



KOЯN TOURS EUROPE

As Church praises MagicPanel™ R

TRIBUTES TO VALÈRE
PAUL McCARTNEY
SUPER BOWL LI

MAGICBLADE-FX



MAGICBLADE-FX CREATIVE SOLUTIONS

The versatile MAGICBLADE™FX is an exciting new iteration of Ayrton's award-winning MAGICBLADE™R, which has been sold in thousands for use on major musical tours worldwide. This new MAGICBLADE™ is equipped with the revolutionary FX optical zoom system that has no visible moving parts and a fixed transmitting lens. With a 15:1 zoom ratio, the beam angle of this proprietary system ranges from 3.6° to 53°.

SUMMARY *live*¹¹

TRIBUTES TO VALÈRE

- 4 Goodbye Valère
1979 - 2017

EXHIBITION PREVIEW

- 6 Prolight + Sound 2017
Ride the Wind with Merak

SHOW REPORT

- 10 KoЯn tours Europe as
Church praises MagicPanel™R
- 12 Leroy Bennett goes One on One
with MagicPanel™R
- 14 Lady Gaga rocks Super Bowl LI
with a little help from Ayrton
- 18 Florida Georgia Line Dig Your Roots
while MagicBlade™R flourishes
- 20 Jean-Philippe Bourdon on
Mission: Les Enfoirés at the Zénith
theatre in Toulouse, France
- 26 Mitchell Schellenger takes on the sun
for Rob Thomas with IntelliPix™R
- 30 Klaus Bolte makes
clever work for Silly
- 32 Vitalic and Ayrton go on Tour with a
spacecraft at the Aeronef Lille Venue
in France
- 36 Opeth Sorceress tour weaves spell
with DreamPanel™Twin
- 38 Justin Bieber's Purpose revealed
by Cory Fitzgerald



KOЯN TOURS EUROPE

P.10



TRIBUTES TO VALÈRE

P.4



PROLIGHT + SOUND 2017

P.6



LADY GAGA ROCKS SUPER BOWL LI

P.14



LES ENFOIRÉS

P.20



JUSTIN BIEBER

P.38

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TRIBUTES TO VALÈRE



From Ayrton

Goodbye Valère, 1979 - 2017

It is with a heavy heart that we report the heart of Valère stopped beating on 19 February 2017. He was 37 years old.

Valère Huart-Gyors, our collaborator and dear colleague, was responsible for exporting Ayrton throughout the world. Since 2011, from Las Vegas to Sydney, he has spread our values with a rare commitment because Valère was an authentic fan of Ayrton.

Methodical, organized and precise, he advanced quickly and well, exercising a detailed knowledge of his market. Societies and their politics, people and their past, excited him in addition to his many interests such as history, politics, music ... Valère was both brilliant and cultivated. His humor, sharp and often caustic, made us laugh. He was also a rascal, and Norman...

It was with the enthusiasm of a young graduate of higher education that he arrived in Paris at the age of 22, first as a salesman at AVLS, then as purchasing manager for La BS, before joining Ayrton to develop international sales. "It's Ayrton's second life," he said humorously when he arrived in 2011, and success, which first struck in the US, spread throughout the globe.

Now, sadly, Valère will no longer get angry at how societies have broken creativity, he will no longer organize parties with his friends, death has stolen half of his life. He was infinitely kind to the whole team, whose dismay is matched only by the sadness of having lost a friend.

We are already missing him.

From the Ayrton team

Cyril (Electronic Design Engineer): Valère was a very good colleague. We spent some great moments together. We exchanged ideas about technical things. He was open-minded and always wanted to know more. He asked the right questions and always had a desire to share. He loved precision and had a fabulous memory. He will be truly missed.

Jean (Communication Manager): We came onboard Ayrton at the same time, 6 years ago. We got along well. I used to work with him on Ayrton Live. He knew what he wanted, and he also knew what he didn't want. He was stubborn. We could disagree, but if I was right he'd admit it... It's hard to look at him in the photos, smiling. His passing will leave a lasting impression. I like to think he simply woke up somewhere else.

Marzouk (Service Technician): We shared the same passion for soccer. After the Paris Saint Germain matches, he'd come pick me up and we'd discuss the game -our time spent together. When I couldn't do immediately what he asked, he'd find a solution. He'd work around it and, in the end he got what he wanted. That was Valère. He always achieved his goal, but then again, it was business. We were there for that, and there were no hard feelings, ever. We still need him.

Rémi (Product Application Manager): Valère was a friend. We knew each other for a long time. He was curious and well educated. He knew a lot about many subjects. He had a never-ending thirst for knowledge and a desire to share. We used to call him Valéropedia, among friends. I'm really going to miss him.

Vincent (Product Application Manager): He was a real professional, and he was often self-deprecating... and with a real sense of subtlety. He played it up, and that was a delight. At trade shows, we used to have a lot of good laughs. You could accuse him of bad faith on occasion, but he was a sweet guy, a helluva Norman too! But unlike Normans, he knew what he wanted. We will miss him every day.

Wenwen (Export Manager Assistant): He made me laugh. At trade shows he had incredible energy. He would talk to customers all day without a break, and in the evening, as we were leaving, he still found the energy to talk to the security guards and to the hostesses. He used to tell me: "My main strength is choosing hostesses". He was always enthusiastic. Everybody has their highs and lows but I never saw him depressed or sad or tired. He livened up the office. We are going to miss him.

From Morpheus team

Morpheus Lights' relationship with Valère began with a brief conversation at the Ayrton display at Showtec 2011. Later that year, Valère came to Las Vegas and demonstrated Ayrton's remarkable WildSun™ 500C for us. Eventually, over 100 of those fixtures were purchased for a world tour - which marked the beginning of Ayrton's stunning success in the U.S. Afterwards, we used to joke with Valère that he'd had "a pretty good demo, n'est-ce pas?"

Such was the auspicious beginning of our successful partnership and our friendship.

Valère was an enormous fan of Ayrton, and of our craft. His honest passion was infectious, and was a large part of what made him so successful. He traveled tirelessly around the globe, promoting the always-evolving world of Ayrton to the entertainment production industry.

His humor and energy seemed inexhaustible, no matter how long the days were, or how long the flights were. He was always eminently personable and approachable, and cheerfully professional. It was our privilege to know Valère and our pleasure to work with him, especially at industry events; to see him engage with his fellow professionals and to witness their respect for his enthusiasm and knowledge and wit. And at the end of the day...there was Champagne.

We all miss him enormously.

From Karel de Piere - Face

We can not imagine Ayrton without Valère, we can not imagine a show or demonstration without him. Nor can we imagine being without the honor of sharing his friendship, his manner and his intelligence. He was a man with moral values that he applied in his personal life and in business. But no matter what, we will miss him. The worst is that Valère has left us too soon - he gave too much without having had the opportunity to receive, in return, the joys he deserved.

I'm overwhelmed with sadness; thank you Valère for sharing with us a part of your life, unfortunately it was far too short.

From Lumen Radio Team

Valère a true friend

Valère our dear and loyal friend, always cheerful but still always professional, an ambassador of Ayrton and the business. We have still not fully realized it but Valère is no longer with us.

Our friend has left us too soon and there is only one way to express our feelings, it hurts!

Why him? Why so young? Why now? Questions which never will be answered.

It hurts because we lost a good friend and it hurts to know he had so much more to give. Contributions we will never know about, contributions now stolen by death.

Valère was a true ambassador of Ayrton and a part of the Ayrton success. He lived and breathed the Ayrton culture of honesty, respect and loyalty. No matter if you are a customer or a supplier, you can always trust Ayrton and this trust was personified by Valère.

When you met up with Valère you always knew you would have fun and joyful times in front of you. He always had time for a chat about everything from the latest business gossip to technology to life in general, always with great humor. Humor which was the sign of Valère in which we have shared many laughter's together. There are countless of warm memories we have had from those meetings with Valère, meetings that's never more will be, meetings that now remains memories from the past.

But even in this sad and dark moment of grief we must remember his passionate work together with the Ayrton team and cherish the happy memories of Valère. We must do this to honor a great man that devoted his life to Ayrton and the business. We need to do this to realize and accept the fact that he is no longer with us.

The memories of Valere will always remain.



PROLIGHT+SOUND 2017

Ride the Wind with Merak



To mark its 15th anniversary, Ayrton will introduce the first of its new line of luminaires with product names evoking the winds of the world, symbolizing the lightness embodied in the fixtures, the fluidity of design and the breath of innovation that Ayrton brings to the marketplace of entertainment lighting. The first luminaire in this new line is a technological marvel called Merak™, which will make its debut at Prolight + Sound 2017.

The Ayrton team, along with its German subsidiary VISIONSTAGE, will welcome visitors in a 280 square meter space in Hall 3, with 180 square meters dedicated to showcasing new products. A raised VIP space offering optimal conditions for viewing the demonstration light show will be opposite the product area. The demo will run three times an hour for the duration of the trade show.

Noted French lighting designer Stéphane Migné has designed Ayrton's demo once again, with the assistance of programmer Arnaud Pierrel on the console. They will present a display of 360 fixtures, including new products for 2017: Merak™, MagicBlade™FX and Arcaline™3. In addition, products first previewed at the 2016 show and now ready for market, such as MagicDot™SX, MagicPanel™FX and MagicBurst™, will also be featured. The combined Ayrton and VISIONSTAGE teams will be delighted to provide you with any additional information.



1 2



3

Merak™ The new technical marvel from Ayrton

For its 15th anniversary, Ayrton introduces the first in its new line of luminaires with product names that evoke the winds of the world – Merak™.

Ever exploring innovative technology, Ayrton has developed a compact wash fixture that combines punch and enhanced performance. This new design squeezes a lot of wash light into a package less than 40 cm high, with a new 250-Watt RGBW multichip LED module and a Fresnel lens to create a mono-source luminaire that is a marvel of ingenuity.

Merak™ is the first embodiment of Ayrton's new, sleeker, design motif, with perfectly straightened yoke arms and minimized base enclosures which house highly efficient, miniaturised power supplies. Behold the base box of Merak™ – which fits its high-tech 400-watt power supply into a space of 30 cm wide by 20 cm deep by 5 cm high.

Merak™ produces magnificent output with a remarkable spread through specially developed optics: combining a four-chip-per-colour RGBW LED module with light pipe technology to ensure a perfectly homogenous colour mix is transmitted through its rosette lens. Merak™ produces superior colours – even in the yellow, orange and amber range, and features a white chip at 6,500 K.

A de-focusable rotating beam shaping optic, which can be variably positioned with respect to the light pipe, provides control latitude from subtle softness to perfect sharpness. The fixture's zoom range is a fantastic 7° to 70°.

As a mono-source wash light, Merak™ casts but one shadow – something all lighting designers will love.

Merak™ features a new miniaturized liquid cooling system that was specially developed to ensure the powerful LED module is properly cooled and to guarantee continuous full power operation without derating.

1. Merak
2. MagicBlade-FX
3. ArcaLine 3



ArcaLine™3 Refined and even more attractive for event suppliers

In its latest iteration, V.3, Ayrton's ArcaLine™ units have had a total makeover. The results are outstanding. The luminaire now consists of two distinct parts: the tubular optics and a slender base that houses the electronics with stabilizing feet at either end. This permits the tube to be tilted with no restraint.

To facilitate set up for event suppliers, Ayrton has made the new ArcaLine™3 configurable directly from the touch screen on the base. Small straps running along the rear of the fixture make cabling easier than ever.

This one metre-long linear luminaire houses 12 RGBW LED emitters that can be controlled point-by-point. It has a new 45 mm collimator that projects an 8° beam angle – narrowed from the 12° found on previous units. The new lens employs a rosette pattern, to decrease the diffusion of light energy and concentrate it. The result is a vastly improved colour mix. The centre beam intensity of the LED emitters has also been increased by a factor of 1.5, achieving 63 candela/lumen (compared to the previous 40), which is a testament to point-by-point design.

ArcaLine™3 is rated IP65 – essentially, weather proof. Each enclosure contains a Bopla pressure relief valve to guard against internal moisture. The fixture automatically evacuates potentially harmful moisture, which permits it to be installed outdoors for extended periods.

Improved cast aluminium feet provide ArcaLine™3 units with greater stability and make it ideal for floor mounting downstage or on a drum riser, or for use as a component of scenery. Event suppliers will especially appreciate the new attachment point on the base that provides easy connection for truss clamps.

MagicBlade™FX Elegant Versatility

Ayrton expands its Creative Solutions line of graphic beam projectors with the new MagicBlade™FX. This automated in-line luminaire is fitted with the distinctive squared output lenses found on MagicPanel™FX and shares the same quality of colour mixing and versatile effects: 3D volumetric projections, variation between the colour-rich luminescent face or separated points of light... with ultra-tight beam projection or wide angle wash from a unique zoom system with no visible moving parts. More magic from Ayrton!

MagicBlade™FX presents an elegant rotating baton of seven squared outputs placed shoulder to shoulder. Each emitter combines an ultra-powerful RGBW multichip LED source with a light pipe zoom system that homogenizes the colour mix and an aspherical transmitting lens, which is optimized to project a tight 3.6° beam.

The quick, internal zoom system delivers a 15:1 zoom ratio, with a range of 3.6° to 53°. This optical system allows designers to create an exceptional colour mix with visually sophisticated results through direct control of the RGBW chips of each emitter. Multiple colour effects can be achieved point by point.

The versatility of the MagicBlade™FX makes it an indispensable tool for any lighting designer. Used for back lighting, it can create a lens moiré effect. With its volumetric beams in unlimited continuous rotation on the pan/tilt axes, this luminaire helps highlight a performing artist from the side or front. MagicBlade™FX has the same form factor as its brother, the award-winning MagicBlade™R, and can be integrated into a rig just as easily. MagicBlade™FX uses the identical control protocols as MagicBlade™R: DMX-512/RDM, ArtNet™ and wireless DMX via an on-board LumenRadio receiver with external antenna. Driven by three-phase hybrid stepper motors, it is a solid and reliable performer, capable of crisp positional movement and glorious sweeps in continuous rotation.

MagicBlade™FX is to be launched officially at Prolight+ Sound 2017 and will be available for immediate delivery. The stunning demonstration video for MagicBlade™FX was released in early March and the fixture is already a dazzling success – Ayrton has received hundreds of pre-show orders!

MAGICDOT-XT



MAGICDOT-XT CREATIVE SOLUTIONS

MAGICDOT™XT is a radical fixture fitted with the AYRTON's new and proprietary 126 mm diameter optic – which distinguishes the "XT" product line. Weighing in at 550 grammes, this new high-efficiency lens is the world's largest collimator! Combined with an ultra-powerful, low-etendue, RGBW multichip LED emitter, MAGICDOT™XT pushes the limits of technology even further with a 2° full beam and centre-beam luminous intensity of 580 candelas per lumen.

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AYRTON
Digital Lighting

KOЯN TOURS EUROPE

as Church praises MagicPanel™R

Text: Julie Harper
Photos: © Sébastien Paquet



Grammy-award-winning, nu metal band, KOЯN, embarks on a tour of mainland Europe in March, starting in Zurich and culminating in Slovakia in April, with a set that features Ayrton MagicPanel™R fixtures as the focal point of the lighting design. The 17-date tour follows on from North American and UK legs which were supplied by Morpheus Lights in the US and Neg Earth in the UK respectively, with Black Box of Germany assisting for the forthcoming Europe leg. KOЯN's lighting designer, Thomas 'Church' Christmann, supplemented the North American tours with 20 Ayrton NandoBeam™S9 and 6 Ayrton MagicBlade™R fixtures for KOЯN's sets in the Return of the Dreads & Nocturnal Underground tours.

Church designed his lighting to work in combination with a large, rectangular back video wall, by deploying 56 MagicPanel™R fixtures, complete with mirror kits, in five 4x3 arrays across five step risers which back the band and frame the drum kit. "Everything in the design is straight and the MagicPanel™R fixtures fit perfectly into it," he says. "The straight beam of the panels and their position within the design make a perfect overall picture."

To meet the quick turnarounds that touring with a variety of other bands demands, Church was able to incorporate the MagicPanel™R units into a versatile floor package that was simple to set up, manoeuvre on stage and transport. "It is the fastest way to deploy them and the safest way to transport them on dollies," he says.

Church reveals the reasoning behind his choice of Ayrton's MagicPanel™R: "I needed a flat beam fixture to complement the straight lines of the design and was impressed



by the output of the Ayrton MagicPanel™R. I made the design for the first tour and the band really liked the result of the show and the design, so we held on to it. I've used them on all KoЯn tours in 2016 now and am continuing to do so. I've become a big fan of the Ayrton fixture family."

The decision has borne out and Church notes how easy the fixtures are to justify, based on ease of use and tour-worthiness, "I've used them on three different tours, each time trucking and travelling on the risers. In all that time, I've only had to replace one fixture." As for the set up, he states, "It was pretty simple to set up the MagicPanels™", and the programming on pixel mapping works solidly. I really like the idea with the mirror kit in the back and they've piqued a lot of interest with the other guys on tour. All my system techs like working with the MagicPanel™R. It is easy to set up and connect, and the manufacture is legit!"

Church controls the panels from a Chamsys MagicQ 100 Pro 2014 lighting desk, run in extended mode via Art-Net. Using a combination of the desk's internal pixel mapping options and the MagicPanel's own macro patterns, Church explains, "I'm using all the options I can imagine - from a big white light wall to tiny dots moving around. I can create frames or movement effects, and the endless pan/tilt motion is a great effect."

He continues, "The panels fit perfectly to the sound of the band, which involves many peaks and dips. Originally, my intention was to use the panels for their unique qualities of endless rotation, brightness and beamshape, but I discovered the quality and effects achievable from a washlight with square pixel mapping ability finally sealed my decision. The MagicPanel™R supports all the atmospheres and moods I need to create a picture of lights to complement the sound."

Church is full of praise for the MagicPanel™R fixtures, and concludes, "I'm already planning my next design with Ayrton fixtures, I'd use them every time."



LEROY BENNETT GOES ONE ON ONE

with MagicPanel™ R



Text: Julie Harper
Photos: © MPL Communications



Paul McCartney's One on One tour started in Fresno, California in April 2016 since when it has clocked up 41 shows, to date, across North and South America, Europe and Asia. The tour promised a 40-song setlist that celebrates McCartney's legendary career set against a 'dazzling re-designed set', a promise which rings true having been brought to fruition by production and lighting designer, LeRoy Bennett.

Bennett has worked with McCartney for the last fourteen years, during which time they have established a collaborative working partnership which allows Bennett considerable freedom to develop show concepts that incorporate McCartney's inspirations.

"For One on One we decided that it was time to upgrade what we'd been doing for the last few years," says Bennett. "I wanted to create something new that was less two-dimensional than previous shows by introducing an abstract, three-dimensional aspect that would give the show a more volumetric feel."

Bennett achieved this by building up several layers of lighting fixtures and video surfaces to create a depth that gives the audience an interesting perspective through the layers which changes from different viewpoints across the auditorium, and gives a wider viewing angle with more things to look at.

The result is a massive lighting and video installation that includes an upstage wall composed of 160 Ayrton MagicPanel™R units, arrayed in ten 4 x 4 clusters, in conjunction with a series of vertically rigged LED battens and moving head fixtures, all of which give Bennett different textures of light to play with. The wall is rigged on modular frames, built by the tour's lighting contractor, Upstaging, Inc., which can be adapted to fit all sizes of venue on the tour.

"The MagicPanel™R fixtures were the usual robust, well-made fixtures we expect from Ayrton," says Upstaging's John Huddleston. "They worked well throughout the tour and gave us no issues - one of the reasons they are so popular with designers."

Downstage of the wall are flown WinVision Air LED screens, and mid-stage and downstage layers of Nocturne V-Thru video screens. These are hung between a whole host of alternating rows of lighting fixtures in the overhead trusses, including a series of vertical LED battens from Upstaging which fly in and out, and a further downstage truss with more moving heads, and a row of audience blinders. "There's a lot of lights!" says Bennett.

The whole adds up to a huge canvas on which Bennett builds layers of light and video content to interact with each other - the content

playing through the lighting fixtures in the ceiling and interacting with the LEDs of the backwall, and playing through the V-Thru screens, even when up high in their home positions.

"My goal is to achieve a cohesive interaction between video and all the separate lighting fixtures so they work as one unit," explains Bennett. "I have a clear idea of what I want to do for each number, beginning with the video content and deciding how we are going to interact with it to bring out the feeling in the song and create the right atmospheric emotion. To do this, I need fixtures that I can rely on to do what I need them to do, and the flexibility of the Ayrton products gives me so many options."

Bennett is no stranger to Ayrton products, and has used MagicPanel™602 fixtures many times before, for Bruno Mars and Nine Inch Nails to name but a few. He chose to use the MagicPanel™R for the One on One tour, however, to take advantage of its added control and sharper, narrower beam. "And because it is a new model!"

The 160 MagicPanel™R fixtures form a signature feature of the backdrop as their distinctive square faces form a dynamic grid which runs the gamut of effects from audience sweeps and strobing, through to subtler lighting with morphing patterns and video content.

Preferring to array his MagicPanel™R fixtures in clusters for maximum variety, Bennett takes advantage of their pixel-mapping potential which allows him to use them as both a low-resolution screen and to project beams of light through the smoke-filled atmosphere.

Bennett also enjoys the dynamic flexibility of the units, the continuous rotation and 360° pan and tilt enabling him to create novel effects. "I can play with how to move the pixels; by picking one pixel in each unit and rotating the panel, for example, I can give it an interesting axis of movement. It's what I love about the Ayrton products - the flexibility of what you get out of them."

Bennett chose not to use the MagicPanel-R's on-board macros but prefers instead to use the two GrandMA consoles needed to run the show to push the flexibility of the lights as far as he can, maximising the pixel mapping and feeding them video content.

"It's easy to get lost and overwhelmed amongst all the possibilities," says Bennett, "...so you don't think about the possibilities, you think what you want to do and make it happen! With Ayrton, I know I have the flexibility and the unique qualities to be able to achieve what I want to do."

LADY GAGA ROCKS SUPER BOWL LI

with a little help from Ayrton



© Kelly Coffey

Text: Julie Harper
Photos: © Bruce Rodgers
© Kelly Coffey
© Lindsey Breslauer

On 5 February Houston, Texas played host to the NFL's Super Bowl LI, fought out between the New England Patriots and the Atlanta Falcons at NRG Stadium. Entertaining the crowds in the hotly anticipated Pepsi Zero Sugar Halftime Show was Lady Gaga, whose high-octane performance earned the respect of millions in an intense 13-minute spectacular that was viewed by over 115 million people worldwide. The show was another world-class collaboration from co-production designers, Bruce Rodgers of Tribe Inc. and LeRoy Bennett of Seven Design Works, and lighting designer, Bob Barnhart of 22 Degrees.

Ayrton was, once again, proud to be part of this show with 81 new MagicDot™XT fixtures, 40 new MagicPanel™FX fixtures and a solitary CosmoPix™R chosen to adorn the major scenic elements of Barnhart's lighting design.

Both Bennett and Rodgers had a message to convey through their design and, with the eyes of the world watching, helped Lady Gaga restore a sense of unity and deliver a performance that was both uplifting and determined.

Symbolism was abundant amongst the scenic elements, with half-buried – but still shining – stars surrounding the main stage, two tall 34ft-high towers as back drops, and a piano stage shaped like a planet of shining light, with a beating heart at its centre and softly undulating beams of light reaching out to the audience. With the juxtaposition of Woody Guthrie's *This Land is Your Land* and Irving Berlin's *God Bless America* at the top of the show, against a backdrop of illuminated drones etching out the star-spangled banner in the sky, the message of humanity was clear to any who wished to see it.

"We presented the design to Gaga, who has very strong views of her own, and she embraced it," says Bennett. "She is one of the few artists who, once you show them an idea, figures it out and then totally owns it." From this, Gaga decided on her own set list and what to do with each number in different areas of the stage, then worked hard to make sure every aspect of her performance was perfect, from her dive off the roof of the stadium, 90ft up in the air, to the final catch of the ball as she jumped off stage at the end. "She worked so hard and we wanted to ensure our design matched her level of commitment. She's the real deal as far as talent goes. She is a great entertainer but most of all, an incredible human being – honest, open, warm and sincere, and we wanted to bring that across too."

Bennett chose not to use video in the show in favour of something different that would focus the attention on Gaga's performance. "I wanted something more raw, to say something about Gaga. So Bruce and I came up with the same inspirational tear-sheet – a chequerboard stage with its grid work illuminated from beneath and emanating smoke to add another dimension to what would be traditionally a flat surface." Flanked by the fallen stars, the stage was backed by two tall towers which provided scenic lighting as well as being a statement in themselves appearing, at one point, to be on fire. Each tower was rigged with 20 of Ayrtan's new MagicPanel™FX, and additional spot fixtures, placed on the façade in a random layout to help with the look of the over all production design. MagicPanel™FX units were also located in the base of the towers and used to up-light the towers themselves.

"I like the MagicPanel™FX because of their brightness and zoom capabilities," says Barnhart. "I also wanted a contrast to the spot fixture that would share the same real estate. The contrast in the appearance of the MagicPanel™FX, as well as what it can do, gave me a nice tool box of options."

Aside from the beam capabilities and movement, Barnhart made use of the MagicPanel™FX's internal macros to create graphics that played across the face of the fixture, offering great timesaving during programming in the short production time available.



Barnhart chose another new Ayrton product, MagicDot™XT, to create a second scenic piece, an outlandish piano feature – one of Lady Gaga’s signatures – which in this case took the shape of a globe. “The idea came from Gaga herself who wanted a sphere that represented the planet, with a multitude of light beams emitting outward from it,” explains Rodgers. “We designed the shape as a series of custom-bent latitudinal and longitudinal pipes clustered with an array of MagicDot™XT fixtures specified by Bob. This shape melds into a grand staircase and the entire combination was mounted on a wheeled cart frame to roll it onto the field.” The globe, like the towers, was fabricated by All Access Staging & Production.

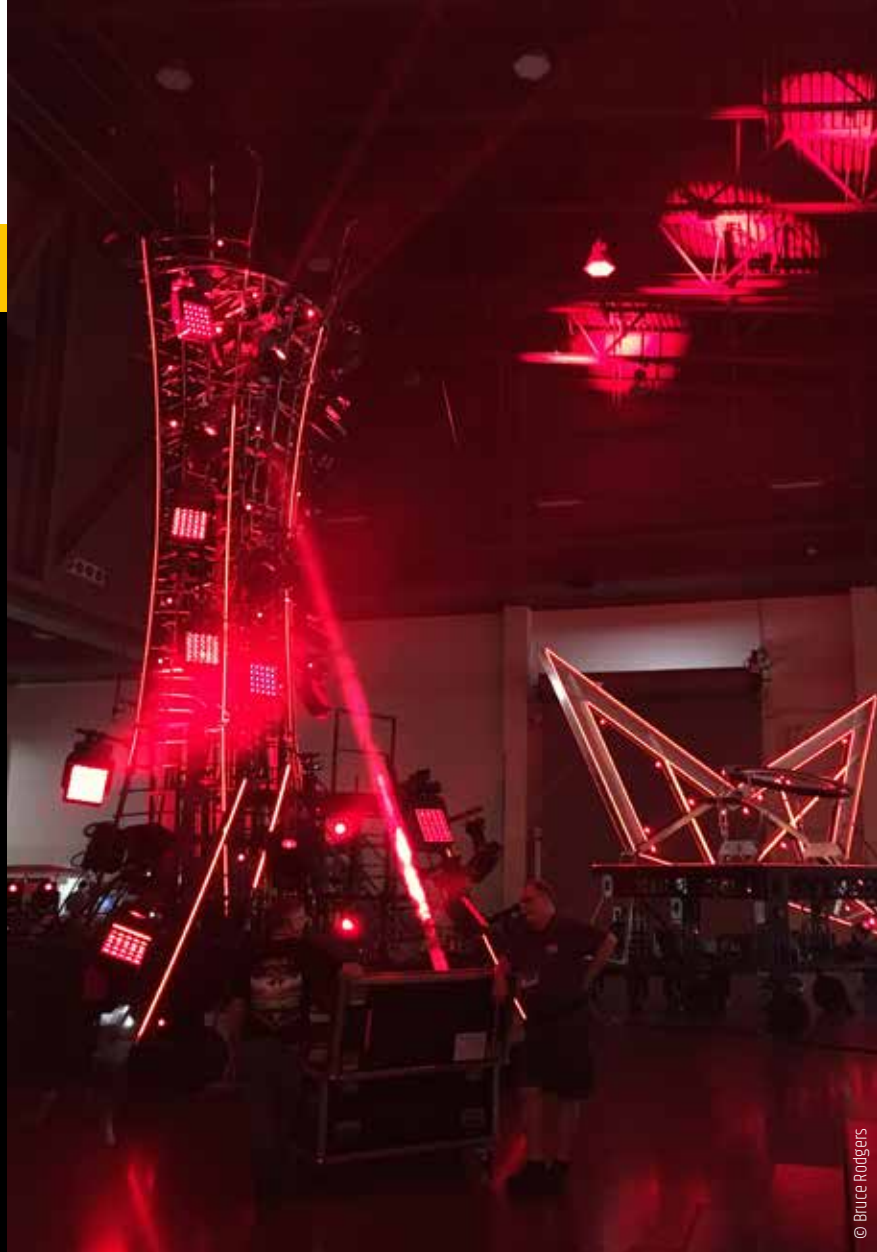
With Gaga’s keyboard connected to the globe, Barnhart programmed a series of gentle fades and ripples of light through the MagicDot™XT fixtures, combined with slow sweeping movements to create a whole emotive environment during the song A Million Reasons. A single, spherical, Ayrton CosmoPix™R was placed in the centre of the piano globe as the warm beating heart within it, giving another dimension and depth to the structure and meaning.

“Instead of the piano just being an inanimate object, it took on a personality of its own with some emotion attached to it that emanated out into the audience,” says Bennett, who also praised the field cast of choreographed Gaga fans that carried Glow Motion torches across the field to connect with the crowd. “It was the closest you can get to video, but without the coldness that can come with LED as a medium. The whole idea was about bringing in a more humanistic, organic side and bringing it down to earth.”

Ayrton’s new fixtures were brought to Bennett’s attention by Morpheus Lights, the exclusive US distributor for Ayrton, which brought a private demo of the MagicDot™XT and MagicPanel™FX to Bennett in early November. He immediately earmarked them for Lady Gaga’s Halftime Show, and demo units were delivered to Barnhart and the scenic team some weeks later. After seeing their capabilities, Barnhart chose MagicPanel™FX and the MagicDot™XT specifically for the scenic pieces of the towers and piano globe. They were supplied by PRG, the long-term lighting contractor for the event.

“I love Ayrton products: they are extremely innovative, super-reliable, and always at the top of the list of things I put into my designs,” says Bennett. “Bob did an amazing job of putting it all together, and I’m happy to say they all behaved themselves on the night!”

The whole production was as deft and beautifully executed as Gaga’s now-legendary final catch of the ball. This team nailed it.



© Bruce Rodgers



© Bruce Rodgers

MAGICPANEL-FX



MAGICPANEL-FX CREATIVE SOLUTIONS

MAGICPANEL™FX is an exciting new multi-function, multi-use luminaire. With a revolutionary new optical zoom system that has no visible moving parts, this proprietary system has a 15:1 zoom ratio with a range of 3.6° to 53°. The front face is comprised of a 5 x 5 array of squared lenses which offer exciting new possibilities for creating 2D graphical effects and produces an extremely powerful beam capable of creating extraordinarily new 3D volumetric effects.

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FLORIDA GEORGIA LINE DIG YOUR ROOTS

while MagicBlade™R flourishes



Text: Julie Harper
Photos: © 2016 Todd Kaplan

The multi award-winning country duo, Florida Georgia Line, took their third album *Dig Your Roots* on a 69-date tour across America in 2016 with a show that marked their emergence into a new stage of their life and career.

To showcase the duo's innovative fusion of country, rock, hip-hop and pop, co-designers Baz Halpin and Chris Nyfield of Los Angeles-based Silent House created a show that was both dynamic and intimate, helping to connect the duo with their audience in a way that typified their edgy brand of music.

FGL's tour was a truly studio-wide design for Silent House with the concept kick-started at a meeting between Halpin and the duo, Tyler Hubbard and Bryan Kelley, to brainstorm some ideas. Those concepts were then passed on to Silent House production designer, Tamlyn Wright, whose initial set layout and renderings were approved by Hubbard, Kelley, and their management team at Big Loud Mountain, before Nyfield began the process of turning the renderings into a tour-able design.

"We chose the MagicBlade™R because it adds such a unique graphical lighting layer that works terrifically in an array," says Nyfield. "Because of the nature of the design, we knew we would be in situations where we would want to expand the visual vocabulary of the video content past the LED screen and onto the flanking lighting panels. MagicBlade™ let us create a variety of looks and patterns that helped us do just that."

The visual anchor of the design was based around two automated tracks, provided by SGPS, which ran upstage of an elevated stage level. The downstage track carried a bi-parting 4:3 LED video wall, and the upstage track carried two travelling panels rigged with 64 MagicBlade™R fixtures (32 per panel) and strobe lighting. "By splitting the LED wall and travelling the halves offstage, it allowed us to have a central wall of light flanked by two LED video columns," explains Nyfield. "Inversely, if we travelled the lighting panels offstage, we could have the 4:3 LED wall flanked by the lighting panels." This gave the design team an expanded palette of possibilities to back the duo and create a series of very



different looks throughout the show.

The flexibility of the MagicBlade™R units were key elements, not only as they alternated between their central or flanking positions to frame the singers, but also by altering the shape and texture of the backdrop. MagicBlade-R's precision alignment allowed the team to array them sometimes as vertical strips, sometimes diagonal slashes, at one point even forming a descending array of squares, and to change the mood of the lighting through monochrome or multi-coloured palettes. "The continuous spin feature worked very well in the array," says Nyfield, "and we were able to use the MagicBlade™ units to provide some really unique looks by tilting the light around to light up the other fixtures and frame work.

Nyfield was first introduced to MagicBlade™R at its LDI debut in 2014. "I dropped by to see Mark Fetto at the Morpheus Lights booth and he was pretty excited to show them to me. I remember being very impressed with the output and versatility of this fixture. MagicBlade™ is appropriately named - it truly is blade-like, slicing through other layers of light; they make such a strong graphical statement."

Silent House has used MagicBlade™R on previous shows, so programmers, Erik Marchwinski and Kirk J. Miller of Earlybird Visual, knew exactly what to expect and how to get what they wanted out of the fixture. "We programmed all of the effects using the grandMA2 Effects Engine without using any of the MagicPanel-R's onboard effects," says Marchwinski. "We love the MagicBlade™ - they are simple to control with a high output and strong visual aesthetic."

MagicBlade™R also got full marks for installation and tour-worthiness from the technical crew. "These lights are straight up plug-n-play, with all of the connectivity options you need and want," confirms Nyfield. "The tracking wall and tracking pods required us to be particular about our focuses, but other than that there were no major challenges.

"Ronnie Beal, our lighting crew chief, confirmed they held up well on tour and said they hadn't had a single failure or swap out the whole of the tour. That's a testament to MagicBlade™R because they travelled mounted in their frames which were broken down into smaller modules and landed directly on a set cart for transport. There was a lot of bouncing around during the build/strike process and the MagicBlade-R's took it all."

Ayrton's MagicBlade™R fixtures were supplied for Florida Georgia Line by the tour's lighting vendor, PRG.

JEAN-PHILIPPE BOURDON ON MISSION: LES ENFOIRÉS

At the Zénith theatre in Toulouse, France



Extracts from the webzine
SoundLightUp
Text: Tristan Szylobryt
Photos: Monique Cussigh

Lighting designers, like sailors, live away from their families and homes, sharing war stories over a glass, as the legendary old navigators told fantastic tales of their voyages through dreamlike waters. One such "captain", Jean-Philippe Bourdon, is the real deal, widely lauded for his professionalism and experience.

We met with him at the Zenith in Toulouse, in the South of France, the venue for the 2017 edition of a seven-concert series given by Les Enfoirés (The Bastards), an entertainment troupe of French pop artists. Les Enfoirés perform annually under the aegis of the Les Restos du Cœur (Restaurants of Love), a charity organisation created by the late French comedian and satirist Coluche.

The concerts are recorded for broadcast over French network television and subsequent distribution on CD and DVD. Jean-Philippe Bourdon, one of France's most feted directors of photography, has been lighting captain for these concerts since 2000. For this year's edition, he chose the latest luminaires from Ayrtón: MagicPanel™FX, MagicBurst™ and MagicDot™R.

An ocean liner of light

The set was immense, almost 50 meters wide, divided into three parts: a centre hexagonal stage for the artists framed by two raised platform stages, one for the orchestra, the other for a "talk" stage. Upstage was a video wall in the form of a nine-metre high Inca pyramid.

The backdrop was an infinity cyclorama. A curved trellis spanned the entire width and height of the theatre, conjuring an image of a giant, unfolded world map striated with meridians and parallels - no continents, just one continuous ocean and hundreds of sparkling islands. This phenomenal construction formed the basic matrices for the lighting kit.

The most visible part of the gear was nested in the mesh of the décor. This mosaic, which gave depth to the central stage, held several MagicDot™R fixtures which could operate effectively in close proximity to alternating strobes. The Ayrtón luminaires, appearing as balls of shimmering light suspended in the air, projected their beams through the haze of the décor.

An impressive number of beams provided continuous light at the top



and the outer edges of the set, highlighting the house and the stage following the geometric shapes designed by Bourdon.

To illuminate the web of steel composing this colossal map, three trusses of wash lights were hung on two-meter spacing. Seven main lighting trusses carried Blade fixtures. They were key to the television broadcast, front lighting the artists, providing back light, and illuminating dozens of sets and accessories for each stage.

Twelve MagicBurst™ luminaires, Ayrton's unique graphic strobe units, were distributed throughout the rafters – each a matrix of 64 motorised LED strobes in continuous rotation. These blinding panels were standing by to dazzle us.

Also on the watch were two racks of 20 Ayrton's new MagicPanel™FX fixtures, for use as sidelights. This is the exciting new iteration of MagicPanel™, with unique squared off 25-emitter optics and 3.6° to 53° zoom. Able to morph from an extremely bright light shaft into a versatile wash luminaire, this unit is like a character actor, perfectly capable of playing the role of audience blinder, graphical panel, wash light or LED strobe. Continuous rotation is but one of its many talents.

On the "bridge" of this huge ocean liner of light, were two GrandMA 2

lighting consoles and a battery of monitors. Technicians were busy preparing the scenes for that evening. The graphics operators ran back and forth, loading the Smode media-server in support of dozens of LED screens upstage. Squeezed in between a GrandMA console and the video monitors, sat Jean-Philippe Bourdon in front of his forever-classic Jester console. He greeted us with a wide smile.

Interview with Jean-Philippe Bourdon

SLU: To begin, can you tell us what process you follow when designing the lighting for a televised production like Les Enfoirés?

JPB: First off, I'm more interested in the story and performance than in the technical issues of the video shoot. I know my video craft well enough by now so, once I've established a solid basis for the show, I can adjust accordingly. I have to keep in mind all the camera angles, plus lighting the audience area, which requires me to have lots of equipment in the house and, of course, followspots.

Usually I start off with a big mess. I've got loads of ideas, so I put stuff all over. Then I eliminate as I position and hang the equipment. We arrived

1. The late French comic Coluche started the "Restos du Cœur" charity organisation in 1989, bringing together a large number of mainly French performers, called Les Enfoirés (The Bastards), to perform goodwill concerts.

2. Instead of just filling in the gaps, the MagicDot™R compliments the Spots in the rig. In this setup, we can hardly tell them apart.

3. The "talk" stage under a spray of MagicPanel™FX luminaires in lavender. For each scene change, the luminaires present a different tableau, never going to black.



4. The Ayrton MagicBurst™ exploding on an unusual diptych of costumes and décor. The new luminaires' size makes up for their small number.

5. Transition scenes in an oft-repeated style. Ayrton MagicPanel™FX projects a tight, fat beam, and MagicDot™R evokes a halogen fixture. During these moments, while a performer is lit by a followspot, the stagehands spend change the sets.

6. A remarkable interaction between video and the actors inside a sumptuous library filled with virtual books. MagicPanel™FX luminaires sort mail to the beat of the music.

here at the Zénith in Toulouse with much too much gear—we were eight tons over! So we had to do some serious housekeeping (smiles). Since my design concept is never set in stone, I give myself leeway to change or move fixtures around during setup—just in case I make a mistake. It's not easy for the other guys, but I'm fortunate enough to have a crew with a good attitude (laughs)!

SLU: For Les Enfoirés show, what are your options and limitations?

JPB: I decide everything – as far as fixtures and how they are set up. The design is completely free in the sense that nobody imposes any artistic or technical limits on what I do—only financial, of course. There are, however, a lot of constraints in accommodating the sets, which take up quite a bit of space and, since this isn't a show for one artist in particular, but for a team with a wide variety of scenes, you have to implement a system with as many options as possible to be able to switch from an intimate moment to a heavily lit production number, and from different musical styles over to comedy. You want the maximum number of “coloured pencils” you can have, meaning a lot of fixtures to cover this set, which is fifty-meters wide. It's much different from a more specifically targeted show, with a single atmosphere. Finally, there are the limitations of television. We have 17 cameras, which is really uncommon, so I have to deploy gear to cover all the angles.

We're given a lot of freedom, but for it to be cohesive, you have to know how to work with everybody and adapt to the requirements of the performances... and of television.

For this shoot, we've planned way ahead to make sure the equipment is available.

In addition, suppliers have really helped out by providing us with equipment. For instance, this year the people at Axente, who work with Ayrton, supported us wonderfully. I had the opportunity to discover the Ayrton luminaires during private demos, in optimum conditions of darkness, with an operator who could meet all my requirements, and with enough time...

SLU: Do you have a special relationship with Ayrton?

JPB: Their fixtures are always something special, whereas other manufacturers just seem to follow the trends. Everybody's come out with beams, then LEDs, and now hybrids... But Ayrton always surprises me. Products like MagicPanel™, MagicDot™ or MagicBlade™ allow you to do so many things...

We try to invent new ways to use them – and that's the whole point. They're unique, but they always meet the basic needs. Ayrton's specialty is LED, and their concepts and execution are at the highest level... I really like the company's whole product line.



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Plus, with a small outfit like Ayrton, we can stay in close contact and propose ideas. We can have lunch with them and talk. With big companies, there's no way.

SLU: So you included their products this year in your game plan...

JPB: Exactly. I was lucky enough to get twenty of the MagicPanel™FX units – one of Ayrton's newest products – to try them out. I didn't feel like scattering them in the rig, and I didn't want to just put up a big matrix in the middle – it would have been hard to embed them into the hoops of centre décor. But the luminaires worked out perfectly in two side areas that were really complicated to set up. Where I would have needed a lot of projectors, Ten MagicPanel™FX units filled those spaces perfectly. I use them for effects, as pixels, but also as powerful sidelights to hit the stage. I love the zoom, which gives me a lot of options. The concept of widening the beams and varying the focus on the arrays allows the whole audience to see the same thing. They don't just favour the angle from the lighting desk. I look forward to using this product again.

SLU: I see that you also have MagicBurst™ units...

JPB: We have 12 of them positioned all around the theatre, and I'm using them at full power... I was a bit scared at first because during the demonstrations, after they came up, I couldn't see anything else – I was all but ready to quit my job. But, here at the Zenith, with all Haze and the high ceiling and the rest of the gear, we're using them with no problem. Full power is just right!

The MagicBurst white balance is pretty nice – not as cold as other LED strobes that we've seen, and the unit is very modular, with a very wide matrix that produces good lighting.

I haven't used the moving-head features much, just in two or three positions, moving from the stage to the audience... This show wasn't the right context for the continuous rotation.

SLU: How did you deal with this huge set, and upstage with all the narrow spaces and curves?

JPB: There is very little room behind it. We have clearance of less than 40 centimetres between the rear curtain and the scenery trellis.

So, I've slipped in quite a few MagicDot™R units, which have the advantage of fitting in anywhere and being lightweight, and they stand up to the big light projectors. I would have loved to use the new MagicDot™SX luminaires. With their zoom they'd have been perfect, but they weren't available yet.

All in all, I have about 750 moving heads, plus about a hundred conventional fixtures that are for specific focuses. I don't differentiate front lights from other fixtures in order to do a special effect, or vice-versa. It's made life easy for my programmers / operators, especially considering the schedule we had: only one day of pre-production, then two and a half days of setup / programming to deliver almost twenty scenes and fifteen set-change interludes for the show... so, we've been busy (smiles)!

SLU: So the lighting rig is made up of some very versatile fixtures, right?

JPB: I can't afford to have any equipment that's too specialised. Each fixture has to pull its weight, like the Blade or the MagicPanel™FX, so that I can create completely different

looks. Then again, I don't like hybrid units that can do a little bit of everything—wash light, beam, spot—but can't do anything very well. I prefer versatile fixtures with a good focal length and zoom ratio.

SLU: Do you encounter any problems combining fixtures from various manufacturers especially with colour mixing?

JPB: CYM colour mixing (Editor's note: subtracting from a white source, unlike the additive colour effect of LEDs) is disappearing from the market and giving way to LED spotlights, so I'm having a few issues.

With CYM units we always manage to connect the colours, but with LED units, even using high-performance fixtures like Ayrtan's with Osram emitters—obtaining a good clean white can be a bit complicated. These are the top of the line luminaires on the market, meaning some of the most expensive (laughs), but we still can have problems with the incomplete wave spectra of white LEDs; it gets better when we add just a bit of colour.

SLU: Can you tell us what problems you've had with additive-colour RGB LEDs?

JPB: The colours generated by LEDs can be very saturated, which is not the case with discharge fixtures and these chips emit both at the very high end of the spectrum, the infrared, as well as down in the ultraviolet.

But video cameras don't have the ability to capture an intensity level that exceeds their sensors' capacity. And as soon as we reach that threshold, we lose information in the image. So we have to significantly reduce the light level to achieve detail, which causes some pretty weird situations with fixtures set to 20% red or Congo red. You don't see the

effect with the naked eye, but you see it in video.

The digital imaging technicians can't do much about it, except play with the gamma. The signal is already normalized to 100% saturation, and the new digital cameras have very little tolerance, so if you exceed capacity you end up with poor pixel resolution.

SLU: Do you have fewer colour mixing problems with the automatic units using subtractive CMY?

JPB: It's the eternal debate over colour mixing. The latest trend is to use very dense dichroic filters that yield saturated mixtures with fewer pastel shades. And some of the lamps now operate at a very high colour temperature. So, while it improves performance, it's at 8,000°K and you lose all the warmth. 6,000°K should be the maximum.

SLU: How much control do you have during the show?

JPB: It's become a habit. I let the board operators take care of the effects and the music. We have a common remote (Editor's note: a grandMA 2 fader wing, which follows the pages on the console, and a traditional console that remains connected to the grandMA. I use that to run the front lights, the back lights and the audience lighting... I control the scene separation. My board operators follow the rhythm of the music, and their roles don't conflict. We try to keep our minds—and our hearts—focused on the stage.

SLU: Jean-Philippe, of all your past projects, is there one you are especially proud of?

JPB: Taratata was a big part of my past (Editor's note: A French TV program broadcasting live pop-rock music in 1993.). At that time, the show was one of a kind. We worked with no constraints. We couldn't really get away with that today. Now TV shows all apply the same formula, with parameters set by the "Anglo-Saxon" world.





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Immediate boarding

Les Enfoirés show was a good long voyage. Over a period of five hours, one scene followed the next. It was leisure cruise highlighted by group performances, with the troupe leaping around the gargantuan set, interspersed with more intimate moments of song. There were also light-hearted interludes of improvisation, just long enough to let stagehands change sets.

Actors forgetting dialog or improvising their lines were all part of the charm, especially when it got a laugh out of the audience. The important thing, after this week of production, was to create a polished performance that, when ultimately broadcast, would be purged of all imperfections.

Bourdon made full use of his lighting gear that evening. He supported and nourished each scene individually, with all the luminaires at his command, and had the 17 camera operators cover all the angles. Those used to live concerts might have been surprised by the way he showcased the performers. The video cameras require that the

followspots be filtered and adjusted as precisely as possible to suit the atmosphere and flatter to each actor. As a result, the faces always appear on screen perfectly lit and detailed against a magnificent background.

MagicPanel™FX is without a doubt the operator's favourite new plaything. Its countless and unique special effects allow them to be ever more inventive. The amazing versatility of this chameleon-like luminaire makes it a perfect tool for creative minds.

After a long night, we finally arrived at the end of our voyage. The production spared no opportunity to delight, with a rich and elaborate design, remarkable display of images, and painstaking work on stage and around the audience.

Jean-Philippe Bourdon, assisted by his devoted crew, calmly and serenely manoeuvred his fleet of fixtures. His style was graphic and meticulous. He tastefully created many incredibly lavish scenes, always focused on the final effect of the visuals. This voyage was a marvellous shared experience, personally and artistically speaking.

7. Displaying an asymmetry of radical colours during this melancholic song, the MagicDot™R luminaires perform marvelously.

8. First scenes portraying a French revolution theme: an explosion of light in the theatre and on stage. MagicPanel™FX luminaires are used in tight focus. MagicDot™R units come on strong and dovetail with the exterior sets.

9. Another group shot against a starry, circus background, and the MagicPanel™FX used for graphic effect.

MITCHELL SCHELLENGER TAKES ON THE SUN FOR ROB THOMAS

with IntelliPix™R



Text: Julie Harper
Photos: © Steve Jennings

When Mitchell Schellenger, principal designer for Station Six Creative Productions, was asked to light American singer-songwriter, Rob Thomas, on a co-headline tour of North America with Counting Crows, he found he had two interesting challenges to contend with.

"Firstly, Rob was scheduled to appear on stage ahead of Counting Crows so we needed a set that would change over quickly, yet still present him as a co-headliner, not an opening act.

Secondly, most shows took place in outside amphitheatres, so I knew I wouldn't have the luxury of complete darkness for my design which would have to compete with the setting sun."

Schellenger wanted to create something with an impactful look that would visually progress from start to finish of Thomas's set. He hit up the idea of a city skyline that could be transitioned from an evening to night scene. "I could use this scenario to treat the show as three different acts with colour schemes changing in tune with what the sun was doing," he says.

He used 98 of Ayrton's IntelliPix™R fixtures to create 15 towers of varying heights to form an asymmetrical cityscape backdrop. The towers were built by Upstaging, Inc. to sit on risers which could be forklifted onto the stage and lifted into place from an eyebolt on the top of each tower. This provided an extremely efficient modular solution that could be erected and struck in just



25-minutes and changed to suit the size of venue. The IntelliPix™R units in their towers could also be transported easily and securely in frames custom-made by Upstaging.

"I first came across IntelliPix™R when I was touring with Imagine Dragons," says Schellenger. "The supporting act, Metric, had a flat wall of them and I remember thinking how bright and powerful they were...which made me think they would be the perfect fixture to achieve the bright look I needed and see off any competition from the sun!"

"I elected to stagger the IntelliPix™R panels and set them all at a 45° angle to form columns of 'city buildings'. That way we could really crank up the intensity when we wanted, without anyone in the front getting hit too hard."

Schellenger backlit the towers to form silhouettes of the buildings and used the light glowing from within each tower to create incredible depth and a sense of the staggered towers as three-dimensional features, rather than a flat scenic piece.

Used mainly as scenic features, Schellenger also used the IntelliPix™R towers to provide some heavy backlighting that silhouetted the band during some songs, aided by the output of some fog machines nestled between the towers. "That gave it great volume which looked pretty cool," he says.

During preset the IntelliPix™R panels were concealed from view within the towers by a custom scrim material that covered the structure. "You couldn't tell there were IntelliPix™R fixtures in these boxes," says Schellenger, "they were just presented as a series of stark shapes."



The audience didn't know the towers were lighting features until the first song when they were all lit up in a warm colour which faded in to give a magical reveal.

"The IntelliPix™R have a very tight beam which gives fantastic volume but, with the scrim only a few inches in front, the IntelliPix™R emitters could be seen shining from behind and hitting the scrim to create a double image that looked like a second pixel of light. This succeeded in creating a kind of 'cylinder' of light which increased the volumetric feel still further. It was quite unique and not what I had anticipated, so it was a very pleasant surprise."

Schellenger used an MBox Studio media server to pixel map the cityscape and performed an Art-Net merge using the GrandMA 2 console. "This way we were able to treat the IntelliPix™R panels both as lighting and to map video content across them. In total we had 2450 pixels to play with – that's a vast amount of real estate to map video content onto and a pretty nice video surface!

"One of my favourite scenes was during the song Fire in the Mountain which has a lyric about a city burning. We used a clip of flame video content on the city and it looked like the whole city was burning."

But Schellenger didn't want his design to be too video-heavy, so intentionally kept this kind of effect to a minimum to maintain contrast throughout the show: "I wanted to treat the fixtures as lighting products - using one colour to showcase the architecture of the design is just as powerful as a some complicated video content."

Schellenger is a programmer by profession so programmed the entire show himself. "I chose to use the IntelliPix™R units in single pixel mode and treat them like straight RGBW fixtures. I didn't use any macros but instead spent some time in making selection groupings in the grandMA which allowed me to run chases around the tower, etc. It was a labour of love, done pixel by pixel, but well worth it for the end result!"



Schellenger did take advantage of the onboard macros in 24 Ayrton MagicPanel™602 fixtures which were rigged in two arrays on vertical trusses flanking the stage. "The long view of the IntelliPix™R 'city skyline', backed by more buildings 'drawn' on a kabuki drop that hid the Counting Crows lighting rig, looked like a postcard. I thought it would be cool to frame it out and give it the appearance of a framed picture of a city with a defined edge. The MagicPanel-602s provided that perfect frame.

"As I was using the MagicPanel-602s as a framing piece and not an additional video surface, I didn't want to pixel map them, but they had plenty of internal effects and macros to choose from. One cool look we achieved was using the infinite pan and tilt to create a rolling, inward sweeping effect at the end of one number, I Am An Illusion, mirroring the units on either side of the stage. Even Rob was blown away by the effect and how these lights could just roll continuously. We definitely achieved our aim of creating a completely different show from the Counting Crows set that followed."

The MagicPanel™602 fixtures were pre-rigged in the four sections of GT truss - inverted on their legs to roll straight off the stage and onto the truck - and travelled within the framework. "That's one of the advantages of a well-built product like Ayrton's," says Schellenger. "Cheap copies just can't hold their positions! Especially in transit where you get to the next venue and you find you have to focus them all again from scratch...which is quite obnoxious! The crew didn't have any of those problems with the MagicPanel™602 and they didn't need to swap out any of the IP for the whole tour.

"Not only that but I hate the ethics of copying. As a designer I prefer to use the real product and give the business back to the company that actually created it.

"I have used Ayrton before but never in this quantity, and they have always been very road worthy and really solid. This was my first time using IntelliPix™R and I got a lot of good feedback on them - people were impressed. Even on the brightest afternoons you could still see them making an impact!"

KLAUS BOLTE

makes clever work for Silly

Text: Julie Harper
Photos: © VISIONSTAGE

German rockband, Silly, toured Germany in autumn 2016 with a sophisticated lighting design drawn up by Klaus Bolte from Lite Science. His stunning design included a wealth of fixtures from Ayrton including MagicBlade™R and MagicDot™R units, and the new MagicBurst™ and AlienPix™RS fixtures.

The main element of Bolte's design were the six massive hexagonal aluminium pods located behind the band. Each pod was fronted by a metal-grill that was painted with symbols from the album artwork which only became visible with the use of up- and downlighting. Concealed within each pod were three Ayrton MagicBlade™R and three MagicDot™R units. These were used in an amazingly versatile manner by Bolte to create a huge variety of looks including a kaleidoscope effect that was a true eyecatcher.

In between the pods Bolte set four Ayrton AlienPix™RS fixtures and used these unique lighting units to create totally original looks and dynamic moves. During the

programming he discovered a thing or two: "I have a cue tip for using the AlienPix™RS!" he says. "By focusing on the singer with the center LEDs, the central emitters stay in place while the disc is rotating, but you can create stunning effects with the outside LEDs at the same time."

Four Ayrton MagicBurst™ were installed on the front truss and showed their diversity as audience blinders, as graphic displays, as strobes and as animated effect lights. "With their overwhelming brightness and the endless rotation on pan and tilt, there are endless possibilities to what I could do with them," concludes Bolte.

The Ayrton MagicBlade™R, MagicDot™R, AlienPix™RS and MagicBurst™ fixtures were all supplied for the tour by Motion Group, Germany.

MAGICBURST



MAGICBURST CREATIVE SOLUTIONS

MAGICBURST™ is the first high-power graphic LED strobe with continuous, unlimited, rotation on pan and tilt. A 384 x 384 mm squared face supports 3,840 high-output LED grouped into 64 pixels on an 8 x 8 matrix (patent pending). A library of fixed images and pre-programmed dynamic effects are accessible from fixture memory. With a new, state-of-the-art, ultra-compact 1,300 Watt power supply, MAGICBURST™ can deliver peak light output of over 240,000 lumen for several seconds.

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VITALIC AND AYRTON GO ON TOUR WITH A SPACECRAFT!

At the Aéronef Lille Venue in France

Extract from the webzine SoundLightUp
Text: Monique Cussigh
Photos: © Monique Cussigh - © Toma Pilato



French electro musician Vitalic is out on tour, and the All Access Design group have conjured an outstanding scenic design concept: a luminous, moving “space oddity” suspended over his head and an array of Ayrton MagicDot™XT and IntelliPix™XT fixtures embedded in a wall with a line of strobes and indispensable beam projectors behind. We saw the show at the Aéronef de Lille venue, and our immediate reaction was “WOW!”

The tour, which started in September 2016, was well under way when we discovered this extraordinary polymorphic flying machine – custom made by All Access Design. Measuring 5 meters x 5 meters, it consists of five concentric aluminium frames with LEDs embedded in the interior and on the exterior and lower edges, and the position of each frame controlled on 4 motors. It can take on a multitude of different geometric shapes, enhanced by video content fed to the LEDs – some 20,000 RGBW pixel are mapped.

We previously spoke with Jordan Magnée, one of the art directors for All Access, who could not make it to Lille for this concert. On the night of the show, Samuel, Victorien and Vincent met with us at the Aéronef. But first, we were able to interview Vitalic himself – or, Pascal Arbez-Nicolas, as the electro dance music sensation is known offstage. So cool!

An artist involved in the artistic process

SLU: How did the set design project start?

Vitalic: I didn't have a specific idea, but we wanted to come up with a design that was relevant to the music and in keeping with the album theme. I gave some key words to

the designers, and All Access Design came up with this great concept. It was the best idea proposed.

SLU: Weren't you apprehensive about that object?

Vitalic: At first I was, because I didn't know how, or if, it would work well on the tour. It's a pretty heavy object, after all. But now, being underneath it during the concert doesn't bother me a bit.

SLU: What's your impression?

Vitalic: It feels like I'm the captain of a spaceship. That's the idea, and I think it works.

SLU: Does it affect how you perform?

Vitalic: No, but I know how it's pre-programmed, so I can anticipate a little. I get excited when I know certain sequences are coming up (laugh)!

SLU: Do you get feedback from the audience?

Vitalic: Yes, I feel it directly. Overall, the feedback is really, really good.

SLU: Does an electronic musician have to provide set design these days?

Vitalic: No, for a long time I toured without it. That works too, but I felt like taking my project to another level... pushing the limits. It's really exciting. I've been involved with the designers on the light sequencing, and it's great. We work together with a lot of flexibility and no ego issues. It's a real pleasure.

SLU: Do you have specific requirements as to how the structure moves, the visuals being projected, and the colours?



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Vitalic: I've often used ideas that are suggested to me, but I have the best vision on how to do my show, and for the sequencing, I've pretty much decided what I want. As far as colour goes, I told them what I need – a sort of colour code, like going to red at intense moments.

A retrofuturistic set design

Jordan Magnée: Three of us worked on the project together. I was in charge of set and media design – and art direction. Samuel handled the lighting design and the network with Victorien. So we all worked on the creative side.

We started with the artist's need for a unique set design that has had a real impact on his concerts. For Vitalic, the set design plays an important part because he was one of the first electro musicians to integrate digital art into music.

He wanted to evolve this tour to a retro-futuristic scene – to explore an avant-garde concept that breaks with what has gone before.

Our concept was to create an object that would be suspended over him and that could interact with the music. We decided on this kinetic sculpture made up of 5 concentric square frames, with each connected to four motor points, so that the object is alive. For Vitalic we wanted something to happen, physically – so the suspended object could create a different design for each song.

The structure is lined with LEDs and it projects video content, so physical changes are accentuated by the video movement.

Then we built a big array at the back with Ayrton IntelliPix-XT fixtures to surround the structure by using beams to play on the depth of the stage. This wall is embedded with

MagicDot-XT units to create beam movements, and then the entire rig, the array and the flying structure are completely pixel-mapped. We use the same media for everything, which creates a unified look.

There is a great variety of content: very graphic visuals, then more video-ish material, mixed pixel by pixel. We really played on the variations.

It's a big toy and we have to keep it under control. It's brought up a lot of issues.

The square structure points forward, toward the audience to emphasize the angles and depth of the stage. In opposition, the IntelliPix-XT matrix is angled upward at the rear to emphasize the oblique angles and depth.

We're happy with the result, and it's pretty innovative. For Vitalic, there's major sync between music, the physical movements and the light and video cueing, which makes the music more intense.

Hanging and adjusting the equipment on a daily basis

When we got to the Aéronef in the early afternoon, the rig had already flown. The five frames were hung and connected. They moved and shimmered. Vincent lay underneath with an iPad in hand. Samuel and Victorien manned the lighting desk.

SLU: Vincent, what are you using the iPad for?

Vincent Leroy: I'm checking the movement of the motors, making sure that the frames don't interfere with each other. I have a kill-switch in case they collide. When I finish my setup and safety tests, the grandMA will take over. It has the same control mode as the iPad with the TouchOSC interface.

Victorien Cayzeele: Every day there are some adjustments to be made due to the height of the different concert halls. Yesterday, in Brussels, the grid was 7 meters-high and today we're at 6.2 metres. Control gets more complicated whenever we go over 3 meters. Every day we program in the height of the show so, as the tour progresses, we can dig into the memory for the height pre-sets.

SLU: Are the winches controlled from the console?

Vincent Leroy: Yes, through ArtNet™. We sent the XYZ (attitude, pitch and roll) coordinates to a winch-dedicated server, as if they were luminaires. The server, based on VVV firmware, interprets that DMX into motor control. The server runs over three different networks. It picks up the ArtNet from the console on a network card, the DMX from the winches on another network card that's physically separate. A third separate network carries the control signals. So there are three network cards in the machine.

SLU: What about overall safety?

Victorien Cayzeele: It's the same as with any moving truss using a safety chain: whenever there's movement overhead you need at least three safety points. We have an electrical safety point, a command safety point through the VVV server, and a safety point at the console. There is also a data safety mechanism and a "dead man" switch which must be activated by Vincent every 30 seconds during the show or everything stops.

SLU: And the moving object works in all the clubs?

Samuel Chatain: We have two versions: one with five frames like this one – the full deal. Then, if we don't have enough space we can remove some of the IntelliPix™ wall, which is segmented, and remove the two biggest frames – as we recently did at La Laiterie, the club in Strasbourg.

Victorien Cayzeele: The whole rig is not very heavy: 1.5 tons, but one of the points has to carry 600 kg, which means sometimes we have to adapt.

SLU: How many points in total?

Victorien Cayzeele: Four. We looked at all possible solutions ahead of time, given the constraints of the venues, so that we could have the maximum amount of manoeuvrability.

Equipped with RGBW LEDs

SLU: Let's talk about the LEDs that light the frames

Victorien Cayzeele: It's an RGBW strip controlled point-to-point with a small 6.7 mm pitch. I'm running 219 universes just for the LED strips on the frames, Vitalic's lighting desk and the DJ Booth. We have them on the inside and outside of the frames and underneath. We've never done a project before with so many LED strips.

When Samuel and I started the blueprint of the frame integrating the LEDs, we had to define very specific lengths for all the rods. We made up some spares. If one of the rods breaks, we replace it. The aluminium casing has the dual advantage of protecting and cooling the LEDs. After laying it all out, it took 4 people for 4 days to attach the LEDs at CMDS and we stayed for 7 days with Sam to wire everything, drill the sheet metal, set up the mounting plates... It's all custom and handcrafted.

SLU: How is IntelliPix™XT used on the project?

Victorien Cayzeele: We wanted to have an array while using the MagicDot-XT. The advantage of the IntelliPix-XT is that it has the same collimator and emitter as the Dot-XT, so all the LEDs are in perfect sync. We were really attracted to this product because





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the beam is really very, very tight and has a lot of output. Léon Van Empel from S Group, who provides the lighting gear, went along with us. He's been very proactive.

Samuel Chatain: We had worked with the MagicDot™R on previous tours. This time we wanted the MagicDot™XT to have a little more power. Ultimately, we installed a fixed array of IntelliPix-XT units integrated with MagicDot-XT fixtures that project exactly the same quality of light – so the wall starts to move.

Victorien Cayzele: Today, our IntelliPix wall is flat because we don't have enough stage depth to form a V, with the point forward, but the concept is to open up the array and work the volumetrics to bring out the angles... and open up the sense of perspective in the show.

SLU: Is the wall easy to set up?

Victorien Cayzele: Yes, we had fixture frames made up by CMDS Factory, with dedicated mounting points for each unit, so it's quick.

Samuel Chatain: IntelliPix™XT creates a real cool array that can also let you do fantastic ceilings with big light shafts.

SLU: The sound, light and video has to be synced...

Samuel Chatain: Yes, the artist is used to having a full sync, and even if we are not crazy about this kind of playback, the show uses sync for about 80%. But we've created a system that also allows us to adapt and respond live.

With all the experience that our company has on different sites, between LED integration, media servers and motion control, this is the first project where we've been able to integrate all our know-how, and bring it to a much higher level. Previous experience has served us well!

Start your engines!

The house is packed with 1,500 people standing on the ground level, plus 500 more on the mezzanine. It was starting to get a little warm... but then magic began! As you'd expect the sound grew louder, with the music surrounding and absorbing us. The artist stands out against powerful and saturated red backlight. The frames, brought into upright position, described the iconic "V" of the artist, taking up almost the entire height of the stage. The effects came almost too fast for my camera to capture any still images. Each change of scene causes the audience to react – from shouts of awe to groans of pleasure. The motorised frames and the point-to-point control of the LEDs display an infinite number of angles, structured as a pyramid, then biased, in a massive, threatening platform above the DJ, de-structured, chaotic, shimmering. Even their thickness appears to change through the three ribbons of LEDs surrounding each metal frame.

The back wall of IntelliPix™XT fixtures appears as a source radiating from outer space, and when the light shafts from the MagicDot™XT units join in, it all comes to life: awe-inspiring. A fantastic effect! Vitalic's music is rich, and each element fully plays its role. We can clearly see why Samuel and Victorien were in preproduction for two and a half weeks at S Group to program the show!

Vitalic's show is electro music at its best. On his previous tour, he used an unusual array of Sharpys. Challenged with coming up with an even more mind-bending project, All Access Design raised the stakes by realizing an outrageous set and lighting design concept – at some considerable risk – but the artist went for it and embraced the project.

Wow, what incredible work. Bravo!

OPETH SORCERESS TOUR

weaves spell with DreamPanel™Twin

Text: Kate Lyon/Ambersphere
Photos: © Tom Grant @ Siyan Ltd



Kicking off with twenty dates in America at the start their Sorceress world tour, Swedish band Opeth brought their show to Europe in November, opting for a single show at Wembley Arena for their UK audience.

Magnus Boyd has been lighting the band for the last eighteen months: "During the tour, we have done two special extended sets at Radio City and Belasco in LA, featuring songs from the Deliverance and Damnation albums before performing a third at Wembley Arena," he says. "The final extended set will be at the Sydney Opera House in February. These are impressive spaces that really deserve a large production."

Boyd's lighting and visual design featured 40 Ayrton DreamPanel™Twin fixtures rented from French company, S-Group. DreamPanel™Twin is a hybrid fixture, capable of full continuous pan and tilt, which presents a specialised MagicPanel™ with 8 x 8 RGBW 45-mm optic array on one side, and an 6-mm pitch RGB 64 x 64 pixel video display on the other. On the Sorceress tour, the 40 units are rigged in four double columns as a backdrop to the band and form a focal point of the lighting set.

"Myself and Petter Nilssen had a brainstorm and decided to try out the Ayrton DreamPanel™Twins," says Boyd. "The DreamPanels were chosen to replace a relatively well used three-part video wall setup. Almost every song in the set includes their use but as they are so versatile, we were able to change looks



continuously, starting out with content relating to the songs and progressing into more abstract material that would include fixture movement. For the encore, all hell breaks loose with some beautiful abstract video, rotation and full use of the LED side of the DreamPanel™Twin. The content was created from a mix of video designers with Sorceress artwork by Travis Smith animated by Scott Rudd, abstract artwork created by Pekka Stokke at Ljos AS, and some content created by myself with footage from Jonas Åkerlund."

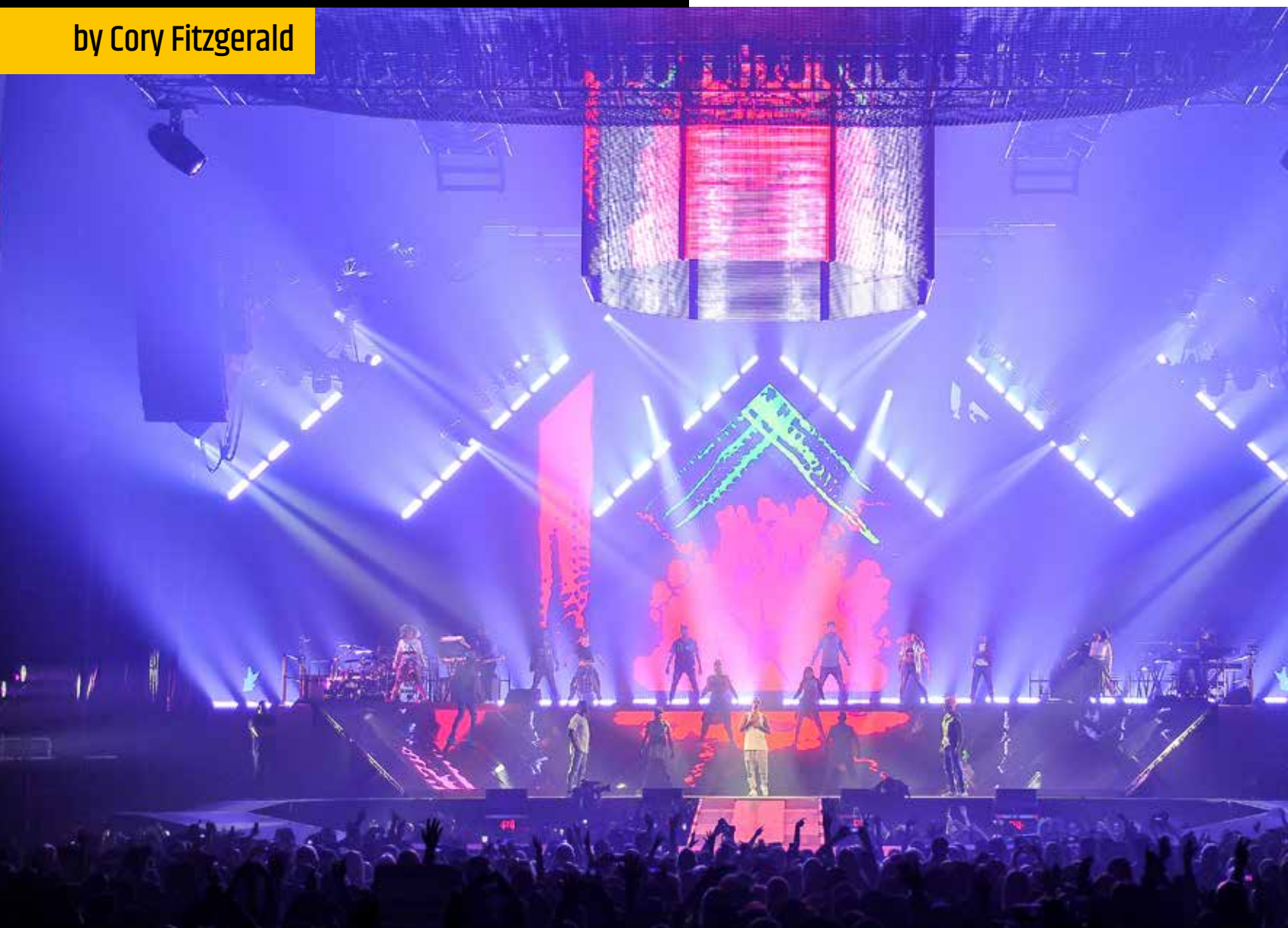
High Wycombe based rental company, Siyan Limited, were chosen to deliver Boyd's Wembley and European lighting requirements. Project manager, Tom Grant, comments: "I thought they were an impressive fixture with some very unique features," concluded Grant, "...as you would expect from Ayrtom! Magnus has used them very creatively and they are THE feature in his design."

As we go to press, Opeth is currently engaged in a tour of Australasia, but will take their backdrop of DreamPanel™Twin fixtures with them on the forthcoming dates in South and North America from March, before concluding with dates at a number of European festivals in June.



JUSTIN BIEBER'S PURPOSE REVEALED

by Cory Fitzgerald



Text: Julie Harper
Photos: © Steve Jennings
© Todd Kaplan

Justin Bieber's third world tour, Purpose, in support of his album of the same name, brings with it a new approach to mark the artist's freshly reinvented image. Lighting designer Cory Fitzgerald employed Ayrton's MagicDot™R, MagicBlade™R and the new VersaPix™RS fixtures to help define this new look and delineate major scenic features within the multi-layered set.

Bieber's co-production designers, Nick de Moura and Chris Gratton, devised a highly mutable, multi-levelled stage set that is connected by ramps, backed by huge jagged-edged video screens and overhung with a 'cage' of V-Thru screens; the stages are inset with numerous lifts, toasters and risers, while three catwalks – the central one inset with a conveyor belt – lead to an octagonal B-stage; and, in an ultimate audience-gasper, a trampoline is flown in above the crowd for Bieber and his dancers to bounce on.

The performance area constantly changes in shape during the show, making full use of the many layers and different heights, and is matched by an equally dynamic lighting rig that adapts its appearance to keep up with the ever-changing states.

"The general design was established by Chris and Nick by the time I came on board so I had a clear idea of what I had to work with," says Fitzgerald. "The overall concept was to accentuate the shape of the video screens and various surfaces and levels throughout the set. There are many lifts, conveyor belts, moving screens, winches and a trampoline, so the show changes shape many times and we wanted to be able to follow right along."

Dominating the backdrop is a video wall with edges forming five angular 'peaks' which Fitzgerald outlined using 103 MagicBlade™-R



fixtures mounted on angled trusses. These emphasise their irregular shape, while more MagicBlade™R fixtures are deployed upstage of the wall on a border truss to give a wide horizon to the upper stage level.

"The MagicBlade™Rs were one of the first things we decided upon as I knew I wanted to add some kind of lighting border to the screens," says FitzGerald. "The MagicBlades-Rs have such tight beams and are so versatile in their movement, I knew we would be able to do a lot with them. Firstly, they gave us the big frame that we wanted which isolated the screens with a clean border. We could then frame the screens with the MagicBlades facing outwards or upwards to make the screen feel more dynamic, and then change the look entirely using the tilt and movement effects to give it a more asymmetrical border when we needed it. They fitted the look well and looked great."

The MagicBlade™R fixtures are mounted on custom frames that travel with the screens, which helps to reduce rigging and focusing time at each venue, and can be easily

adjusted to fit the different sized spaces on the tour schedule. "That is a key logistical advantage of the MagicBlade™ shape," says FitzGerald. "When you are touring this amount of kit, every inch counts, and the speed of getting it all up in time is always a big issue. You don't want your department's special feature to hold up the load-in or it runs the risk of getting cut! A solution like this makes life so much easier on the road."

FitzGerald chose one of Ayrtan's newest fixtures, the VersaPix™RS, to accentuate fifteen angled overhead lighting trusses, with a total of 122 VersaPix™RS units arrayed vertically on the downstage edges to act as truss fascias. The VersaPix™RS are rigged in mono-frames which are clamped to the trusses to avoid the time-consuming process of hanging each unit individually. The trusses can then be angled as a whole unit to match the declination of the stage in each venue. This also ensures all the VersaPix™RS fixtures remain aligned with each other as an array: "That's the hardest part of touring any tight beam or static fixture," says FitzGerald, "you have to really lock them in together to guarantee that symmetrical appearance."





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FitzGerald first came across VersaPix™RS on the stand of Morpheus Lights, Ayrton's exclusive US distributor, at the LDI show in Las Vegas. "I thought they'd make a nice multipart beam light, rather like an old fashioned ACL effect with a modern twist," he says. "As soon as I saw all the angles they produced, I really liked the idea of trying them out on Bieber's tour to add that very beamy, almost 45°, angular look that would match the angles and geometric lines of the set. From this we developed the concept of reflecting the overall shape of the set, which in turn determined our truss placement.

"Our aim was to continue the visual fluidity that starts from the 7ft-high video ramp which rises from the main stage to the second level and continues up into the back wall. These create a kind of angular motion which we wanted to keep going through to the ceiling, so we arranged the trusses at various heights and angles to correlate to this and add more layers.

"We placed the VersaPix™RS on these trusses in a combination of straight and angled positions which interact to give us some really cool looks and help give it a sense of motion. The VersaPix™RS's curved shape with their five-finger spread creates an interesting dimension, simultaneously following the linear effect but adding a slight curve. The angles overlap and create a sea of beams that fill in the whole sky and even punch through the video. The way we have them set up and

the way they work enables me to create a sense of movement, even though the units and trusses are static - it feels like they are moving really quickly which is super-cool!"

This is the first time FitzGerald has used VersaPix™RS fixtures and it was not for the unique beam spread alone that he chose them: "Sets are becoming bigger and more complex, so there's a lot of surface area to cover from a lighting designer's point of view. With greater video use, the number of different types of light sources available and ever-brighter LEDs, there's a wide degree of choice and flexibility, but also the danger of 'clutter' if you are not careful. I'm discovering I prefer the uniformity of just a few types of fixtures, used in a large enough quantity to 'read' in visual terms. This produces a more 'homogenised' look which is less distracting than using a lot of different sources.

"So, although I'd never used them before, I knew the power and the optics of the VersaPix™RS were extremely similar to those of the MagicDot™R, which meant that, used in combination, they would give me a high degree of versatility yet lend a unity to the overall design.

FitzGerald put the MagicDot™R to good use on one of the show's main scenic elements, the 40ft x 20ft trampoline that descends over the audience during the song Company with Bieber and his ensemble bouncing just 15ft above the fans' heads.



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Ninety-six of the compact, award-winning moving head fixtures are built into the supporting truss and make their entrance performing a big tilt wave as it descends at the top of the number. "We came up with the idea of the trampoline being its own cool little spaceship and developed that idea into a big focal point," explains FitzGerald. "We needed a fixture that could operate and travel within the space of the truss framework so it didn't have to get set up everyday, and the MagicDot™Rs were perfect as they fitted right in there!"

"They give the trampoline a nice frame, lighting up all around the edge, and provide good lateral movement from the great pan and tilt feature. When in the 'trampoline' position we can make a lot of horizontal and upward beams that make it look like the floor of the room, and then some really cool sinuous waves that enhance the fact that the trampoline is moving. When retracted up into the 'store' position we use the MagicDot™Rs as overhead fixtures and can create a lot of down focuses, linear effects and aerial fans. It's definitely a very cool look."

FitzGerald has used MagicDot™R and MagicBlade™R many times before: "I am always impressed with their performance and their total reliability," he says. "I love Ayrton products - the speed and graphic nature of the fixtures makes them incredibly versatile. Having a uniform look to the lenses throughout the fixture lines also helps keep them very uniform and similar in feeling. I'm always excited to see some of the newer products in action and discover what we can do with them."

All the Ayrton fixtures were supplied by the tour's vendor, VER, who served FitzGerald and his team well: "VER were great as always, going above and beyond to make it happen and get us the tools we needed to make the rig work every day," says FitzGerald. "We had a great crew chief in Kevin Parsley who led a great crew who have been very supportive and helpful throughout. And Nick van Nostrand has to be the best lighting director around! He keeps the show looking amazing every night and is a complete joy to be around. It's been a great experience."

After completing 115 arena shows in 2016, Bieber's Purpose has now upsized and is visiting stadiums across South America, Australia, the Middle East and South Africa, and will take in several European festivals this summer before returning to North America to finish in Canada in September.



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ARCALINE 3



ARCALINE 3 STATIC LUMINAIRES

ARCALINE™3 units are fitted with 12 next-generation RGBW high-output LED emitters. Each can be controlled separately to create virtual tableaux or to highlight scenery on stage. ARCALINE™3 has been created for use both indoors and outdoors, in all types of environment and in all weather conditions. The new design allows the luminaire to be used in multiple configurations without additional accessories.

MERAK



MERAK AUTOMATED LUMINAIRES

Ayrton's new MERAK™ is a powerhouse of technology that features a proprietary 10:1 optical zoom system, combined with a 250-Watt low-etendue, RGBW multichip LED module. The 7° to 70° zoom employs light pipe technology paired with a new Fresnel lens design to ensure perfectly homogenous colour mixing regardless of beam angle. With its single-source transmitting lens, MERAK™ casts wonderfully crisp light and shadows.

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