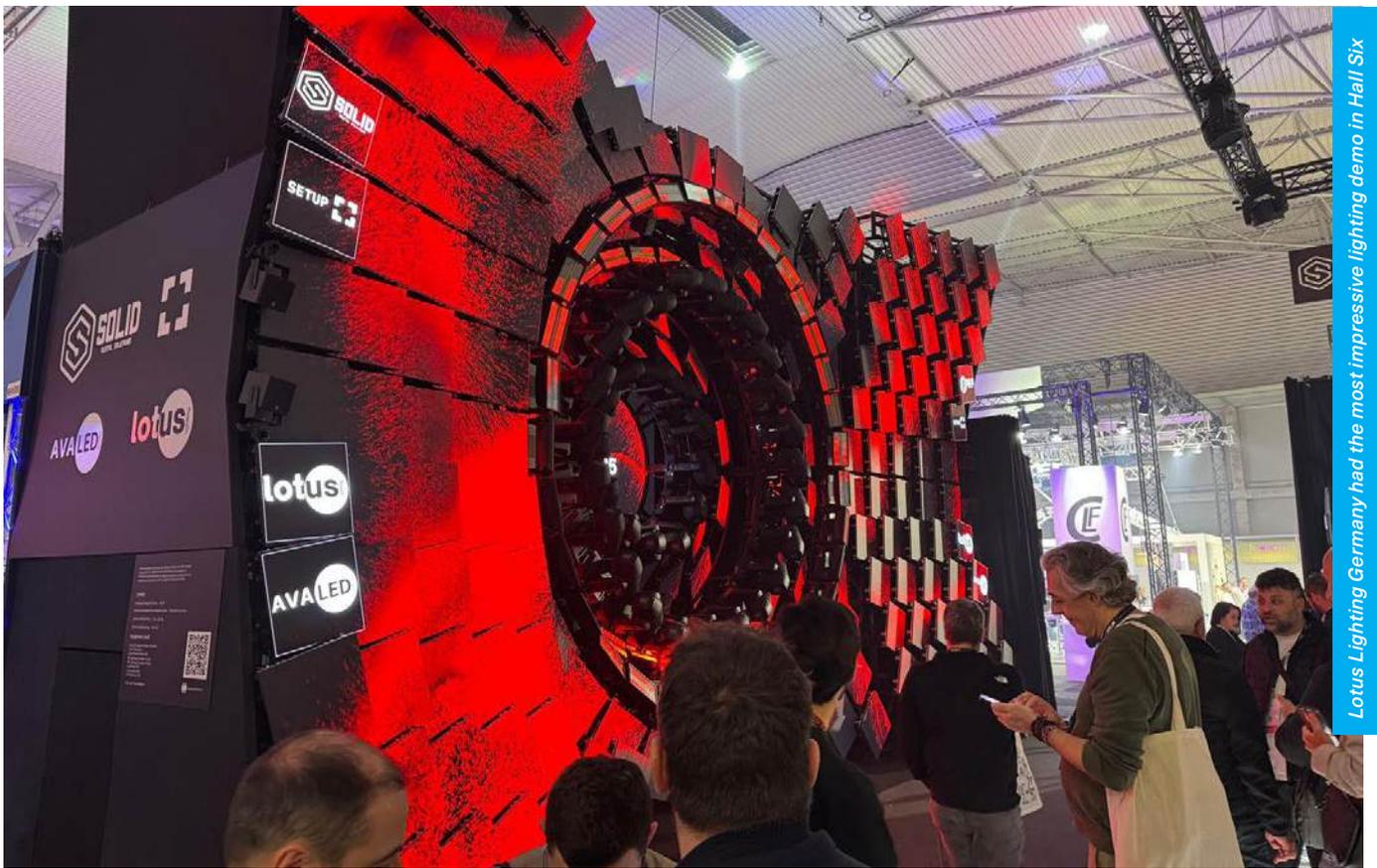
MOVEKET
Chain Hoists and Control Systems

TheatreQuip

Staging Equipment for Venues

SERAPID
RIGID CHAIN TECHNOLOGY

Actuators for Motorised Platforms



Lotus Lighting Germany had the most impressive lighting demo in Hall Six

ISE 2025 cemented Hall Six as a must-visit for lighting professionals, proving that lighting brands are taking ISE seriously as a key global showcase. With the growth of dedicated exhibition space and major product launches, ISE is now firmly on the map alongside LDI and Prolight + Sound for major lighting industry events.

As the industry moves forward, I see a trend toward IP56 being the accepted outdoor rating, away from a full IP65 rating. Laser source fittings have become another segment of the mover market and the Strobe War continues to rage with more offerings on the floor. Punters eyeballs are the victims.

What will 2026 bring? If this year is anything to go by, expect even bigger, brighter, and bolder innovations.



The venerable Eric Loader. An absolute guru of lighting products



The massive GLP Mad Max impressed everyone with its sheer size and fat beam



DRONESHOWS TAKES FLIGHT

Guerilla-style drone shows coming to a town near you

When Taylor Mauriohooho first envisioned drone light shows captivating Kiwi audiences, he wasn't thinking about redefining the drone show industry.

Yet his idea to create a cool spectacle has evolved into designing and manufacturing world-class, interactive drone technology right here in New Zealand.

At the heart of this transformation is Dr Isaac Henderson, a lecturer turned CEO, whose expertise in aviation regulation and passion for safety has driven the company's ambition to set new global benchmarks. Together, Taylor and Isaac are not just intending to produce breathtaking light shows but to pioneer advancements that see cutting-edge aviation standards merge with artistic ingenuity.

Isaac shares the story behind Droneshow's rise and their trailblazing technology. He describes the journey from prototyping their

Whetū Taura drones, to guerrilla roadshows lighting up small-town skies, ultimately to market disruption.

From Distributor to Manufacturer

Back in October 2021, Taylor Mauriohooho had a bold idea: bring drone light shows to New Zealand. What started with a TikTok clip and a spark of inspiration has since skyrocketed into a game-changing innovation.

Enter Dr Isaac Henderson, an aviation lecturer at Massey University with a background in civil aviation regulation. With flights already booked, Taylor sought Isaac's advice on getting the necessary certifications for the off-the-shelf system he was going to purchase. Isaac's response was clear, "We can do better."

Isaac enlisted the help of Chris Jackson, who has a strong engineering background, and the pair investigated other existing systems on the market at the time. They were unimpressed with what they saw. Isaac summarises, "Existing systems were built on outdated technology and were not up to what we would consider to be 'aviation' standard. The manufacturers had no coherent answers to questions around safety and the systems lacked redundancies. As a result, they were very limited in the approvals that regulators were willing to give them. The more we educated Taylor about the known safety issues within the drone light show industry, including high failure rates and

GPS reliance, the more he became convinced that New Zealand needed to develop its own hardware and software."

Taylor's vision took a bold turn, from staging drone shows to building the world's leading drone light show system from the ground up. Committed to global safety benchmarks and armed with the drive to disrupt the international market, he tapped into his entrepreneurial savvy, having launched his first successful company at just nineteen, and by late 2021, Droneshow was born.

From Intention to Prototype

Droneshow's journey from idea to innovation was all about rethinking what drone shows could be. Initially leading the project as a consultant, now CEO, Isaac recalls their 2022 game plan, "We aimed to set new standards for safety, reliability, and interactivity. We wanted to create a system that was not only safe, but would allow the audience to interact with the performance."

By mid-2022, Droneshow had partnered with Christchurch company SPS Automation to create a new drone light show solution from scratch. Over the next year, the team built hardware and software with industry-leading fail-safes, enabling pilots to maintain control even in emergencies.

By April 2023, their first prototypes, Whetū Taura, meaning 'apprentice stars', took flight in a private test, proving the concept. Five

months later, they wowed audiences at their public debut during the Innovation Expo and Aerospace Summit in Christchurch. Operating in a challenging 12m by 6m by 5m indoor space that would cripple other systems, Droneshows leveraged a GPS alternative, ultra-wide band, to fly flawlessly on their redundant positioning system.

"Despite only flying eight drones, the response was overwhelming," says Isaac. "At a tech expo, not even an entertainment event, people were captivated by the live interactivity, waving their hands to change the drones' colours in sync with magical, Harry Potter-style music. This was a world-first here in New Zealand."

Counting Down to Lift Off

2025 is the year Droneshows takes flight, starting with 50 operational Whetū ('star') drones, with the fleet expanding throughout the year. Meanwhile, development is underway of the second-generation models, Kāhui Whetū ('constellation' or 'swarm of stars'), which will push boundaries of what is possible even further. The naming convention, which centres around the Māori word for stars, is inspired by Matariki, which was Taylor's original vision for where drone light shows could make an impact.

"The smaller fleet comes with a purpose," says Isaac, "It makes drone shows accessible to smaller players. Generally, providers of drone light shows won't perform with less than a hundred drones, which limits events to larger cities. We want to bring our technology to provincial New Zealand, which both myself and our founder identify with."

To test the drones and build buzz, Droneshows is rolling out guerrilla-style roadshows across Aotearoa, staging surprise events in smaller

centres. "No one will see it coming, which adds excitement and lets us further refine the tech without disappointing anyone if we need to reschedule," Isaac explains.

Droneshows eventually plans to go global, ramping up production and exports to take their trail blazing technology to the world stage.

Navigating the Rules

While the past three years have focussed on product innovation, Taylor Mauriohooho's passion for drone show production remains a driving force. Alongside manufacturing, Droneshows offers operational and regulatory support for event organisers, as well as creative design input for show managers.

Isaac, with a track-record of consulting and research on aviation regulations, sits on the Council of the Aviation Industry Association of New Zealand as Chair of UAVNZ, an industry and professional body representing the commercial UAV sector in New Zealand. He emphasises the need for live entertainment professionals to engage with aviation standards, "We're a small part of the sector as Droneshows, but we face the same challenges as other operators - safety, regulation, and supply chain issues."

In the absence of international standards and recommended practices, which exist for almost all aspects of conventional aviation, New Zealand's risk-based Part 102 approval process requires operators to identify the risks posed by their operations and how they might be mitigated, for example, through training, maintenance, operating procedures, and risk management processes. For event organisers, the challenge becomes working with a Part 102 operator to ensure the operation is conducted

safely and in compliance with the Civil Aviation Rules, "At Droneshows we try to keep that process as convenient as possible, but it is a challenge anyone wanting to organise a drone light show needs to be aware of."

Droneshows' commitment to live shows extends to hiring creatives, including an experienced VFX artist, and opening an internship for a recent graduate of Massey University. "Drone light shows are usually part of larger events," Isaac says. "We love collaborating with organisers to bring their vision to life. There is no more public way of presenting your art than putting it 400 feet in the sky."



Dr. Isaac Henderson



What's Next and How To Get Involved

The future of aviation in New Zealand is buzzing with potential and not just for light shows. Isaac sees New Zealand's aerospace industry leading the way globally, "For a small country, we're punching above our weight. We've launched the fourth-largest number of rockets worldwide in recent years and are well ahead of our neighbours. In the drone sector, it's swarming technology's impact on pest and weed eradication that's generating more excitement in the industry than drone light shows."

While drones might seem like the poorer cousin to rockets, Isaac finds joy in their artistry and innovation, "I still mingle with scientists shaping the future of aviation and space programmes. When they ask me what I do, I say, 'I help put pretty lights in the sky and move them around safely.' It's not world-changing, but as the only aerospace CEO serving the arts and entertainment sector, I love every second."

For others who want a piece of the action, Isaac advises, "It's not just about the pilot, there's a whole team of people and weeks and weeks of work behind any 20-minute drone show. People with backgrounds in 3D animation, lighting, visual technology, programming, and storyboarding are really important to the end result, helping us to bring the technology to life."



Opportunities for Businesses

As Droneshow moves into full operation, the company is looking for investors and global distributors to join its journey. And for businesses wanting to make an immediate impact, the guerrilla-style roadshow offers a unique opportunity.

Through their 'Your Logo Here' campaign, small companies and charities can submit their logo and a pitch to feature in a pop-up drone display along the roadshow. It's a chance to shine - and to support a new era of interactive entertainment.




QUIK SPOT

BORN TO BE QUIK!

100% WIRELESS

Up to 20h App IP65

- Zoomable and controllable wireless spotlight
- Makes your workflow Quik and efficient

- High quality whites and intense colours
- Seamless integration into the Astera ecosystem








BE THE FIRST TO EXPERIENCE THIS NEW FIXTURE

CONTACT US FOR A DEMO | AUS 1300 852 476 | NZ 09 218 6532 | info@ulagroup.com | ulagroup.com



Apogee's Greg Chung, Link Audio's Michael Jago, and Bob Clearmountain

BALANCE, AND THE NEW WORLD ORDER

In the last five decades or more, audio mixing has traditionally been about shoe-horning sounds into one or two speakers. Getting all these noises to coexist inside a soundstage between a stereo pair of one-inch paper cones has been an art unto itself over the years, and as track counts have grown, so the task of shoe-horning them into this so-called 'space' has grown more challenging. But with the expansion of immersive formats like Dolby Atmos, Spatial et al – cramming and shoe-horning may no longer be quite so important.

There has always been a fundamental tenet in mixing: that sounds are combined together – from either a multitrack recording, or a live stage full of musicians – into a single, creative euphonic entity that's appealing to a listening audience. As mix engineers, it's our job to pull all the ingredients of a mix together in combination with a sonic palate of 'herbs and spices' appropriate to the material presented to us. To that end, we can position ourselves as either cooks who work with recipes to produce predictable, familiar meals, or chefs who push boundaries by making our own dishes, simultaneously expanding the palate of the clientele along the way.

But, as many of us well know, the art of mixing isn't just a creative one. It's also technical in many respects – although I won't digress into the details around those here, lest we disappear into the weeds for good. Suffice it to say, mixing involves being able to pull all the sonic information together into a form that's capable of translating through countless sound systems the world over. And as these types of systems change – and they are changing – so the mixing process does along with it.

With the new immersive formats looking like they're here to stay (he says with a small amount of trepidation in his voice) the mixing task seems to have shifted, or at least the new formats present options that

call some of these well-established mix fundamentals into question.

One of these questions is whether sounds must still be compromised, or 'made to fit' together in the same way as they did when one or two speakers were all a mix engineer had to play with. With immersive formats it seems that this concept is something we can now make a subjective decision about. It's no longer fundamental to the physical limitations of the format that we compromise sounds to make them fit, or even glue them together at all.

As an example... sounds placed inside the sphere of a Dolby Atmos environment clearly no longer need to battle with one

another quite so rigorously on the frequency spectrum as they do in a typical stereo image. When 11 speakers (plus a sub) are – at a minimum – sharing the workload of a Dolby Atmos mix that was previously carried by only two speakers in stereo, clearly there's now space beyond most engineers' wildest imaginings for more frequency overlap, a greater dynamic range for both individual instruments and the mix overall, and infinitely more placement and proximity options.

Indeed, immersive formats potentially call into question some aspects of the very notion of what we understand mixing to mean.

As an example, and to digress for a moment, I was recently in a room at Empire Studios in Melbourne listening intently to some mixes by Bob Clearmountain, that the man himself was presenting in Dolby Atmos 7.1.4.

Apart from being an interesting experience for all present – and of course hearing Bob talk about his thoughts on Atmos was very interesting indeed – what was fascinating to hear was that the Atmos mixes of some of Bob's most familiar work – songs like 'Avalon' by Roxy Music and 'Run to You' by Bryan Adams, for example – were fascinating not for how they were 'glued together', but for what they revealed.

Despite Bob consistently trying to frame the Atmos mixes around the idea that they needed to stay true to "what the original song was all about," nevertheless what tended to happen was that things previously hidden in the stereo mix were exposed, and in some cases you might say, celebrated.

In many respects, what Bob's Atmos mixes revealed – to my brain at least – was all the things I hadn't quite noticed before. Certain sounds were far more detailed, exposed and full toned than they had previously been, almost as if I was listening to the multitrack again.

Which brings me to the far bigger question that immersive mixing tends to provoke: what is mixing in this context?

With all this space, the multiple phantom centres, and the capacity for sounds to exist inside a sphere of sonic information, rather than merely on its outer shell, most objects can now occupy their own space virtually without compromise. Of course, a mix engineer can still choose to conceal something, curtail a sound's frequency response, dynamic range and so on, but it's no longer quite the imperative it once was.

So what does this mean? Is immersive mixing a format where all the rules of the stereo approach still apply, where only some of them still apply, or indeed none of them apply? Can we bring all our experiences of working in stereo into an immersive context, or do we need to rethink our approach entirely? It seems to me that at least some of what stereo mixing has been all about these past decades doesn't necessarily apply in an immersive context at all.

Dynamic range is another question posed by immersive mixing. Given the amount of space available to a mix engineer in this context, in some respects the dynamic range of instruments is now conceptually well and truly up for grabs. Indeed, allowing instruments to retain a greater dynamic range than they have generally enjoyed in stereo might be the best way to keep these elements elusive and subtle in an immersive context, and ultimately prove to be an instrument's greatest strength. Hearing a musician play with subtlety can be an entrancing thing, and with an ensemble cast given this freedom, immersive mixes will be able to breathe like never before. Moreover, they will present new gifts of sonic intrigue over time like never before...

But when it comes to mixing immersively, there are a couple of issues I find difficult to reconcile.

The first is the nature of the 'sweet spot', and a sub-category of that question: because objects can be placed discretely into innumerable locations, when a listener moves around, are they not fundamentally altering the focus of a mix? In a larger physical space where multiple listeners are 'immersed', they all receive a different version of your mix, not only with respect to volume, but also time. So one listener might be in the centre, up front, and perhaps receive too much main vocal (assuming it's front and centre), meanwhile someone up the back and to the left, might receive too much of a supportive rhythm guitar channel, and far less main vocal.

You get the idea. In other words, the mix starts to unravel depending on your position.

Particularly in larger environments, this constitutes a serious limitation.

The other issue is where will immersive mixing formats be consumed by listeners...

In our corner of the globe, the big question that remains is how studios, individual mix engineers and producers will be able to justify the outlay of a decent immersive rig in their mixing environments. Without healthy budgets from record companies or individual artists funding the work, it arguably feels like a fool's errand to invest heavily in a format that very few artists are inquiring about.

On the other hand, it's arguably up to us as an industry to recognise our role in all of this. If we're not out there educating customers on the benefits of immersive formats, then customers are very unlikely to request mixes in said formats. It's cart before the horse, of course, and to some the financial risk seems high, but the flipside is waking up one day to realise that you're a stereo mix engineer and the whole world has passed you by. It's our equivalent of the transition over to electric cars... once you drive one, every other form of transport feels steam-powered.

I for one don't want to get stuck driving a steam engine... and besides, once you listen to immersive formats for long enough, stereo sounds pretty darn flat.

Immersive audio gives mix engineers a palate and a sound stage that's vastly larger and more superior in every way to stereo. So why are we still debating this?

[Andy Stewart owns and operates The Mill in the hills of Bass Coast Shire, Victoria, and he's also the new Editorial Director of Mutech Media. Check it out here: \[mutech.media\]\(http://mutech.media\)](#)



Bob Clearmountain

DISCO WONDERLAND

Orchestra plus disco. **Groovy!**



Adding 50 Sydney Symphony Orchestra musicians to a band of four with seven vocalists at the iconic 5,000 seat Hordern Pavilion for a disco show – what’s not to like? Old people like this writer flocked up in gaudy gear. The lights went down, and the machine struck up.

Conducted by the charismatic Vanessa Scammell, whose diamante-riddled pants sparkled under Peter Rubie’s lights, the opener ‘I will survive’ swelled rather than launched as acclaimed orchestral live sound guy Des O’Neill wrangled 95 channels on a Yamaha Rivage PM10 console.

Seated near centre midway the sound was full, and the strings managed to sit in the correct place while a regular drum kit and rhythm section cozied into the ensemble. The absence of an electric bass was notable, but covered by the two double basses. A slight but present kick drum kept the ‘Night at Studio 54’ theme real.

O’Neill didn’t fault or waver, his mix slowly crept up as he filled the dry acoustic, with monitor engineer Steven Coyle feeding the stage with an appropriate array of feeds, to Aviom personal mixers for the rhythm section and a mix of sidefill and a wedge for Scammell.

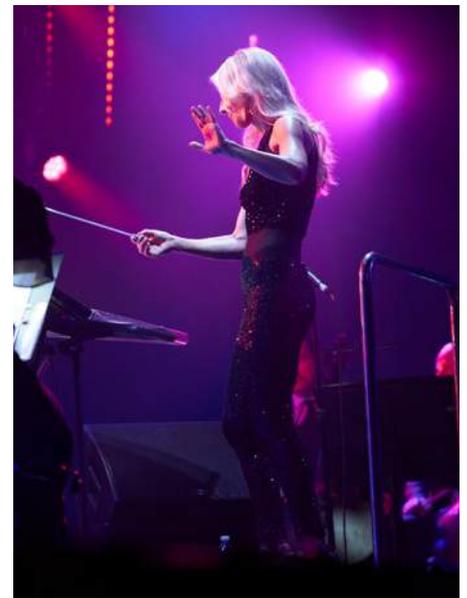
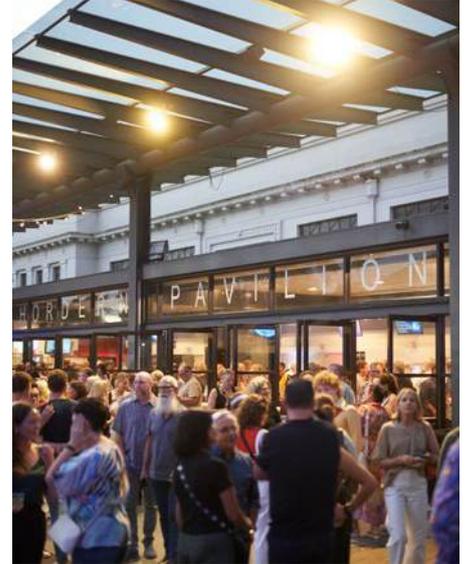
The spill off the back of the K2 PA would have made an interesting acoustic environment for the (usually) un-mic’ed orchestra.

“One of the key challenges with the Sydney Symphony Orchestra is the pace at which they work”, O’Neill told CX. “Their rehearsals are dedicated entirely to playing through the material, leaving little time for traditional sound checks where each section is fine-tuned individually. Instead, as soon as they start playing, I dive straight into mixing, setting gains, shaping the initial EQ, and balancing levels on the fly.”

O'Neill has collaborated with major orchestras worldwide, including leading Australian orchestras, delivering high-profile concerts with added artists such as Nick Cave, Warren Ellis, Tory Amos, The Cat Empire, Ben Folds, and Birds of Tokyo. That's a long way from his early start in studio sound back in 1999.

Seven vocalists entered and moved around the stage with standouts Paulini and Timomatic joining several others who occasionally struggled with a huge one-off show that could never have enough rehearsal time. One embarrassingly forgot the lyrics to an entire song, making up some new innovative ones, but the orchestra never missed a beat.

Peter Rubie's lights were beautiful, with the mandatory mirror ball (not 'disco ball' as too often described) clusters cleverly arranged and cued. As required, all performers were frontally lit at all times, a simple but essential task that can be forgotten in the rush to use every feature of every light. This was lighting that was classy, pretty, and in harmony with the performance.



Des O'Neill



Over two halves, the show spanned a little over two hours covering 18 classics. Work flow at front of house was nuts for O'Neill. "I begin by grouping the orchestra inputs into section-based stereo stems. Strings, Woodwinds, Brass, Percussion, and so on. These mixed stems were then sent to the monitor engineer, significantly reducing the number of channels he needed to handle. This approach allows the monitor engineer to focus on the rhythm section and the in-ear mixes for the vocalists, ensuring that everyone on stage has what they need to perform at their best. While most of my processing happens on the input channel, mixing to stems also gives me additional flexibility in shaping the overall balance of each section if needed."

"The FOH mix was incredibly dynamic, requiring constant adjustments. With significant variation in the arrangements from song to song, along with vocalists coming on and off stage throughout the show, having a structured workflow was essential. Custom fader layers and scene programming were key tools in managing these transitions smoothly, ensuring that every section and soloist was where they needed to be in the mix at the right time."

"I used Yamaha Rivage consoles, which handled the fast-paced workflow with ease. The onboard processing is excellent, eliminating the need for external gear and keeping everything streamlined in a single mixing environment. When working under tight time constraints, having a responsive, intuitive console makes all the difference."

Day after the show, O'Neill flew off to London to continue his specialist audio work with orchestras in Europe and China.

**Julius Christophe Grafton is the founding publisher of CX*



entech

THE SHORTEST ROAD TO NEW BUSINESS

MAY 2026 NATIONAL

- May 18 Sydney
- May 21 Brisbane
- May 26 Melbourne
- May 28 Adelaide
- June 2 Perth

AUGUST 2026 NZ

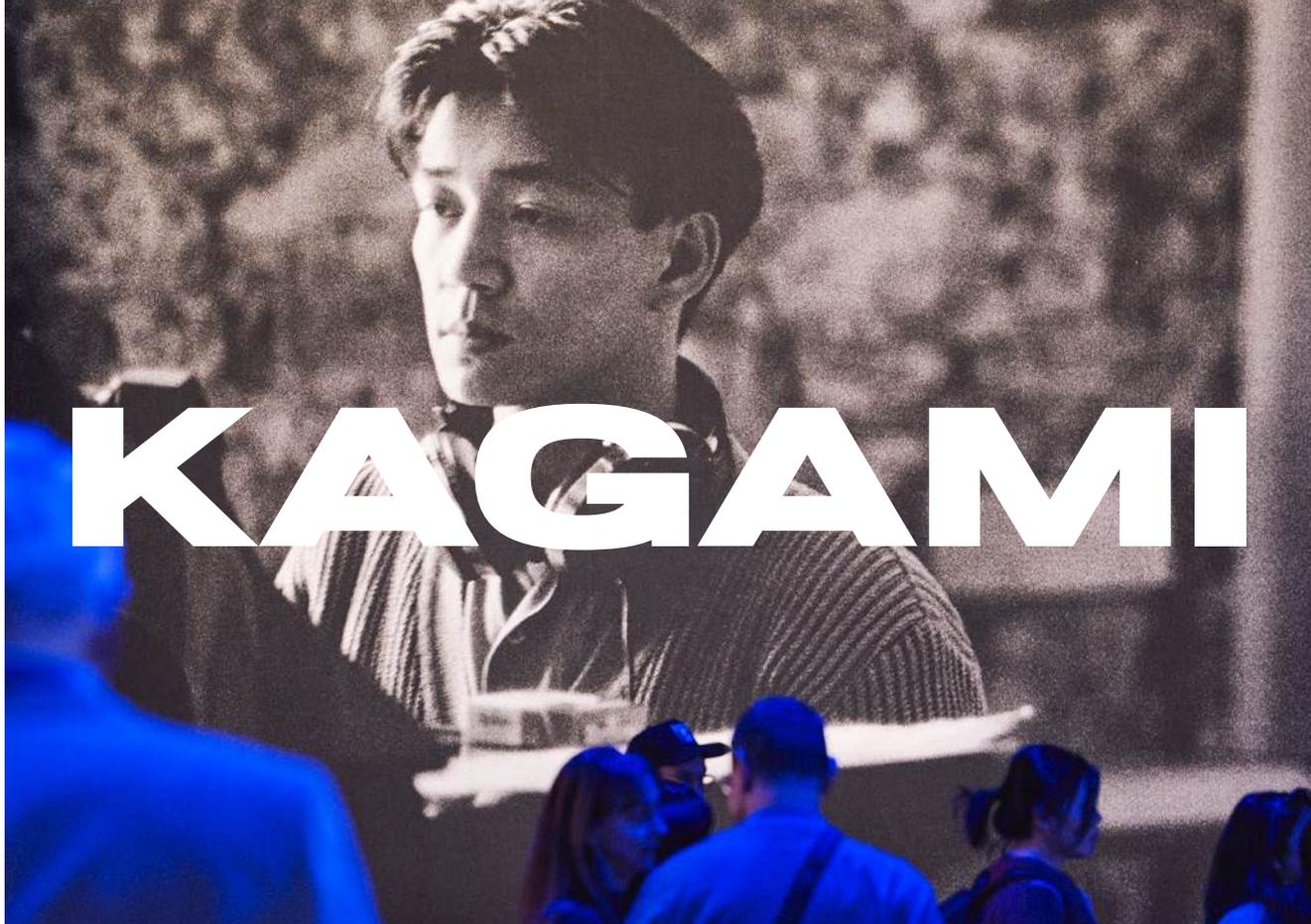
- July 28 Auckland
- July 30 Wellington
- Aug 3 Christchurch

Hop on Board!

exhibit@entech-roadshow.com | +61 408 498 180 or +61 418 359 330

ENTECH presented by Kate and Julius Pty Ltd

www.entech-roadshow.com



KAGAMI

Ryuichi Sakamoto and Tin Drum's Groundbreaking Mixed Reality Concert

Even if you're not familiar with Ryuichi Sakamoto, it's likely you've heard his music. Launching his music career as part of electronic music pioneers Yellow Magic Orchestra, he went on to release a series of influential solo albums, composed music for the opening ceremony of the 1992 Olympic Games, and won an Oscar for his score to the 1987 film *The Last Emperor*. He even acted alongside David Bowie in the 1983 film *Merry Christmas*. Mr. Lawrence, for which he also composed the score, whose main theme, *Forbidden Colours*, became a hit. Constantly experimenting, Sakamoto produced multimedia works, collaborated across disciplines and genres, and was awarded one of the world's highest cultural honours, the French *Ordre des Arts et des Lettres*, in 2013.

On Wednesday 19 February, I went to the media preview for the extraordinary *Kagami*, a mixed reality piano recital performed by Sakamoto, now almost two years after his death. Despite having two cameras with me and having totally free reign to photograph it, I can't show you a single image of the show. Not because of bad light or my shonky photography skills, but because the visual part of the performance takes place in a pair of mixed reality glasses that defy photographic capture. Sure, I can show you what the infrastructure in the room looked like, but in describing the truly novel and breathtaking visuals, I'm left with just words.

Kagami (mirror, in Japanese) was created by Sakamoto and long-time friend Todd Eckert (as director) and Todd's company Tin Drum.

It is a 50 minute long piano recital consisting of 10 pieces, played by Sakamoto on grand piano. Apart from the solo piano, Sakamoto speaks briefly three times, introducing pieces. It is very Japanese in spirit; restrained, zen-like, and beautiful.

The audience enters the space, in this instance, a blacked-off exhibition hall in the Melbourne Convention and Exhibition Centre. A circle of chairs rings the room. You take your seat, and staff hand you your glasses and the computing 'puck', or 'pack' that runs them. They ask you to put on the glasses and confirm you can see a red cube rotating in the centre of the room. I can. That's means the device is booted and running.

A circular truss hangs above the centre of the room. It's rigged with six d&b audiotechnik loudspeakers spaced around its perimeter, and one in the centre pointing straight down. Two d&b audiotechnik subs are flown next to them. There are also some simple LED fixtures around the truss. Another truss circles the room, which must have been 30 metres in diameter. It has regularly spaced LED Pars, LED pinspots, a few movers, and some smaller LED fixtures I can't place. On the floor under the centre truss, white tape marks out a square mandala about four metres wide.

In silence, the room goes dark, and Ryuichi Sakamoto appears sitting at a grand piano in the centre of the room. It is life size. He begins playing. The piano sound, coming from the d&b PA, is as close to sounding like

there is really a piano in the room as I have ever heard. Both Sakamoto and the piano are not made of real video – they are rendered as very high-quality graphics. They are completely three dimensional.

During the first piece, a low fog starts floating to the centre of the room from all 360 degrees, starting about 20 metres out. It's not real. People get out of their seats and follow it, as do I. That's when the magic really starts. You realise that as you get closer to the maestro, he becomes more realistic and in focus. You can walk around him (they encourage you not to go inside the area marked by white tape). I stood over his shoulder and watched his hands playing the piano, and it looked real. Amazingly, I walk around the piano, which has its lid off. The sound exactly follows what would happen sonically if you walked around a real piano. I am very, very impressed. Particles float through the air. At the end of the piece, the video fades.

When it fades up again, you start to see what this technology is really capable of. In response to an angular, rhythmic piece, beams of red and white laser-like light start forming a structure in the air that you perceive as being 40 meters across and two storeys tall. They grow and reproduce according to the structure of the piece, like a three-dimensional painting by Mondrian. From here, the graphics become more amazing with each piece.

From then, I see visual effects I have never even considered as being possible. In one

“The producers have only released this one simple render from the graphics engine running the show. While that’s frustrating for me as a magazine editor, I am totally behind this artistic decision. Kagami needs to be experienced. Even with years of covering tech and theatre, I was left awestruck by the piece.”

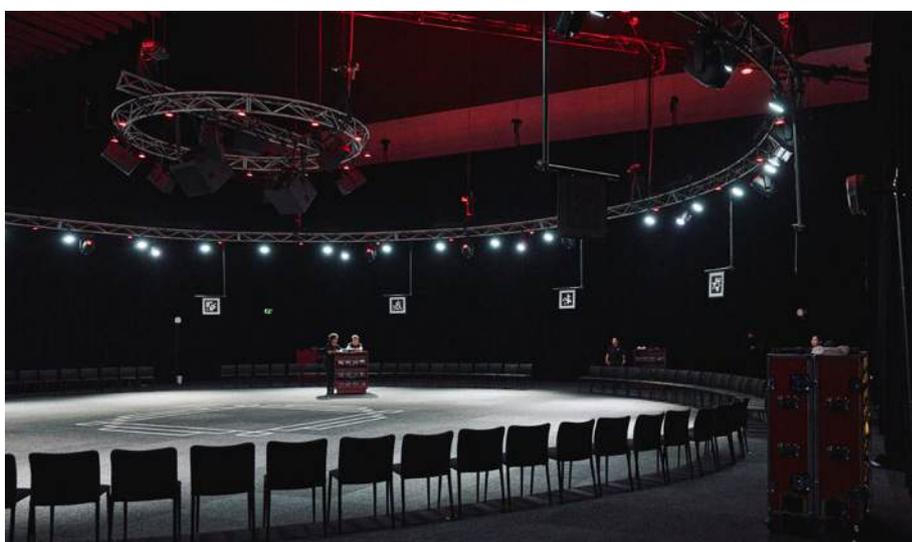
piece, a roughly 3 x 3 metre ‘window’ opens behind Sakamoto, about six meters in the air. It is angled down at roughly 30 degrees. Within this window, a real video of a progress through a snowy forest plays. It’s exaggerated light beams from the window onto Sakamoto’s back and around him. It looks transcendently beautiful.

In another piece, two concentric circles grow out of the floor, roughly 12 and 15 meters away from the centre. At first, they are rings of light, but then they grow into two-storey-tall still images of Tokyo that bend around 90 degrees of the circle. The are two rings of three images, with gaps between each image. Both rings rotate. I walked between them as they rotated. They are somewhat transparent, and you can still see Sakamoto. I found myself putting my hand into them with childlike wonder.

Then, Kagami takes the floor out from under you. A tree grows out of the piano, and its roots extend into the ground. The floor has gone black, and you are seeing tree roots grow in a complex tangle over 20 metres in diameter under you, going down 10 to 15 metres. Your brain is now convinced you are hovering in air.

This effect is taken to its absolute extreme when you are hovering above Earth itself and the entire performance space is the vastness of our universe. Some people are going to have pretty extreme reactions to this. Our audience broke into spontaneous applause, which is always a bit odd when you know you’re applauding playback.

As acknowledged by the pre-show announcement, this tech isn’t perfect. The glasses use some kind of polarisation, which makes your fellow audience members all but disappear, but which the brain interprets as ‘odd’. About a third of my field of vision was blurry, and you have no peripheral vision to speak of. There’s always a slight lack of substance to any digital visual. All that being said, the experience is still incredible, and it’s startling to think what this technology is going to be capable of in the near future.



Behind the Mirror

After this extraordinary experience, I was lucky to sit down with Director, Producer and Art Director Todd Eckert of New York's Tin Drum. Tin Drum is a global collective of artists, technologists, designers and scientists founded by Todd to create works in mixed reality. Todd himself started his career in music journalism at the tender age of 14, worked in the arts and film, and was recently the Director of Content Development for mixed reality device manufacturer Magic Leap, which led him to found Tin Drum in 2016.

I had a million questions, and started by asking what gear was involved in what I just witnessed. "The mixed reality glasses and the computing pack you were wearing were made by Magic Leap," confirms Todd. "We don't have to specify lights as they're pretty generic wherever we go. The sound system is d&b audiotechnik, running Soundscape. Everything else we created. The actual video delivery mechanism is gaming engine Unity. The capture process was done by a company called 4DViews who are based in Grenoble, France. We did the capture and recording at Crescent Studios in Tokyo using 48 cameras and a lot of close mic'ing of the piano. We had to reprocess, refine, and change absolutely every facet of the raw data that we created."

I haven't had much experience with augmented or mixed reality experiences like this, and I have no idea where the content is

actually coming from. Is it streaming? "No, all of the content is stored individually on each computing pack, and all of the packs are locked together with timecode, as is the lighting and audio," explains Todd. "We had to create a bespoke piece of software to do that."

The positional data that changes your perspective on the content as you move around the room is also running in the computing packs. "The computing pack orients itself when we first initialize the device. Unless something goes wrong, your position isn't being updated by anything external to the pack." I ask about the 12 or so 20 x 20cm QR codes hung around the perimeter of the room – do they have anything to do with the positioning? "Yes," Todd continues. "The devices are state-of-the-art, but sometimes they're like precocious children and need to be affirmed. Finding the floor, for example, is predictable, but it was very important to all of us that if there was any potential for drift or the images coming off-centre, that we'd be able to fix it very rapidly, and so we put those QR codes there. But it also orients Ryuichi so that the audience gets the best vision of him. It's there if we need it, but we're not constantly looking for it, because that would burn through our computing power."

Todd worked on the show with Sakamoto and the technical team over many years; "The art design was all mine, and every single song has a reason why it is what it is," states Todd. "The process of creating visuals was to

distance the show from feeling like a recital. It was very important to me that this not only appealed to people who already loved Ryuichi, but could also entice and excite an audience who were unfamiliar. It is more fulfilling than just a person playing piano, and we are able to express different ideas with each song. The first song, with the fog coming out, is designed to encourage the audience to move towards him. The next song, 'Aoneko no Torso', has an incredibly fluid melody, and I pulled the particles that float around Sakamoto out of video of the sun glinting off of the sea in Thailand."

The astonishingly perfect piano recording and playback is courtesy Audio Designer Kazuyuki 'zAK' Matsumura, who captured the piano with extremely close mic'ing so as not to get in the way of the cameras. A d&b Soundscape immersive audio processor takes the multitrack playback and positions it perfectly in the d&b PA cluster, ensuring the as-close-as-possible-to-real result.

I asked if there was anything going on technically that I wouldn't be able to pick up on. "You know how the show goes into complete darkness a couple of times?" asks Todd. "Given that the mixed reality devices require the recognition of the floor to remain positioned virtually where they are, we needed a way to give them that information in a way that you can't see. We actually flood the entire area with a very specific frequency of infrared, from specialised fixtures we tour with."



AT NO STAGE

STOP BULLYING  HARASSMENT

AT NO STAGE
STOP BULLYING  HARASSMENT

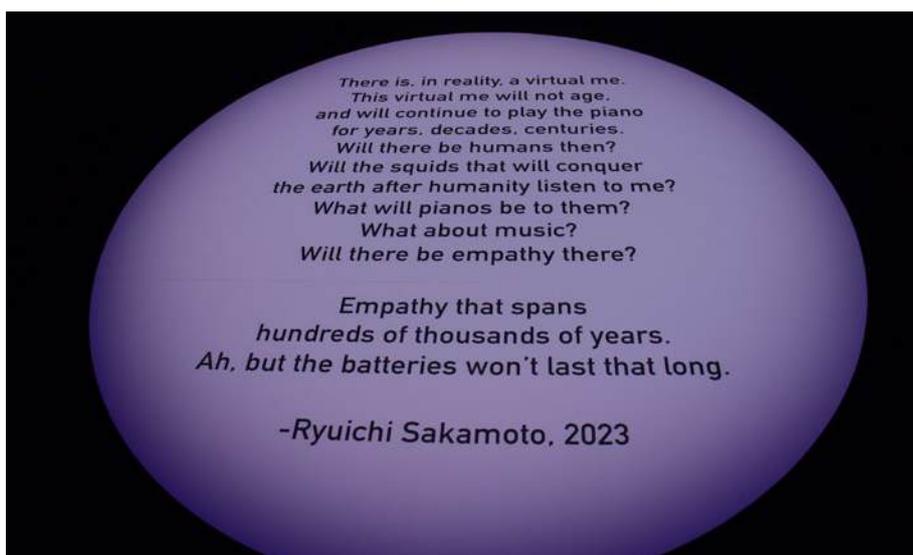
No matter what stage in your life,
or the stage it plays out on...
At NO Stage will bullying and harassment
be tolerated in the live music industry!

 **CrewCare**®
For ALL Live Music Crew



Aside from the special IR fixtures, the show tours with fairly minimal tech infrastructure. “We’ve got a few racks, but not a crazy amount,” relates Todd. “We don’t tour lights; we pick them up regionally. Same with PA – we can always get what we need in terms of d&b. We’ve got an anchor team of five people, including a stage manager. It’s not a massive group, and I’m really, really lucky in that I have an astonishing crew that just figure it out wherever we are. And by the way, the crew here in Melbourne has been crazy good! I guess it’s the same as any touring show, really. Every space is unpredictable. How the devices work can be impacted by magnetic charges that you can’t see. Power grids are all different, so you have to accommodate that.”

Despite all the technology deployed on Kagami, the show feels deeply organic, and an extremely human meditation on death. Sakamoto himself went into hospital halfway through production and didn’t come out for a year. He died not long after the project was completed. A projection on the floor in the antechamber before you enter the space are Sakamoto’s typically playful musings on his eternal digital life (see image to the right).



“As a director, it was really important to me that I not come up with anything that was just absurd,” concludes Todd. This was not about turning Ryuichi into a superhero. This was about connecting an audience who would never meet him in a way that they felt like they were in the room.”

THE PEOPLE ISSUE

This is the second year we've run a 'People' issue in March, and given the reaction, I think it's here to stay. The premise is simple – we put out the call to celebrate the most important thing in our industry – our people. While we all work with tech, it's the people we do it with and for that make it all worthwhile. I often say to people that I'm writing about that it's not the tech that's truly interesting, it's about what we humans do with it, and why we do it.

So here's to everyone who put down in words why they appreciate the people they work with, and what they do that's so awesome. We all need to do this more often! While I'm at it, I'd like to thank all of CX's regular contributors in no particular order; John O'Brien, Jenny Barrett, Kurtis Hammer, Allee Richards, Brian Coleman, Andy Stewart, Artemis Horton, and Julius Grafton, plus all back room contractors that get the mag into your hands each month. Salut!



Angie Doyle, The P.A. People

by Jodie Steele, The P.A. People

Angie Doyle leads the Service and Maintenance Team at The P.A. People. Starting as the Service Coordinator in 2018, Angie was then handed the reigns to the Service Manager role in 2021 when her manager left the company. It's only been up for Angie from there, tripling the service department workload in the last three years.

The team now consists of nine full time employees nationwide, plus Angie uses a

number of contractors and casuals in the busy periods. Team collaboration is the most enjoyable part of the job for Angie, commenting; "Everyone in the team brings their wide-ranging expertise to the table. We problem solve, discuss issues, and share knowledge. Everything is done together, making for a really positive team environment."

The P.A. People service team's diverse skills are comprehensive, handling multiple audio visual and venue engineering systems for venues large and small. "Whether it's routine maintenance of your AV system, servicing your chain motors or hoists, or a full service audit for your venue, our team is equipped to do it

Anthony 'AJ' Littlewood Johnson

by Andrew Chambers, AC Production Design

This is AJ, Anthony Littlewood Johnson, owner-operator of The Max Company, and one of those people who help glue the West Australian events industry together. He's prodigious, productive, passionately driven, and the nicest guy you'd ever call 'mate'.

When he's not programming lights for major shows or busy in his workshop working with us mutts repairing every conceivable bit of kit, he sneaks in some time to help teach the next generation.

Never short of a valuable contribution, he's helped so many of us with his knowledge and compassion, without expectation, with humility and humour. We had to threaten sending compromising photos to get him to sit for this one.

From your workmates and the legion whose lives are better for the knowing of you, thanks mate, you're a legend!

all. Plus, we have the support of the full P.A. People engineering teams in Sydney who can assist with anything out of the ordinary. The wealth of knowledge and experience between them and our service team is unheard of anywhere else."

"The challenge is managing multiple service schedules across venues," says Angie. "Each job has its own timeline, performance schedule, and maintenance needs. It's a juggle, but I love solving the puzzle and making it all work simultaneously."



L-R: James Collins, Bass Hathaway, Blake Crisford, James Butler, Milo Rankin

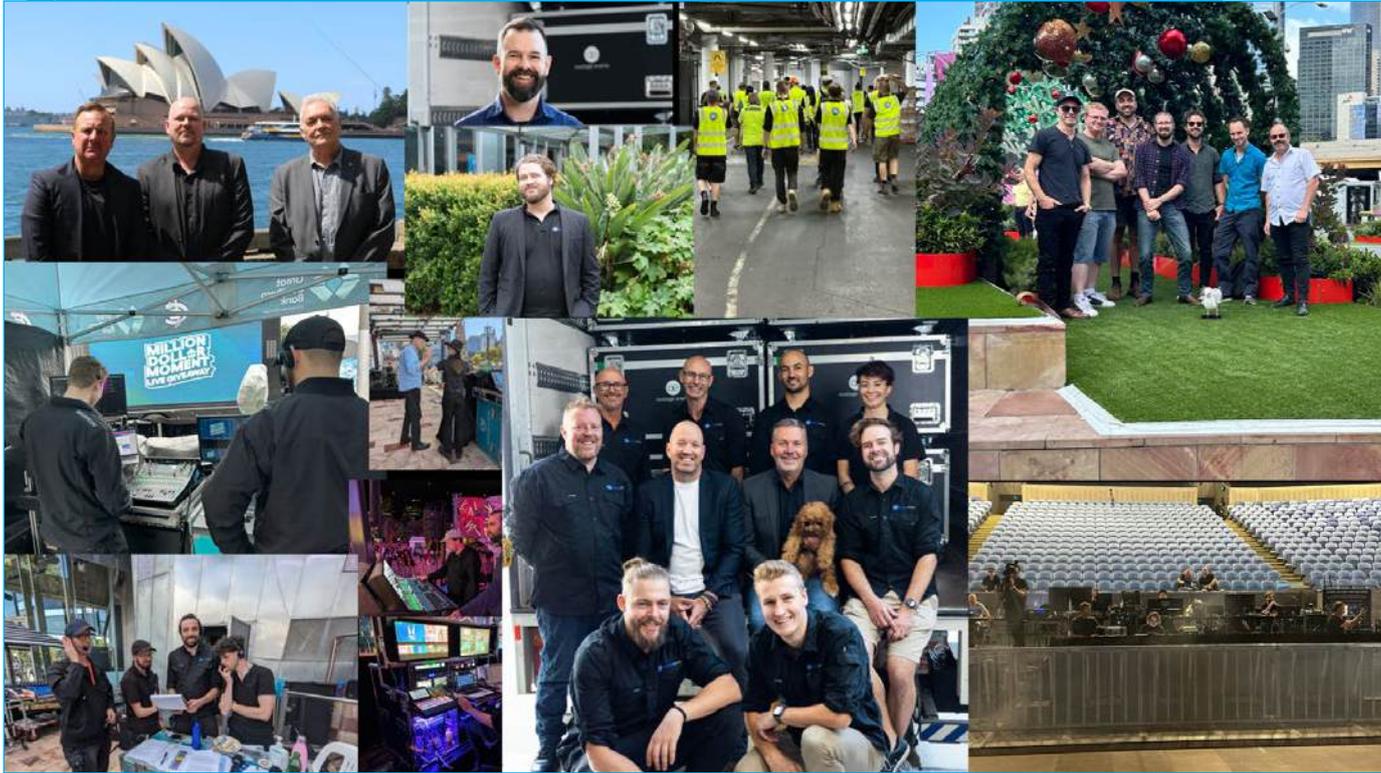
Team Austage

by Matt Wilson, Senior Production Manager, Austage

A busy AV business is only as good as its crew and, lucky for us, Austage is stacked with absolute legends. From seasoned veterans who have been with us from the very start to the young guns who are the future of our industry, this group are just a few of the amazing individuals who come together to make the best team in AV!

The first to arrive and the last to leave, they are the ones unloading trucks at 2am and reloading them again at 11am, because that's what needs to be done to make the magic happen. Their work is not always seen or recognised by event attendees, but it certainly is by us, and we couldn't do what we do without their dedication, enthusiasm, and skill.

We're not just work mates but friends as well. That's why our gigs are guaranteed to include top-tier banter, an endless supply of snacks and plenty of jokes - sometimes they're even good!



The CTS Production Team

The CTS Production team is a testament to the impacts of matching talent and dedication. Known for their exceptional work in audiovisual and event production delivery, and webcasting excellence for premiere corporate clients across Australia, this dynamic team is composed of skilled professionals bringing a wealth of experience and creativity to every project they undertake. This has included some of Australia's largest Annual General Meetings, financial announcements, public customer presentations, and employee meetings.

We'd like to spotlight some of our key people here, who are themselves supported by incredible teams of operators and support staff throughout CTS.

James Collins, the Production Manager, is the backbone of the Production team. With a strong grounding in both live events and expertise in broadcast production and delivery, working with teams to get the most effective combination of individual talents, coordinating efforts and ensuring that all technical aspects are flawlessly executed. James's leadership and expertise are invaluable assets to the group.

Tyler Wood, the Event Operations Manager, is a key player in ensuring that every event runs smoothly and efficiently. A previous recipient of AVIXA's Young Professional of the Year award, Tyler's meticulous planning and attention to detail, as well as his ability to troubleshoot and manage complex technical setups, is crucial to the team's success, and has earned the team a reputation for excellence in event management and the respect of our customers nationwide.

Milo Rankin is known for meticulous seasonal planning and collaboration across the CTS business to enable the development of new technical staff, ensuring that every event project is well resourced and able to be executed. Without Milo contributing to the skills and success of our people, and a solid plan, nothing else would be possible for our client events. Milo also works with the team as a vital and experienced professional across both AV and IT disciplines for our event calendar.

Bass Hathaway, a talented director, videographer, and technician, brings technical prowess and innovative solutions to the table. Bass's flair in capturing those fleeting, special moments in a live setting help distinguish our client's event footage and creative content, and craft a honed message for their audiences.

Blake Crisford, another integral member, contributes significantly to the team's achievements with a keen eye for detail and a commitment to delivering high-quality results. Blake is responsible for setting up and maintaining the audiovisual equipment, ensuring that all technical aspects are flawlessly executed.

James Butler, along with many in the team, has been with CTS for many years and plays a vital role in ensuring the technical excellence of every event. James' dedication to creating seamless engagement with remote audiences through virtual broadcasts, and his ability to elevate every event for those in the venue or joining remotely, make him a standout member of the team.

Together, this team is not just about getting the job done; they are about exceeding expectations and setting new standards in the industry. Their collaborative spirit, combined with individual contributions, makes the CTS Production team true professionals, as well as technical experts. They pride themselves on their ability to learn and grow as professionals using insights from the industry around them, and from each other.

The skills they are able to share and draw from the larger team surrounding them, be it in our AV Support, or Consulting teams, enable CTS to be at the forefront of what our clients deserve from their events and push us to innovate continuously. Whether it's a corporate event, a live broadcast, or a high-profile production welcoming the public, this team delivers outstanding results every time, making them a standout in the field. With over 20 years of industry-leading experience and awards in hybrid event innovation, CTS Production ensures your audience has a seamless event experience.

WE HAVE YOUR EVENT
BACKDROPS
SOLUTIONS

Backdrops™
Fantastic

2024
ANNUAL AWARDS

2024

Today, tomorrow, together

Today, tomorrow, together

2023
ANNUAL AWARDS

1800 737 037
www.backdrops.com.au

OUR BRANDS:

Events™
Fantastic

Modular™
Backdrops

Light
Up™
Letters

Backdrops™
Fantastic

Keeping up with Kieran Bedwell

by Geraldine Shine, Brand Strategy, TDC - Technical Direction Company



This is Kieran Bedwell, the Outbound Warehouse Coordinator and all-around logistics legend at TDC – Technical Direction Company. Kieran is the guy keeping all the balls in the air, working out the huge task of ensuring our technical team have the gear they need at all times.

Missing a bit of kit for your prep? Kieran is on it. Packed the wrong bolts for your LED build? Just ring Kieran and he'll have them to you ASAP.

As our Outbound Warehouse Coordinator, Kieran makes sure our logistics operations and inventory management system is running smoothly. He works behind the scenes with every area of our business to make sure that all the shows we are working on aren't short on a bit of kit, and that our video technology and equipment are out the door on time to make it to site for rig day.

Kieran recently reached the 10-year milestone with TDC, and he's been a staple in our warehouse from day one. Not only does he bring an eye to detail for our equipment tracking and inventory management, but he also delivers daily his signature brand of comedic relief and child-like sense of fun, which is much appreciated in times when the team are under the pump to get equipment from one gig in the door, de-prepped, re-prepped and out for the next gig with little time to do so.

Here's to Kieran – thank you for a great 10 years and here's to many more!

PS – Kieran is currently writing his memoir – “Keeping up with KB”

Daniel Pryzibilla, WOOHAH Sydney

by Jason Griffin, Head of Production, WOOHAH

Daniel joined WOOHAH Sydney in 2023 taking on a completely new role for him as NSW Operations and Logistics Lead after coming from a long term career in sales and sales management. Daniel's primary role is to look after all NSW crewing, logistics, equipment and interstate transfers. Daniel recently won WOOHAH's annual MVP award which is voted on by all staff in the business. He was a clear winner for this, as he represents everything we strive for at WOOHAH. While Daniel's role is primarily office-based, you will regularly see him driving trucks or bumping in and out screens, because no job is too large or small.

Daniel is a problem solver for many people in our business. When you call him, you know he is going to take the time to find the right solution. In addition to being an amazing member of the WOOHAH family, Daniel also is a dedicated husband, and father of two beautiful girls.



Eventspec

by Nicole O'Reilly, Eventspec

In the world of AV, we all know that the tech and gear are what often grab the spotlight. From the latest LED walls to the cutting-edge sound systems, it's easy to get caught up in the gadgets. But at Eventspec, we firmly believe it's the crew that truly makes the difference.

Sure, our equipment is second to none, but it's our people who bring the real magic to life. From Chris, our founder, to Mash, our creative genius, each member of the Eventspec team is crucial in turning any idea, no matter how big or small, into an unforgettable experience.

So here's to the incredible crew at Eventspec! You're at the heart of everything we do, and it's because of you that our clients and their audiences have those unforgettable, memory-making moments, our suppliers partner with us, and most importantly, we continue to thrive as a tight-knit team that always has each other's backs. Thank you for your hard work, your creativity, and your unwavering commitment to excellence!

Harry the Hirer Productions, The Legends Behind the Scenes

by Simon Finlayson,
General Manager

These are the unsung heroes of our National Productions team! They're the legends that keep our shows and events rolling out the doors, day to day, with their planning, logistics, stock management, prepping, repair and maintenance of all our product segments including lighting, video, rigging, audio and staging.

Without these guys and girls setting up the lives of our crews on the road, we wouldn't be able to deliver such great shows and events. A huge THANK YOU to you all!



Melbourne operations team



Sydney operations team



Melbourne department heads and warehouse team

PEOPLE spit in microphones

They don't realise it, and you can't see it - viral loads stay on a surface for 3 days.

Protect your PEOPLE and de-prep with Li.LAC

For more info visit www.lilac.works/faq/ or email info@evcomaus.com.au





**Martin Bowman,
General Manager
of Clearlight Shows**

by Simpson Myers, Sales and Marketing, Clearlight Shows

At Clearlight Shows, you will have run into our General Manager, Martin. He has been with us for over three decades and become an integral part of our team. 35 years ago, young Marty came to Clearlight Shows as a casual worker aged just 16. He spent a few years learning the ropes before moving into the hire department, where he soon moved up into the manager position.

As the hire manager for over 25 years, Martin has shown exemplary commitment to Clearlight and the lighting industry as a whole, always willing to problem solve and go above and beyond to ensure our hire team ran smoothly.

Recently, as of 2020, Martin has stepped up again to the General Manager position. In this new role, Martin oversees both the sales and hire departments of Clearlight Shows. What started as a casual position in his teens has led to a long and fulfilling career in lighting, and we know that Clearlight and the rest of the industry is better for it! In this nearly four-decade career, Martin has seen the industry innovate and evolve, witnessing the introduction and development of moving lights, and later, LED technologies.

Martin has travelled the globe as a Clearlight ambassador, often heading out to one of the big trade shows or visiting our European suppliers. He is a big part of what makes Clearlight the business you know today. We know Clearlight is in great hands with Martin's care and attention to detail and his passion for his role. Thanks Marty for everything you bring to Clearlight Shows!

**Peter Eirth
- Technical Manager,
The McDonald
College**

by Peter Kraft
Deputy Principal Performing Arts, The McDonald College

Peter has been the Technical Manager at The McDonald College (an Independent Performing Arts School) in Sydney for



nearly 20 years. Being a school with a significant focus on Performing Arts, Peter has a massive responsibility for nearly every technical aspect of our shows on-campus which can number between 40 – 50 separate events every year, not including things like college assemblies, information evenings and all those other things that make school tick. He manages two performance spaces on-campus, regularly turning them over in record time for the next show that is being staged.

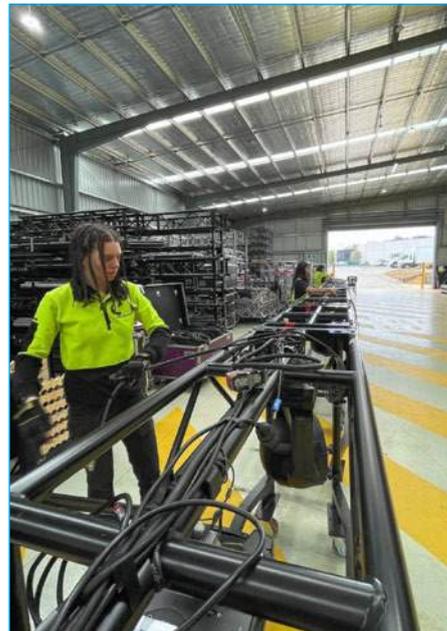
Peter is a jack-of-all-trades and is often called on as Lighting Designer, Lighting Op, Sound Op, Vision Systems Op, Set Design, Set Construction, bump-in/out supervisor and crew, you name it, Peter does it! He's always the first in during productions and the last to leave after every show. On top of this, Peter also teaches and mentors our Technical Production students, most of whom have gone on to work in the industry and who he runs into at major events outside of The McDonald College where he does casual crewing (where does he find the time!?)

On top of this, he is also a great guy and a wonderful colleague and teacher. He is one of those people who just gets on and quietly does his job with no fuss. He is part of the gaffa tape that holds our productions together and we simply couldn't function without him. From all at The McDonald College, thanks Peter, you're awesome!

Resolution X Our People, Our Strength

by Casey Morrison,
National People & Process
Manager, Resolution X

What sets us apart isn't just our equipment or expertise - it's our people. Across Sydney, Melbourne, and now Brisbane, our teams are the heartbeat of every event, working with precision, passion, and an unwavering commitment to excellence. Behind the scenes, our warehouse teams ensure every piece of gear is prepped, packed, and ready to roll, keeping operations seamless and efficient. On the ground, our production teams bring events to life with expert rigging, AV setups, and flawless execution. And in Brisbane, our newest team may be small, but they're making a mighty impact as we expand into The Sunshine State. With adaptability, teamwork, and a shared drive to create unforgettable experiences, our people are the reason we continue to grow and help deliver world-class events across Australia.



Robyn Good

by Tiny Good, Showtech Australia

Robyn Good is the ex-General Manager of Showtech Australia, and currently works Special Projects and Administration Support at Showtech Australia.

Robyn started work with Showtech Australia in the early 1990s. She quickly became part of the Melbourne TV, film, and corporate event rigging and staging scene, then music festivals, structures, performer flying, and automation. Robyn developed business and financial skills, all learnt as she went. International freight and travel logistics were added to her skill set, as well as HR and Legal.

Robyn was one of the founding board members of Entertainment Assist, and then the early CrewCare, as well as becoming a Mental Health First Aider and supporting many other charities both within the industry and elsewhere.

About 10 years ago, Robyn was diagnosed with MS and had to leave full time work with Showtech Australia. Typical Robyn, she adapted and moved on to new challenges but maintained her contact with the crew, and friends in the industry. She still takes calls from crew needing support or advice and makes sure the Showtech team get the right planes and hotels for the many gigs all around the world. We think she's awesome!!

Susanna Salmi, Diversified

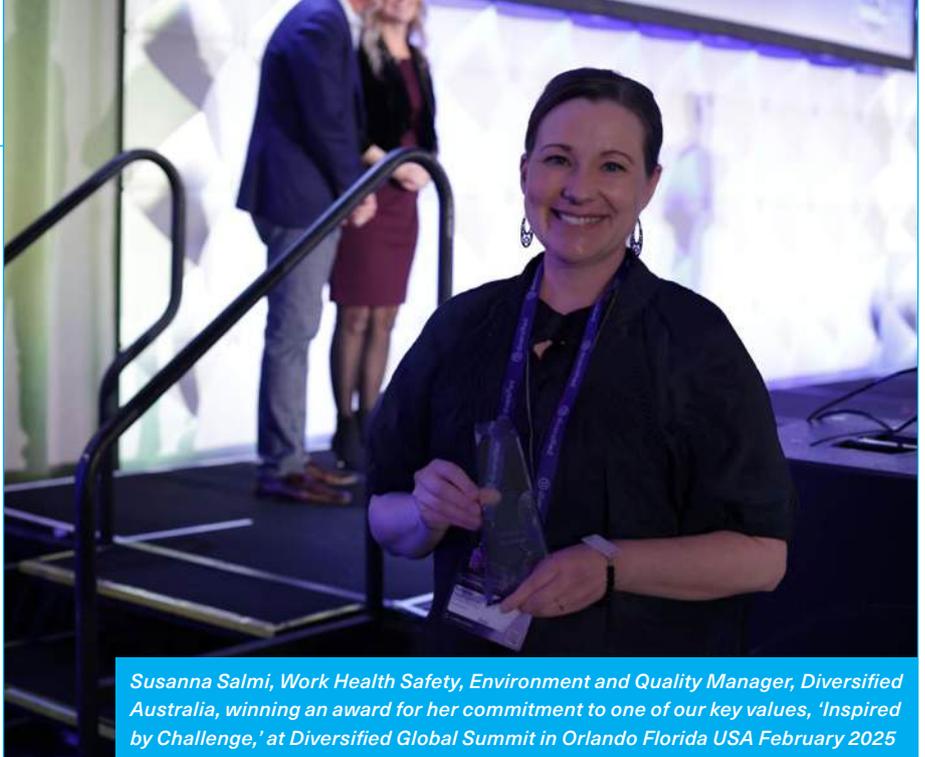
by Mandy Balla-Kellett, Director of Marketing APAC, Diversified

Susanna Salmi is a Work Health Safety, Environment and Quality (WHSEQ) professional at Diversified, with extensive experience driving excellence in the construction and AV industries. Awarded by Diversified globally for her commitment to one of our key values, 'Inspired by Challenge', Susanna has shown continuous improvement in the development and execution of innovative WHSEQ strategies within an Integrated Management System.

Under her leadership the business has achieved compliance certifications with ISO 45001, ISO 14001, and ISO 9001. She sets clear goals for her team and drives their successful completion, consistently achieving high standards. Susanna plays a key role in major projects like the AV overhaul of the Melbourne Cricket Ground, where she has championed proactive risk assessments, safety protocols, and environmental sustainability initiatives. As part of this effort, decommissioned equipment has been repurposed for charities, community organisations, and educational institutions, supporting both environmental responsibility and community engagement.

"Workplace safety is a commitment to ensuring every team member goes home safely. A strong WHSEQ culture not only protects people but also drives performance, innovation, and continuous improvement. It's the individuals who uphold these principles that create a workplace built on trust, accountability, and shared responsibility. Together, we foster a culture where safety, sustainability, and quality lead the way," said Salmi.

Under Susanna's management, Diversified Australia has strengthened its commitment to sustainability, workplace safety, and operational excellence.



Susanna Salmi, Work Health Safety, Environment and Quality Manager, Diversified Australia, winning an award for her commitment to one of our key values, 'Inspired by Challenge,' at Diversified Global Summit in Orlando Florida USA February 2025



Susan Twartz, Profiles RF Management

by Peter Twartz, Profiles RF Management

In any successful relationship, the people complement each other. That is certainly true for Susan and me here at PRM.

To many people, I am the face of the business, and it is often mistaken as "mine". Nothing is further from the truth, as PRM is most certainly "ours". I might be the face, but Susan is the person that runs the business.

For those that don't know, Susan has an equally long history in this industry and has been working in and around RF for many years. During the eight years of the Digital Dividend, Susan led the peak industry body that was responsible for getting recognition

and appropriate laws changed that allow us to operate in the spectrum we currently have. She brings that knowledge and experience to our business now and some of the spectrum plans you see me deploying were created by her.

When I am onsite at a job, I have a tendency to get bogged down in minute details, so often Susan will step in and redirect my attention to what needs to be done now for that particular job and also something vital for the next job too! Her soft skills are evident when dealing with news crews at large events. She has the ability to get them to be compliant rather than confrontational. She also remembers to invoice

the clients which, I must admit, I have been known to forget.

She brings other soft skills to our business that are hard to quantify. As our business has expanded, it has been interesting to observe that, while most of our clients are major sporting codes, they are run by smart women. Susan relates to them better than I can, and can explain our service offering and how it benefits their business.

On top of all that, she insists we take a good holiday each year and she is a stellar travel organiser!

**FEELING
THE PINCH?**
Check out the special
reduced membership
offer for people in
financial hardship

COLLECTIVE STRENGTH

CAMPAIGNING

WORKPLACE SUPPORT

DISCOUNTS & BENEFITS

NETWORKING

With more than a century as **the leading advocate for workers in the arts and entertainment industries** and dedicated and experienced staff, MEAA is the union for any lighting, audio, staging or rigging crew who work in theatre, live music, concerts, conferences and events venues.

BECOME A MEMBER TODAY

meaa.org/join [1300 656 513](tel:1300656513) members@meaa.org
[fwithMEAA](#) [@withmeaa](#) [withmeaa](#)



The Perfect Employer!

A 'workers utopia' - NOT

As a fairly decent employer most of the past fifty years, I can also sure identify my failings along that road. Statistically a handful of the hundreds of people that have worked for me (I'd rather say worked 'with' me) were wrong from get-go but I reckon I did well to retain almost everyone I valued, and most of the others. Retention is everything - the average loss period on any new hire is three months until they are useful.

Of late I'm incredulous at how same-same the employment adverts are, following the same format almost every time. Every hirer is an exemplary beacon of righteous wholesomeness. An average of fifteen bullet points of required skills and virtue, which no human applicant has a hope of matching, following by eight 'desirable' wishes, and several 'must haves' - like a driver's licence or a formal trade qualification. Mostly in our creative arts and audio visual technical lines of work, a formal qualification is not common.

I keep hearing the same things: 'I applied and didn't hear anything' or 'they hired someone who doesn't match the list'. We're in a very small industry here, consider by example the professional audio side buys around ten billion US dollars worth of stuff in a year, while the rest of the planet eats 2.5 times that much in potato crisps. Everyone knows someone, so think about how you recruit.

How about ditching the bullet points, and writing a brief intro from the heart of your business about who you are and what you are looking to achieve? Like, 'We're a regional theatre in 'xxxx', with a historical facade (and maybe also a ghost called Shirley), in a wonderful town of 40,000 people. We need a professional theatre tech who knows the

basics of our system which features 'xxxx' and 'yyyy'. We have eight full-time staff and a pool of casuals, the tech we want is someone who can engage with our community, hirers, our people, and embrace our culture. It's a full time gig, and we will pay what we can afford for the right person. Everyone who applies will get a phone call. Write us a letter about why this is you!

That'd do it, honestly! The 'get a phone call' part is the secret sauce. You shouldn't ever go on an internet date without first talking to the potential suitor, because chances are the wonderfully crafted profile and notes were written by a robot - or a smooth cousin. The person answering the phone may not have the cadence or the grammar to actually match the applicant. That applies with job seekers too, and a new hire could be a very expensive divorce if you mess up. Call every applicant and say, 'hi, just a quick call to acknowledge your application!' Then wait until they say something. Like, silence is a wonderful tool! Listen, think, respond, and then advise you will not call back if they are unsuccessful but you sure will email them the minute you have decided. It may have become a valuable discussion. They may have indicated a salary expectation. They may know - possible WILL know - someone you know.

A phone call EARLY does great things for your reputation. The applicant knows they got through, they know NOT to expect a follow up call unless they are winning. They trust what you said, that you'll let them know by email what happened.

And from that you've branded your place as a good employer, one that respects its workers. They talk. I hear them, we all know what we think we know. There's a Glassdoor review stream spanning at least a decade about a horrible, nasty, vile integration firm that still gets applicants as it churns perfectly good people. Some employers are sociopathic. But the applicants are NOT from the existing experienced pool of workers we all know, they are always new to our industry. Because we all talk.

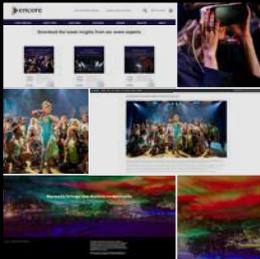
Fast forward to the offer and contract phase. I've read some recent multinational job contracts on behalf of friends (or my kids), and they usually run to ten or more pages of fine print. Some of them, more than half, contain unenforceable non-compete clauses which may seek to limit you working for a competitor in a similar role, and could push the timeframe well beyond the reasonable six months. One sales rep contract I just reviewed had 'salary', 'car allowance', and 'commission' where the commission was a fixed amount, with no definition as to how it was awarded. The inference I drew was that the sales manager would pull a sales number out of thin air and you'd go nuts trying to bust it. Then they would probably whack forty percent on the following year, depending whether they liked you.

That kind of trap is straight away a red flag. A device to play you.

Most 'thinking' progressive employers talk about how they advertised a job and the eventual winner started in a different role, or an 'adjusted' role. Where promotion from within meant alterations to a team, and saved all that time and money on induction and training. Your team usually have strengths and weaknesses and if asked could illuminate opportunity to change their role, or those around them, and maybe that improves all those tangibles, like efficiency, productivity (they are different), morale, profitability and reputation. And it came from within, from the thinking mind of someone who may be hiding in plain view. (The downside is you may get some crazy ideas that you have to rebuff gently to maintain motivation, and that requires mental energy).

We live and work in an imperfect world of eight billion different humans all of whom cannot hit fifteen bullet points with any degree of accuracy, or at all, and yet almost always have something to offer. Being an employer was by far the hardest thing I ever did at work. I didn't really 'enjoy' it, because it means so much to the people whose lives you co-opt for most of their waking hours across their varied lives. You really are responsible to them, moreso than they are to you.

Creative Services for the AV and Entertainment Technology Industries.



**Specialist
Content
Creation**



**Integrated
Print & Digital
Media**



**Marketing
& Business
Development**



**Professional
Event
Services**

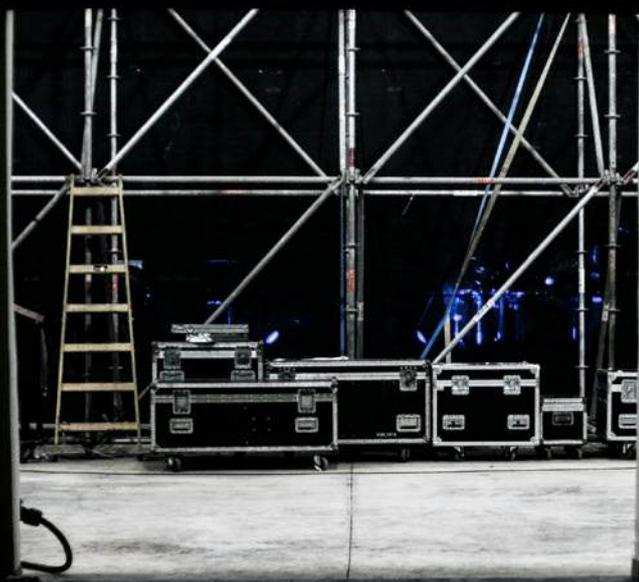
VCS Creative understands your products and services because we've used them professionally. We are AV, sound, lighting, video, comms, and staging professionals working as content creators and AV and entertainment technology business specialists. You don't have to explain your products to us; we know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

vcscreative.com



The essential primer, all you want to know

A CX SERIES



Working Backstage

PART 1

Photo Credit: Adi Goldstein. unplash

Let's peel this onion. Showbiz is an exciting animal, nothing is quite like the feeling as the curtain closes or the house lights go up after an AWESOME show! For us who work it, we really feel the endorphins - neurotransmitters released by the pituitary gland and hypothalamus in the brain.

No kidding, it's a buzz! I got that nine times out of 10 even if the music or the performance was boring. I'd pack up and feel warm, even when the air was cold. It helps us along, especially late at night. Then there is the approval of our friend circle because this is perceived to be a glamorous vocation and the approbation (translation: disapproval) of our wider family elders. Of that I hear a lot, although these enlightened days there is hope!

It's a modern-day circus, but lacking the animals of the past. They remain festooned with lights and signs, large motorhomes for the performers, and out back crappy caravans for the 'warbs'. Those warbs are us, the tent-hands of the past, existing in the present.

Yes Please: Me!

I really felt like I had joined 'a circus' when starting in 1974 and working at the evolving band scene that included AC/DC, Little River Band, Sherbet, Skyhooks and a gazillion others. Quickly I evolved my lighting business 'Zapco Lightshow' to fit the need. At that time, we lit the venue AND the band, with colour wheels, projections, ultraviolet tubes, a mirror ball, and a couple of coloured stage floodlights. The 'need' became concert lighting. We lit the talent.

Working through the 'YES ME' list I sure did enjoy the band interactions and less so the audiences. They were and remain at fever

pitch for 'their' band or performer. Try to not get in the way. It is sometimes cringeworthy.

Your 'friend appreciation' of what you are doing whilst working is wonderful, but it comes with a stack of requests: tickets (usually a few); introductions to the 'stars' - which is a very bad, career ending thing; then just gossip. All that is either difficult or wrong. Understand this: you have to reset your brain. If Prince was your legend, you'd be fired for even looking at him backstage! (An actual contract condition). Always remember, you're only as good as your LAST gig!

Sometimes it all gets too much...



The *Support Act Wellbeing Helpline* is a free, confidential counselling service that is available to anyone working in Australian music who needs to talk to someone about any aspect of their wellbeing.



THE SUPPORT ACT WELLBEING HELPLINE IS MADE POSSIBLE WITH THE SUPPORT OF:



Travel The World

At an ENTECH Brisbane 2024 EnTalk, we were absorbed in the session by Sean 'Motley' Hackett. A Brisbane lad, he found employment in Jands Concert Productions in the 1980s and ended up seconding for the Lighting Designer for KISS. Soon he was the guy, promoted to LD. So began 800 shows over 20 years.

It wasn't glamorous. Kiss were a notoriously tightly run money machine. Gene and Paul did pre-show meets worth ginormous dollars. They sold autographed guitars at every opportunity. They made insane money. But they made Mot fly Premium Economy. Cunning plan, here's why; he always had more than enough FF miles to upgrade to Biz, but: consider. What if your tour isn't planned a year out, and you are slumming it back there?

No kidding, sitting upright 14 hours and arriving in seven time zones will render you a dribbling, gibbering wreck. Forget the gig tomorrow. You are officially munted. You're out of service for a couple of days at least. Don't think you can blunder through, you cannot do that AND be safe and useful. Mot had enough time to get upgraded. You probably will not. Speaking from vast experience, travelling biz with a real flat bed and proper personal management will get you there fit for your purpose.

This is where you need to say the best and most accurate word in your language: NO.



Photo Credit: Seabass Creatives. unsplash



Photo Credit: bennoptic. unsplash



Photo Credit: Marc Schulte. unsplash



ADVERTISE WITH US



CX Magazine

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

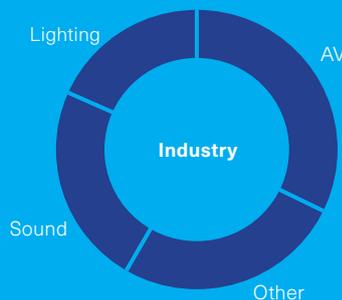
The website makes over **40,000 impressions** per month.



Social Media

Our social media generates **50,000+ impressions** monthly.

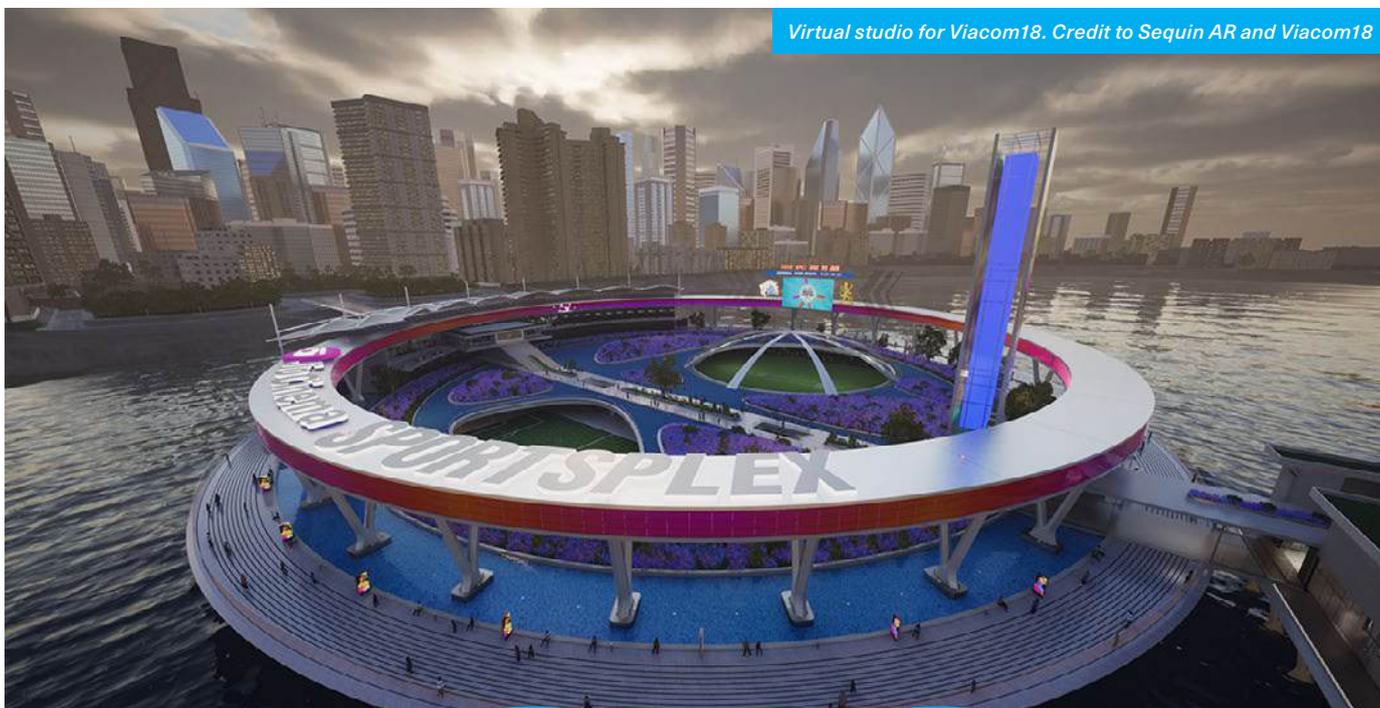
Your advertisement will have the best chance at succeeding with CX readers. Our audience are evenly spread across all areas of the industry and have varied annual spending habits.



Our audience are YOUR potential customers.

Talk to us today about a custom package to promote your business. Any budget, any platform - print, web, email and social.

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



PIXOTOPE

ALTER YOUR REALITY THROUGH THE LENS

The team at leading visual distributor ULA Group are not one to rest on their laurels. In addition to distributing major entertainment and architectural lighting brands, they're also big in LED display and processing. They've also got involved with Norway-based company Pixotope, known for cutting-edge solutions for extended and augmented reality for live broadcast.

Unlike most announcements that such-and-such distributor is now handling such-and-such a brand, this one deserves some explanation. That's because Pixotope's products are not only novel in what is still an emerging field, in some instances, they're revolutionary.

With the exception of a couple of small sensors and accessories, all Pixotope products are software. Each is dedicated to performing some kind of virtual magic with video in real-time. You may have noticed some augmented reality in the recent Superbowl LIX broadcast – that was their software. Gigs don't get much bigger than that.

Pixotope's range of software includes tools for VS/AR graphics in studio and live, talent

tracking to insert real people into virtual sets, and to make them interact perfectly with digital elements. Their Living Photo software turns 2D video of people into 3D interactive assets that you can incorporate into live broadcasts. They offer both indoor and outdoor camera tracking, even through a phone app. Most jaw-dropping is camera tracking Pixotope Fly, which uses their amazing 'Through-the-Lens' video tracking to place moving, interactive digital elements into live video from drones, fly cams, or Steadicams.

I talked with the Senior Vice President, Product, Gideon Ferber from their office in London, where they've been making huge inroads into Europe's broadcast and production industries.

"We started as a production company in 2013," begins Gideon. "We were called The Future Group and we were working on a Norwegian TV game show called 'Lost in Time'. It was technically groundbreaking. The whole show was filmed in a green screen studio with tracked props in a virtual environment. We were doing everything inside of Epic Game's Unreal Engine. The contestants competed with physical props. If they needed to pull a lever, there was an actual lever that was encoded, and every action they took in real life translated to an action in the virtual world."

This was in 2017, two years before Disney's *The Mandalorian* would make Unreal Engine synonymous with virtual production.

"We used Unreal Engine because visually, there was no comparison to any other product," elaborates Gideon. "But back then, Unreal Engine didn't have features for broadcast. We were the first to introduce SDI in and out, lens calibration, genlock, and time code. In 2019, out of all of that innovation came Pixotope, taking all those components and building a product. We realised we had a really good ecosystem that can be used for broadcast that is super stable, powerful visually, and with fidelity like no other."

Today, this means Pixotope are running a customised version of Unreal Engine with their own modules built around it. "Other than the design and rendering tools, we are not using any of Epic Game's components," confirms Gideon. "We are in full control of our own video pipeline from the first frame hitting the engine until it leaves; it's all our own code. The same goes for tracking, lens calibration and, and every aspect of the engine. It just gives us more control, and we can guarantee our support level to our customers. As you mentioned, we did the Superbowl for the sixth time in a row, this year with Fox. If something was not right and they had encountered a bug, we know each line of code. If anything is broken, we can fix it, and this way, we can guarantee that a mission-critical on-air show is always running."

Pixotope made a decision early on that they would not be building their own black boxes to run their products; all the major products

are licensed software. “We want to deal with hardware as little as we possibly can,” Gideon says. “It gives us flexibility. It means we can upgrade faster; we can release fixes faster. We can come up with crazy ideas and just give them a try. For example, we recently launched Reveal, our AI-powered background segmentation tool. Quite a few people have tried to build something like it, but no one has succeeded so far. Because we don’t have any proprietary hardware, we were free to just try. Being software-only also gives us the ability to be more flexible with our licenses; all the licenses are cloud-based, and customers can reassign them between different users. They’re not tied to a machine, or a dongle. It just makes life a lot easier.”

Pixotope’s talent tracking is all happening using nothing but the video coming from cameras – there’s no physical reference points, dots, markers, or sensors. I asked Gideon how on earth that is possible. “We do it two ways,” he divulged. “One is with Body Pose Estimation (BPE), which is a feature from Nvidia that runs in their graphics cards. Purely from the video, it analyses the silhouette and generates a wire-frame skeleton. The second option is more robust and offers greater flexibility, which

is why we refer to it as TalenTrack. TalenTrack works on multiple cameras, with small sensor cameras that you can mount anywhere, and they create a tracked volume. Within that volume, characters will be tracked. You can expand it to as many cameras as you want. If I wanted to track a corridor, then I could put 20 cameras in a row; there is no real limitation. It generates a wire-frame skeleton from the image, does the triangulation between the cameras, and builds the 3D skeleton for up to five characters at once. It doesn’t care where the main camera is, because it’s a standalone system.”

One of the most impressive bits of tech in their arsenal is Fly, enabling epic XR and AR effects with video that is literally flying. “The ‘Through-the-Lens’ technology that runs Fly is from a German company called TrackMan that we acquired in 2022,” Gideon outlines.

“It’s absolutely mind-blowing! It works by taking the frame and analysing it for contrast points. Although it was initially designed for drone cameras, we have customers using it exclusively in studios. It doesn’t require encoders, markers, or any additional equipment on the camera, meaning there’s no added weight for the camera operator. It’s

purely analysing the video, and if the studio has enough clear contrast points that you can track, it works like magic.”

There are still some technical hurdles to overcome, and Pixotope is making successful progress in addressing them.

“One of the latest features we added to Fly was support for zoom,” Gideon continues. “Doing it purely on video is difficult, because the minute you start zooming in, you’re losing your points of contrast. You need to know the environment really well to be able to do any level of zoom. The way our solution works is that you build your cloud of contrast points ahead of time. During production, you can then zoom inside that area. We did some shooting in Oslo a couple of weeks ago at a ski jump, testing our own boundaries, and to see if it works with snow. How do you track white against white? Do you have enough information? The Winter Olympics are coming next year, and we want to make sure we have something cool for them. We did exactly that, and it worked really well! As long as you have some elements in the scene that are constant, you’re golden!”

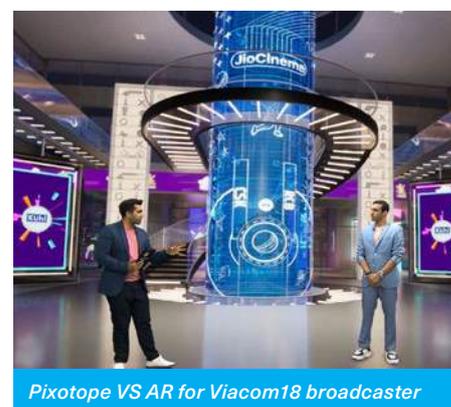
www.pixotope.com
www.ulagroup.com



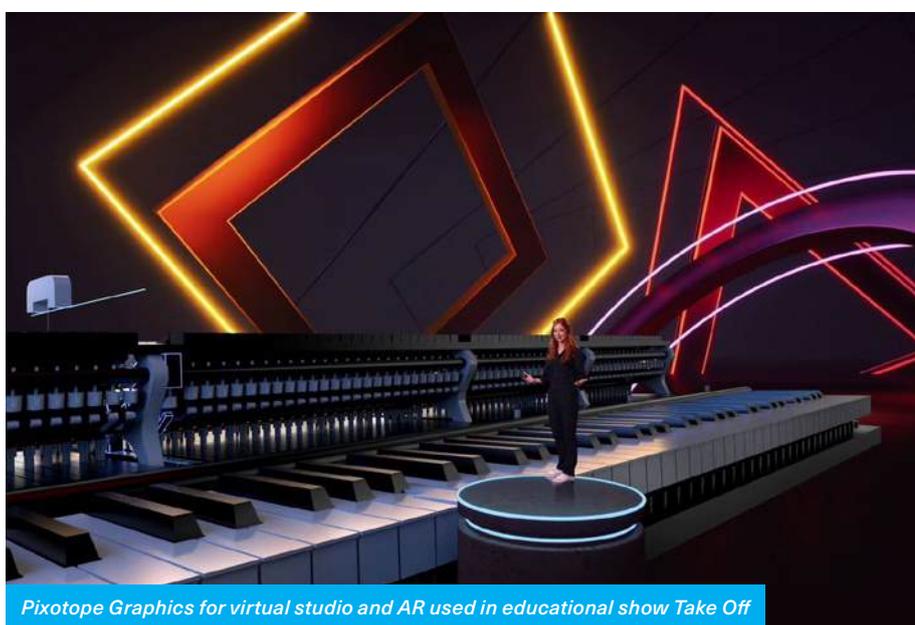
Credit: ESPN Brazil and TekTrade



Pixotope Reveal



Pixotope VS AR for Viacom18 broadcaster



Pixotope Graphics for virtual studio and AR used in educational show Take Off



Gideon Ferber

Photo Credits: Matthew Murphy and Evan Zimmerman for Murphy Made

Meyer Sound System Helps Jonathan Deans Achieve Sonic Vision for Broadway's Redwood

Redwood, the groundbreaking new Broadway musical starring Tony Award winner Idina Menzel, is more than seen and heard, it's profoundly felt, its soul-stirring narrative brought to life through dazzling projected visuals and an immersive soundscape created by acclaimed sound designer Jonathan Deans. Leveraging Meyer Sound's advanced technologies, Deans transforms the Broadway theatre environment into a vibrant, breathing forest where every sound envelops every audience member.

Conceived by Menzel and director Tina Landau (who also wrote the book and co-wrote the lyrics) with music and co-lyrics by Kate Diaz, Redwood tells the poignant story of Jesse, a New Yorker who, grieving a devastating loss,

finds solace among the ancient redwoods of Northern California. The show, which opened at the Nederlander Theatre in February 2025, challenges Broadway conventions by pairing a deceptively simple stage set - the trunk of a redwood tree - with expansive sound and projected visuals that extend beyond the proscenium, drawing the audience deep into the heart of the forest and into Jesse's psyche. Together, these elements not only set the scene but become integral characters in their own right, driving the emotional arc and heightening the dramatic stakes.

Translating Redwood's themes to immersive soundscapes was a familiar challenge for Deans, a veteran designer who has crafted sonic landscapes for hundreds of Broadway and West End productions and 16 Cirque du Soleil shows. Deans joined Meyer Sound as Senior Specialist, Theatrical Production Systems, in 2024.

"Because much of Kate Diaz' work has been filmic, and she's also writing songs, she was able to create compositions to be used in a multichannel way," Deans says. "The show starts before Jesse gets to the redwoods. That part is a very traditional kind of sonic

adventure, which is onstage around the proscenium. It's not until that character discovers the redwoods that we open up the whole surround system and we're all now within that forest, both visually and sonically. For me, that was a very easy thing to grab onto, based on my experiences with other productions, especially Cirque du Soleil, but applying that here to something that is more 'real,' more understandable."

Using Meyer Sound's audio technologies, including the Spacemap Go spatial sound design tool, Deans created an enveloping sonic experience that makes the forest's presence felt in every corner of the theatre. "There's a huge difference between something coming at you from a proscenium to where you're sitting in it and you're being wrapped with a blanket of sound and becoming part of the story itself," he explains. "You're in it, as opposed to watching it."

Deans says Meyer Sound systems' power and transparency helped him achieve his sonic vision for Redwood. "The sound is so neutral, you're not necessarily aware of the system itself because it belongs to the music and the production. It's at a high quality; the air,



SCAN AND SUBSCRIBE

Love to get your news online?
Or just can't pass up a real-life,
glossy, printed magazine?

Whatever your preference, we have the
perfect subscription offer for you.

Simply scan the QR code here or visit
cxnetwork.com.au/cx-magazine-subscribe/
and subscribe to the industry's most relevant
and in-depth magazine - delivered straight to
your door or inbox!



DIGITAL ACCESS ONLY

- / Weekly CX News
email on
Wednesday
- / Subscribe to digital
web reader
- / Read on our site
- / Download in
PDF format

FREE

1 YEAR PRINT + DIGITAL

- / Weekly CX News
email on
Wednesday
- / Subscribe to digital
web reader
- / Read on our site
- / Download in
PDF format
- / 11 print issues
per year - That's
a saving of \$31

\$79

3 YEAR PRINT + DIGITAL

- / Weekly CX News
email on
Wednesday
- / Subscribe to digital
web reader
- / Read on our site
- / Download in
PDF format
- / 11 print issues per
year - That's 33
issues over 3 years
and a saving of \$155

\$175



the space, the dynamics, the depth, and the voicing. If you want to move speakers and add speakers to cover different areas, the voicing is critical. And, just the dependability. All those things allow us to create this experience night after night."

The show's Meyer Sound system, supplied by New York-based PRG, centres around 16 LEOPARD compact linear line array loudspeakers and 18 LINA very compact linear line array loudspeakers. Across the auditorium, the design incorporates multiple generations of point-source loudspeaker solutions including two ULTRA-X40, 14 ULTRA-X20, and 16 ULTRA-X22 compact

point source loudspeakers, 56 UP-4slim ultracompact loudspeakers, supported by UPA 2P and UPJ-1P products. Supporting the system are elements from the low-frequency control family, with four 1100-LFC, three 900 LFC, and two 750-LFC low-frequency control elements delivering low-end impact. A further 26 loudspeakers are installed onstage. The whole system is controlled by Galileo GALAXY and D-Mitri network platforms.

"It's taken what would be called immersive now and taking it up several notches," Deans explains. "This is not a traditional format like 5.1; we created our own format, because we have four areas of the auditorium - the front,

in front of the balcony; the balcony; the rear balcony; and underneath the balcony, in the orchestra level - and they're all different as far as we're spatially concerned."

Because the scenic design relied heavily on LED video walls, speakers had to be placed in very specific locations, often projecting sound onto screens, taking advantage of reflections to provide a sense of distance, or to tone down direct energy focused on close audience members. "The layout had to be very tight, within inches," he says. "I would have to say things like, 'I can only go down to this size speaker in this area, can you move that screen, or slightly angle it, to give me that room



Khaila Wilcox and Michael Park in Redwood



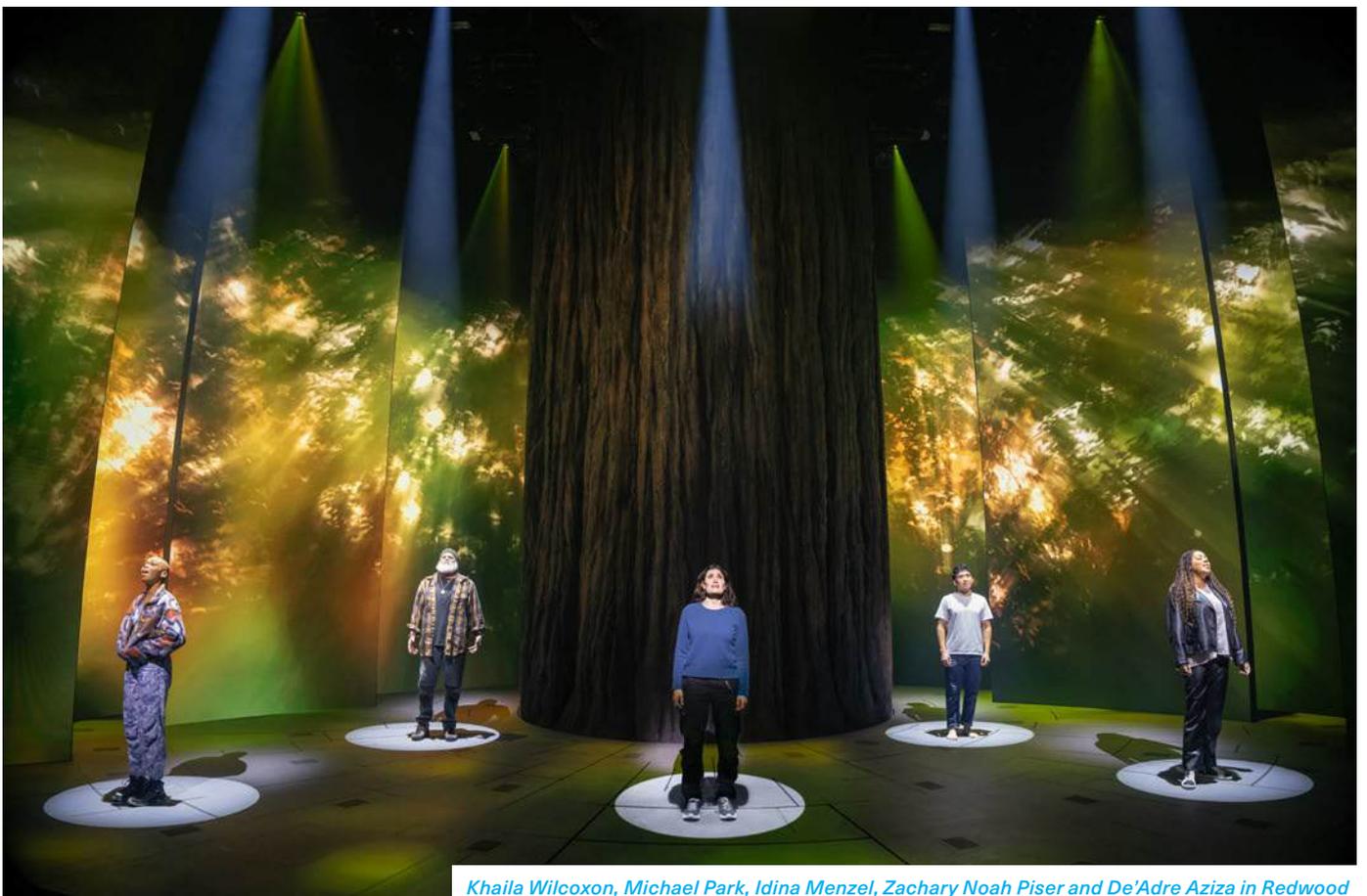
Idina Menzel in Redwood

to put that speaker?' When I look around here, I'm seeing the nooks and crannies where the speakers are all very much planned between myself and the set designer."

Redwood's visionary approach represents a modern milestone in Broadway theatre;

a seamless blend of human artistry and technological innovation in service of the story. "There's been an understanding of unity from the beginning to all departments, but especially sound and music, to work as one cohesive idea and support for each other," says

Deans. "It's the first production that I know of, that has been done in a legitimate Broadway theatre, that has fully immersive screens, with an immersive film score, with leading actors of this calibre," he says. "It's super cool."



Khaila Wilcoxon, Michael Park, Idina Menzel, Zachary Noah Piser and De'Adre Aziza in Redwood



Astera QuikSpot

The QuikSpot is the latest in a line of high quality wireless fixtures released by Astera; a battery powered light that is up to spec for film & TV. If you are familiar with Astera and their products you will see a light that feels familiar, even though it is new.

It is 'on brand' with the rest of the Astera product range, with quality LEDs. It features a large range of accessories and control protocols, including the app. It is the latest addition to the Astera ecosystem which is rapidly growing, improving, and refining.

The QuikSpot is essentially a battery powered Fresnel. Although it's a small light, it has a really high end look and feel to it. It looks like a lot of time and effort was put into the research and development of the QuikSpot.

Construction

It is a good size light. Not too bulky and awkward and also not too small and ineffective. It weighs just under 3.5kg without the barndoors. It has dimensions of 164mm x 164mm x 182mm and as such, can be easily handled by one person.

One of the highlights of the construction of the Astera QuikSpot is the versatility and the

number of ways in which it can be hung and mounted. It has an easily removeable yoke, an integrated kickstand, mounting pin in the back, or you add a TrackPin Compact to attach it to a track. You can also attach a third-party clamp or use a FlexCover to blend the fixture into the surroundings. The Astera ecosystem extends well beyond an app and a logo. Just like any light in the Astera range, there are a large range of accessories that go with the QuikSpot.

It comes with an IP65 rating, meaning you can use it indoors or outdoors. It also means less maintenance and should be more durable.

You can tell that a lot of time and thought has been put into the design, not only from an aesthetic standpoint, but also from a practical perspective. The yoke is in the right spot, and can be taken on and off with ease. It has rubber stops to protect the lens as well as the base, the zoom angles are marked and the screen is easy to see at all angles, really helpful if you are on a ladder and can just reach the light and need to adjust the settings via the onboard screen.

Optics, Colour and Brightness

The Astera QuikSpot features the Titan LED engine. This is the LED engine being used for Astera products to create an ecosystem of lighting fixtures which are all uniform and compatible with each other. This means that if you were to use a bunch of different Astera fixtures that all share the same Titan LED

engine, you will have uniformity across colour, dimming characteristics and brightness.

It's a single source LED. When you look into the light as it is outputting, you see one crisp colour, not an assortment of red, blue and green dots at varying levels. The Astera QuikSpot uses additive colour mixing, RGBMA (Red, Green, Blue, Mint, Amber).

Why use mint in additive colour mixing?

In LED colour mixing, mint LEDs are used to boost optical efficiency. It can help increase lumen output of the whole fixture and can improve lumen per watt performance when compared to standard RGB fixtures.

Why use amber in additive colour mixing?

Amber is a version of warm white. Having amber as a part of additive colour mixing allows the light to produce whites with a much higher and more stable CRI (colour rendering Index) which is essential for lighting to camera.



The Specs

LED Engine: Titan LED engine

Colours: RGB, Mint, Amber

Total LED power: 60W

LED power draw: 35W

CRI (Ra)/TLCI 3200 – 6500K: ≥96

Strobe: 0 – 25 Hertz

Battery runtime: up to 20 hours

Battery runtime (max. brightness): 4.5 hours

Weight: 3.45kg

Dimensions (L x W x D):
164mm x 164mm x 182mm

The QuikSpot features a fresnel lens which can be focussed as a hard spotlight or as a wide soft flood. It has a set of compatible barn doors and a range of filters to spread and shape the beam. The quality of the LED engine is the highlight of the optical side of the Astera QuikSpot.

Applications and Features

There is a feature pot which allows you to trade off light output with light quality, called OutputGain. If OutputGain is on, the light aims for maximum output and deeper saturation of colours. It tends to be more suited towards live performance applications. When turned off (OutputGain Off), you lose some of the output and colour saturation for higher CRI. This version tends to be more suited to film and TV or any applications with cameras.

The zoom can be manually focussed, much the same as an SLR camera, by turning the lens barrel. The beam angle ranges from 13° to 60°. It will stop at 30° to indicate that you are in the middle of the zoom range.

The QuikSpot features up to 20hrs of run time, with 4.5 hours of runtime at maximum brightness. All Astera products utilise Smart Battery Management, the most advanced battery management system in the industry. The system intuitively deals with most of the common issues associated with the traditional battery lights. For example, you can set a run time of 20 hours for your Astera fixtures, and they will automatically self-manage to perform at the optimal level for the entire time.

True to form, Astera has a number of accessories that go with the QuikSpot to help with charging and prep work. ChargingPlate lets you charge the batteries of up to eight QuikSpots with a single TRUE1 cable, directly in the case. PrepBox lets you assign DMX in seconds, to blue-mode and pair up to eight QuikSpots at once, to configure dimming and colour in multiple devices without a controller.

The Astera QuikSpot is best suited to any application where a high-quality battery

powered Fresnel is needed. That covers a wide range of applications from front light to ambient light and even extends beyond event lighting into architectural applications.

Control and Programming

Another thing that Astera is well known for is having lights that are compatible with a large range of control protocols. The QuikSpot is no different. The QuikSpot includes LumenRadio's wireless DMX and RDM. As for wireless protocols, it is also compatible with CRMX, UHF, Bluetooth and Wi-Fi.

It also features 5-pin XLR in + out sockets for a more permanent install or 'old school' approach. Same goes for power, it can be run for longer periods using a powerCON TRUE1 cable. It also has an onboard control panel, which will be very familiar for any previous Astera user.

Verdict

Over the last few years, we have been seeing some huge forward steps being taken in the battery powered LED space. Astera have been at the forefront of this movement and have continued to do so with the release of the QuikSpot.

The size of the light and the number of easy-to-use rigging accessories available with the Astera QuikSpot make it really easy to use and hang in all kinds of difficult spots. The fact that it is battery powered and has wireless DMX means there are no cable runs (unless you want them). The high-quality output means it can be used on TV and film gigs, the IP65 rating means it can be used indoors or outdoors; a very useful light indeed. I would love to see a bigger, brighter and more powerful version of the same light to compliment the QuikSpot, but who knows, it might be in the pipeline.

Product Information: astera-led.com

Distributor Australia and New Zealand:
www.ulagroup.com



AYRTON



KARIF LT

The Ayrton Karif LT is part of the Ayrton Long Throw (LT) series. For those familiar with the Ayrton range, it is a similar size and shape to the Ayrton Diablo and the Ayrton Mistral. It is a hybrid beam/spot LED moving head fixture. It is the first hybrid LED moving head that Ayrton have brought to market. It features an intense long throw beam, a very large zoom ratio (17:1 and a zoom range of 2.8° to 47°), an expansive selection of gobos (of which there are 48 total) and a variety of aerial effects.

Construction

As a 27kg light, the output would suggest it should be much heavier, but the optical system is very efficient. It comes in at 622mm tall, 365mm wide and 212mm deep.

It's IP rating is IP20, which is pretty much the same IP rating as every other 'indoor' fixture. I thought it was an interesting choice to build a light with such a good, high end long throw optical system but not have it rated for outdoor use. But then again, the Ayrton range is so large, they have exactly this covered in another fixture.

An understated feature that is easy to overlook is the small base and how it allows you to hang and mount them close together for a good en-masse type look. It uses two on your standard omega style brackets, like just about every other Ayrton fixture.

It has a liquid cooling system onboard which is much more efficient than your standard air cooled set-up. It also has variable speed fans for quiet operation, which is a nice feature, but I do wonder how useful it is in a long throw light.

Optics, Colour and Brightness

The Karif offers a 300W light engine calibrated at 8000K. It uses a new miniaturised high-efficiency low-etendue compact LED module. The whole unit draws just 550W of power, which is pretty impressive given the output. It's a very bright light with punch that goes for miles.

What is Etendue?

Etendue is a property of light, which measures how concentrated or "spread out" the light is from its source in area and angle, not to be confused with beam angle. Etendue can remain constant, or it can increase as light travels through an optic, but it cannot decrease. Typically, the lower the etendue, the brighter and more efficient the source is.

The Karif LT uses subtractive (CMY) colour mixing, variable CTO and a multi position colour wheel. The white is very cool, and almost metallic. The colour saturation is good, producing colours that are crisp. Like all lights with subtractive colour mixing, you do lose a bit of intensity with your dark blues, purples, and dark reds. I do wonder if we will see a day soon where the lumen output of a fixture will remain the same regardless of what colour is used.

The fixture has a 168mm frontal lens. The Karif LT offers a substantial zoom ratio of 17:1 and a zoom range of 2.8° to 47°. Its ability to focus a gobo at maximum zoom and minimum zoom is impressive.

You do lose a bit of intensity the further out you zoom the light, but much like the darker colours, this is a pretty normal thing.

The unit has an overall output of 14,000 lumens. Although the zoom range is impressive, I feel the real highlight from an optical perspective is the strength of the beam it produces.



The Specs

13-element 17:1 zoom
high-resolution optic system

Beam aperture: 2.8° to 47°

168mm frontal lens

20,000 lumens 8000K white-light engine

Total luminaire output: up to 14,000 lumens

Colour temperature output: 7000K

CRI: greater than 70

Moving-head range:
infinite rotation (pan), 263° (tilt)

Fixed colour wheel with progressive CTO,
four colour temperature correction and nine
complementary colours

Indexable rotating gobo wheel with nine
HD glass gobos, plus open position

Fixed multi-position gobo wheel with
instant access to 19 HD glass gobos and
20 metal gobos on three concentric circles
(patent pending)

Heavy and light frost filters

Graphic animation effect-wheel with
bi-directional continuous rotation

Prism effect system comprising four
combinable rotating prisms

Dimensions:
365 x 622 x 212mm (l x h x d), 27kg

Applications and Features

The Karif LT has infinite pan but not infinite tilt; quite a feat when you consider how 'top heavy' the light is and how small a base it has. Although not the fastest continuous tilt I've seen, it does move pretty fast. One thing I do notice with a lot of fixtures that feature infinite pan and tilt is that the indexing ability of the light (its ability to accurately recall saved positions) is somewhat compromised. That does not appear to be the case here. Although not infinite, the tilt range is still a pretty impressive 263°.

The Karif LT is set up to create a number of aerial and projection effects. It has four colour-temperature correction filters, and nine complementary colour filters on two concentric circles. Its also equipped with a bi-directional continuous dynamic effects wheel. The prism effect system comprises four individually combinable prisms, coupled with 48 fixed and rotating gobos.

A light like this would look really good behind a band. Whether its shooting beams from a truss, on the floor, or projecting gobos, the Karif LT would be perfect. You just wouldn't use them as front light.

Control and Programming

For those familiar, the Karif LT has your standard Ayrton menu, and the onboard LCD display that can flip with the click wheel. It also has your standard 5-pin XLR for DMX, has wireless capabilities, and is also RDM compatible.

It has three different DMX modes ranging from 32 channels up to 46 channels.

For power, it features powerCON TRUE1 male and female connectors. This has become industry standard, taking over from standard powerCON.

Verdict

With the recent rapid fire of releases from Ayrton, they have representation into just about every corner of the moving light market. The Karif LT produces a really nice, crisp, strong beam that projects a long distance. The gobo range is excellent and looks well at home in any larger indoor lighting rig.

Product Info: www.ayrton.eu

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



BODS OR BOTS?

The entertainment industry attracts a wide variety of people. Creatives, weirdos, and free thinkers get mixed up with practical, technical, logical minds - an unholy alliance that is so much greater than the sum of its parts. This maelstrom of temperaments and talents is seemingly required to stage a successful show. Getting the balance right for each cast and crew melange is always a juggle but when it gels nicely it lifts everyone a few steps higher and the results can be seen on stage.

Because the job is unconventional, it attracts the off-kilter. Getting the chemistry cooking for a well-gelled crew is a brew that not many witches could claim the recipe to. One of the best ways to go about it is to study the human condition. Learn how your colleagues tick, what makes them happy and where their boundaries are. Adjust your behaviours to both fit into and elevate the group vibe.

Each and every person has a mix of good and bad. A blend of dull and interesting. Of happy and sad. Where we fall on those spectrums is part choice and part circumstance. You can do all the right things and lose out anyway. Or you just get all the luck - be an arse and land on your feet regardless. Luck has no logic.

People are the backbone of your business. Unless you are selling AI driven robots. Even then, your supply chains require people to function. For both business and personal reasons, it's well worth understanding people. Particularly their strength and weaknesses. And, especially, yours.

People are fun, fabulous, and frivolous. They make daily existence enjoyable and are a

pleasure to be around. People are also fickle, fatuous, and fervent. They will frustrate you, confuse you and confound all common sensibilities.

People are inventive, creative, and visionary. They can inspire you to reach great heights, create awesome things and look at problems with fresh perspective. People are equally extractive, exploitative, and abusive. Some will take what they want, when they want it, and not care a damn about how that affects anyone else.

The same people are often greedy, selfish, and tempestuous. Mummy and Daddy never told them 'No' strongly enough. These heels are stepping on everyone right now. Many people are caring, sharing, and giving. I've made it a life mission to surround myself with these sorts. It is truly liberating to hang out with people who give a toss about people other than themselves.

Most people are persistent, resilient, and strong. Look to those suffering through war and conflict in so many zones of the world and admire their inner hardiness. First world cost



of living might be tough but no comparison to wondering whether you'll eat this week...or if you'll make it through the night.

For all those with stiff spines, just as many people are patronising, repugnant, or weak. These cowards too often try to appear the exact opposite, punching down like the feckless bullies that they are.

People can be inspiring, uplifting, or edifying. Salutations to all the emergency first responders keeping it together as others fall apart in the face of disaster. More power to the community leaders and conscientious objectors who stand up for the downtrodden. Other people are just annoying, cloying, or toying with you. These ones have little concept of empathy and get joy from manipulating others. They don't hold hoses. Best avoided before breakfast or a stout Mai Tai.

The good people are loyal, steadfast, and resolute. We all owe them some of that in reverse. Be strong for your mates, family, and

community. Try wasting less time with people who are pernicious, calculating, or combative. They are nothing but needless, negative distractions who take joy from ruining yours. May you fart loudly in the direction of these oxygen bandits.

From Nobel Prize winners to despotic dictators, we all share positive and negative traits. We all have the capacity for both ugly and admirable behaviour. It is up to us to make that choice, a thousand times per day.

We don't always get it right, but we have to keep working in a positive direction. Otherwise, we add to the increasingly polarised nature of our society, shouting at each other from the bias confirmed safety of our information siloes. The bots and algos are already doing a pretty good job of that. No point adding to the misery.

If you're a human reading this, relish your humanity, celebrate your unique nature. You are wonderful. You are an individual. You have heart.

If you are an AI bot, scraping this article for your Large Language Learning Model, I hope some caring, sharing humanoid sticks a high-voltage fork in your cybernetic ear.

If you own the bot, then you own us all, for now. The law of the jungle can deal with you later. Something about pitchforks? Even revolting peasants will revolt when they have nothing more to lose. Remember; you reap what you sow.

Within reason, you get to pick your own path. At least, you get to pick how you respond to events around you. That alone defines what kind of person you are. What kind of person do you want to be?

When Jim Morrison sang that "People are strange," he was only partly right. I've found that more people aim to be safe and boring than those who are outré or odd. Most just want to fit in and not be thought of as weird. The misfits join the rest of us carnie-adjacent road crew and go put on a show for the normies.

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

THE GOOD, THE BAD, AND THE UGLY PROMOTIONS



Snippets from the archives of a bygone era

Entertainment promotions have largely been a thorn in the flesh for me, especially when they competed with bands that I ran in nightclubs and other venues. These promotions were ubiquitous during my four-year stint in the Philippines in the 1980s.

During my first engagement in 1983 at American-owned nightclub Rosie O'Grady's, Rick, an English partner, was pushing the club towards boxing promotions while I was out scouting for bands and outfitting the venue with sound and lighting.

Rick's inaugural boxing event at Rosie O'Grady's began with a one-sided preliminary fight where an outclassed welterweight took such a pounding in the first round that when he retreated to his corner, his trainer remarked, "I think you better go out and clout him." However, he took such a clouting himself in the second round that his trainer had to throw in the towel.

Rick hoped the clanging bell, signalling the start of the main event, would also ring in his resurrection as a promoter, but after a short flurry of punches in the opening round, the main contender slumped to his knees and fell flat onto his face, where he remained for the count. With no bouts left on the programme,

disgruntled patrons filed out of the venue. I would sometimes kid Rick that his poster advertising a knockout event did live up to its prediction. The major partner of the venue, who failed to see the humour, banned all future boxing promotions.

Rosie O'Grady's presentation of live bands wasn't rivalled by any other club; however, the neighbouring Third Eye nightclub, which did have a mediocre band, relied heavily on promotions. Promotions at the Third Eye were handled by VJ, a Filipino/American, who contracted them from a third party. VJ also liaised with the local JBL distributor to outfit the Third Eye with its sound reinforcement system. However, VJ was more of a go-between than a technical or entrepreneurial manager.

All of the Third Eye's promotions were lifted from established American promotions such as Foxy Boxing, which featured girls in skimpy costumes who boxed with benign inflated gloves. Oil wrestling was another promotion that featured girls in skimpy attire who wrestled in the country's premier cooking oil, Baguio Oil. The reason oil was used was to get around Imelda Marcos' ban on mud wrestling, which she found distasteful. But undisputedly the largest promotion was the wet t-shirt competition. The Third Eye could pack 800 patrons into the venue for the wet t-shirt competition. The major partner even patented the promotion, which prevented other venues in the town from using the name. Of course, some clubs still featured the promotion

under different names, such as wet singlet or even wet 'n' wild, but these were nowhere near as successful. Rosie O'Grady's always experienced a marked drop in patronage when the Third Eye ran its wet t-shirt competition.

VJ visited Rosie O'Grady's in the days when I was just setting up the nightclub. Although he feared the rivalry, he considered me as a transitory tourist, remarking on our first meeting, "At least my guy isn't going anywhere." This was a reference to the Filipino JBL dealer, Lin Gomez, whom I worked extensively with in the years that followed; and in a kind of irony, some three years later, I was in the employ of the Third Eye.

VJ and I were courteous to each other, but he was quietly disconcerted that the owner had installed me as the entertainment manager of the Third Eye, and he knew I had little respect for his promotions. One of those was a failed Rock and Soul Night, where he encouraged black and white GIs to bring tapes of their favourite music into the venue in some sort of competition. It was a gigantic flop for the obvious reason that it created division when the US military wanted cohesion amongst its personnel. I got permission to change the promotion to Soul Night, which ran for some seven years, including five years after my departure from the club. The article on Soul Night can be downloaded from the CX Archives, November 2022, Issue CX186.

Dwarf throwing was probably the most distasteful of all entertainment promotions;



The Third Eye

originally considered an Australian promotion, where dwarfs wearing helmets and protective clothing were thrown onto mattresses or at Velcro-coated walls. The promotion caused a huge outcry in Australia and was subsequently banned in 1989.

I was on vacation in the Philippines at the height of the controversy, staying at a hotel formerly known as Randy Rams and recently renamed The Hawaiian Inn Hotel. I chose this hotel because of its large swimming pool, as I was into swimming laps in those days. The hotel owner knew that I was a former sound and lighting installer and entertainment manager in the town, and he engaged me to hire and operate a sound reinforcement

system for a promotion. The hotel had off-base billing contracts with the neighbouring US Clark Air Force base to provide temporary accommodation for GIs, who were also the main patrons at any promotion. However, because the promotion was dwarf throwing, personnel from a visiting Australian squadron were subsequently banned from the event.

My involvement was originally restricted to organising the sound reinforcement system, but at the last minute the MC for the promotion dropped out, and I was asked to host the event. I knew a lot about the Philippines' little people because in the early 80s I had been a regular at the Hobbit House in Manila, where they served good food and presented good

entertainment. The Hobbit House was founded by a former American Peace Corps volunteer, Jim Turner, who established the venue in 1973 as a theme bar and restaurant, which was a tribute to his favourite author, J.R.R. Tolkien. Turner employed the dwarfs as waiters, bartenders, cashiers, cooks, and entertainers, and eventually, they became managers and owners. He was said to have rescued dwarfs from carnivals that demeaned them.

Prior to the commencement of the promotion, I asked one of the little people if they were okay with the event. "Yeah, they're only throwing us into the swimming pool, and we're getting paid very well." What could possibly go wrong? Perhaps the dwarfs mistakenly thought they

((bsound))

BAND PA SYSTEMS, VOCAL PA SYSTEMS, LIGHTS

Pick up and do it yourself, or Delivered, Set up and Operated by experienced Crew.

Mark Barry; (03) 9889 1999 or 0419 993 966

www.bssound.com.au
mark@bssound.com.au

RentalPoint
SOFTWARE

Powerful web based software

CX

GET THE LATEST
INDUSTRY NEWS VIEWS AND JOBS
 TO YOUR INBOX EVERY WED

Register now at
cxnetwork.com.au

were going to be picked up childlike and lofted into the swimming pool, bombing in feet first. Instead, burly US servicemen clutching an arm and a leg hurled them in a kind of discus throw, sending them spinning into the pool and landing in awkward positions. Alarm bells started to ring!

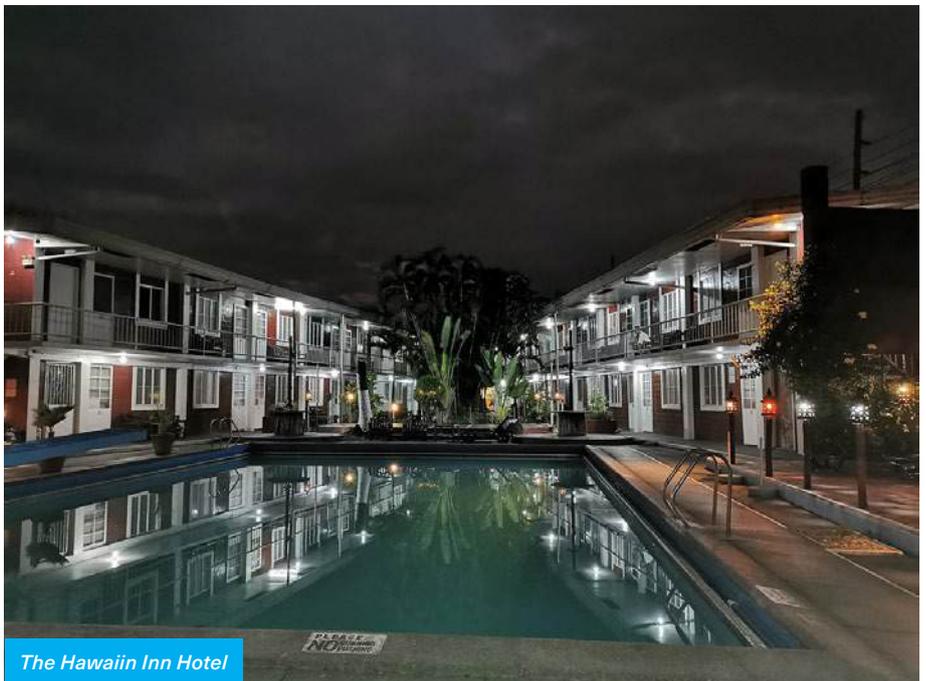
After a short time, one of the dwarfs walked by the mixing console and gave me a discrete shake of the head, so I prematurely announced a winner and terminated the competition. Fortunately, I had also hired a DJ who quickly swung into action. However, the turmoil didn't end there as patrons began throwing their Filipina companions into the pool. One GI, not knowing that his girlfriend couldn't swim, hurled her into the deep end of the pool and headed off to the bar, unaware that she had sunk to the bottom. A couple of GIs plunged into the pool to retrieve her. I then had to make an announcement to stop the folly, informing the patrons not to throw the girls into the pool as the majority of Filipina girls don't know how to swim.

The only beacon of hope for me in my disdain for entertainment promotions was Oktoberfest. I had never been technically involved or at loggerheads with the event, and I could never resist its allure. Oktoberfest is huge in the Philippines, where the German community, comprised of expats and immigrants, makes up the largest Central European community in the country.

There's something special about sitting at a Bavarian beer table in front of a huge plate of Schweinshaxe, a juicy pork knuckle encased in crispy crackling, with sauerkraut and boiled potatoes on the side, while drinking steins of draft beer. And it was at such an event at the Australian-owned Clarkton Hotel in those heady days that I was invited onto a team comprised of American, German, and Canadian expat mates for the beer-drinking contest, which we won.



The Hobbit House Manila



The Hawaii Inn Hotel



Oktoberfest in the Philippines

CELEBRATING A NEW ERA TOGETHER.

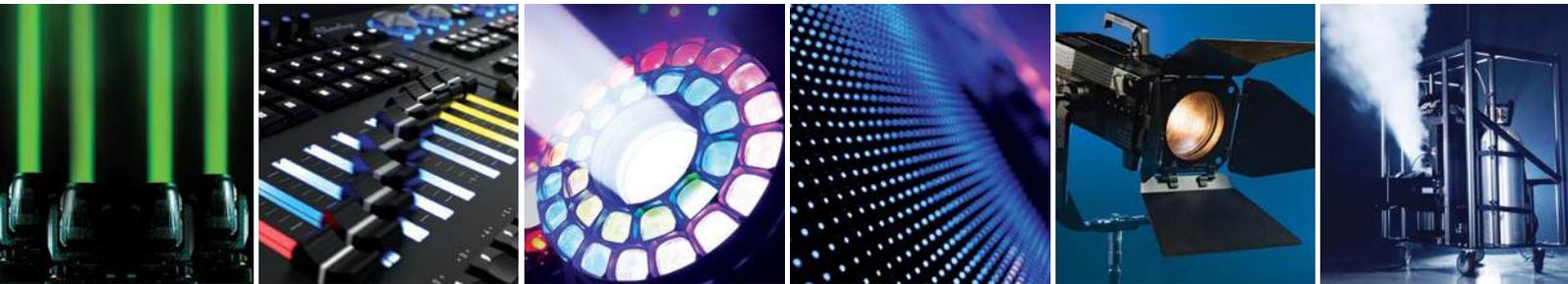


Join some of the industry's biggest names
in 2025 and become an ACETA Member!

Email julie@aceta.org.au or visit aceta.org.au

ULA GROUP

LEADING PROVIDER OF
INNOVATIVE
VISUAL
TECHNOLOGY



AWARD WINNING TECHNOLOGY SOLUTIONS | LOCAL SERVICE & SUPPORT

PROUDLY PARTNERING WITH WORLD-LEADING INDUSTRY BRANDS

VUEPIX
INFILED

ELATION

lumenradio

ACME

DJPOWER

GRIVEN

7M⁴
Milos. Works better.

NOVA STAR

ASTERA

dop
Choice

PIXOTPE

BROMPTON
TECHNOLOGY

Glassiled
The city is your canvas

OBSIDIAN
CONTROL SYSTEMS

MDG

ADJ

FOLLOW-ME
TRACKING SOLUTIONS

arKaos

ACCLAIM
LIGHTING

ChamSys

pharos

CHAINMASTER
THE WORLD OF MOTORS

AUS 1300 852 476 | NZ 09 218 6532 | info@ulagroup.com | ulagroup.com

ULA
GROUP