#Ayrton live

ISSUE 9 _ MARCH 2016

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THE WEEKND *650 Ayrton fixtures involved in the lighting design of LEROY BENNETT*

JOHNNY HALLYDAY *Rester Vivant Tour*

AMBERSPHERE *The Solution*

DREAMPANEL TWIN *by SoundLightUp*

DREAMSPOT-18K

DREAMSPOT-18K AUTOMATED LUMINAIRES

AYRTON™ is proud to introduce DREAMSPOT™18K, the very first laser-source multifunctional, multiple-use automated luminaire. Fitted with an OSRAM™ Laser PHASER™ P6000 phosphor conversion module that required three years of development and rigorous testing, DREAMSPOT™18K will offer lighting designers an unlimited range of creative possibilities.

AYRTON
Digital Lighting

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Editorial

Dear Reader,

What a fantastic and successful year it has been since last Prolight+Sound.

The time seemed to go very quickly, and we saw many of the fixtures we presented in 2015, like the MagicDot™R, become stage classics within just a few months.

We continue the technological breakthroughs this year with the introduction of our new, extraordinary 126mm ultra-narrow beam optics which equip the new XT Series fixtures, and with the addition of new zoom fixtures, such as MagicPanel™FX, MagicBlade™SX and MagicDot™SX, that will complement their respective family of fixtures and offer even greater versatility to lighting designers all over the world.

We are also excited to introduce a brand new advancement with DreamSpot™18K, the world's first laser-source, multifunctional spot moving-head, some 13 years after the presentation of the very first LED moving-head, the EyeColor™, at Prolight+Sound 2003.

So we continue to innovate in order to offer new exciting lighting solutions to our clients.

These are exciting times for Ayrton. Come with us, the best is still ahead…

Valère Huart.
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Summary





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AYRTON REPORTS ITS MOST SUCCESSFUL LDI SHOW TO DATE

Ayrton has returned triumphant from its annual visit to LDI show in Las Vegas, where it was exhibiting with exclusive US distributor, Morpheus Lights, to promote its six new product releases, all of which were extremely well-received by the viewing public.

"This year's LDI show was clearly the best ever for Ayrton," says Ayrton's Valère Huart-Gyors. "We found LDI visitors really intent on discovering our new fixtures and they were more than satisfied by what they saw. All our new releases were incredibly well received and the ambiance on the show floor was fantastic with enthusiastic, smiling people all around the booth!"

Ayrton introduced six new fixtures at the show, which were shown to full advantage in a new light show designed specifically for the LDI booth by lighting designer, Stéphane Migné:

MagicDot™-R is the first professional moving head LED luminaire with a single optical collimator. A new high-efficiency 94mm diameter optical system uses a brand new 60W RGBW multichip LED with a light-emitting surface of 8mm2 that delivers an intense 4.5° beam with a central beam intensity of 180,000 candelas.

Lightning fast and with continuous pan and tilt rotation, MagicDot-R has a totally round head that matches the diameter of its cylindrical base in all positions to allow bold new configurations with barely a centimeter of space between two luminaires.

CosmoPix™-R is an entirely new luminaire based on the concept of the famous PAR36 double-rotation spheres that date back to the early '80s. Using the latest technology, this little powerhouse takes 12 of the highly efficient new 94mm optics and generates 12 shafts of coloured light that can be separately controlled in all directions and driven in continuous pan and tilt rotation to create exhilarating, original effects.

VersaPix™-RS puts Ayrton's new 94mm diameter optics in combination with a 4mm2 40W RGBW multichip to produce a fan of five 3.5° beams (the narrowest in Ayrton's portfolio) with a record-breaking central beam intensity of 200 candela per lumen. This makes the new VersaPix-RS three times more powerful than the original VersaPix, with a central beam intensity six times greater than before. Truly spectacular 3D volumetric effects can be achieved with this Ultra Radical development.

LDI also marked the US premiere of Ayrton's DreamPanel™-Shift and DreamPanel™-Twin, two exciting new moving head fixtures developed from the inspiration behind Ayrton's original innovative DreamPanel Series.

DreamPanel™-Shift is a 384 x 384mm video panel with a 64 x 64 RGB LED display at a 6mm pitch, set in a flat black background that provides prodigious contrast and definition. Mounted on a moving head, DreamPanel-Shift has an innovative 48-circuit rotating connector that enables the smooth, undisturbed transmission of video signals through continuous pan and tilt rotation.

DreamPanel™-Twin is a unique hybrid luminaire displaying a DreamPanel™Shift on one side and an optimized, 8 x 8 emitter, MagicPanel™-style beam projection luminaire on the other, with the two sides controlled completely independently. Incorporated into the motorised head, which is capable of continuous pan and tilt rotation, the DreamPanel™-Twin can alternate between displaying high-definition video images and 3D volumetric lighting effects. The video display on the DreamPanel-Twin has 4,096 RGB LEDs on a pitch black background that provides excellent contrast for video rendering, while the RGBW beam projection side has an improved resolution of sixty-four 6.5°emitters to produce finer detailed volumetric mapping effects. Ayrton's DreamPanel™HD-Box control system has been specially developed to drive DreamPanel™ video panels via a proprietary HDMI protocol. The controller manages the image, the positioning of the panels, and the rotation between the media server layer, which generates the signal, and the display layer. It also resizes and positions the media in real-time in a matrix of video panels regardless of their orientation. DreamPanel™HD-Box sends each DreamPanel tile the entire HDMI 1080P image with a control parameter so that it only displays its allotted portion of the image. DreamPanel™Manager, a PC-compatible software, lets the user configure a matrix, orientate the tiles individually with 1° accuracy, and adjust brightness.

Finally, Ayrton's WildSun™-K25 was shown for the first time in the US at the show. Designed as a replacement for conventional 4000W HMI Fresnel fixtures, yet consuming only 2600W of power, WildSun™-K25 was developed in collaboration with cinematographers and operators specialized in video production for major sporting events. With an output in excess of 100,000 lumens, a 10°-50° zoom and individually controlled rings to modulate the emission surface according to ceiling height, WildSun-K25 is the only LED luminaire capable of measuring up to the classic 4000W HMI Fresnel in terms of pure output, and is perfectly created for sporting events in stadiums and large arenas.

"Everybody enjoyed the light show and the video footage of it is already proving a big success on Vimeo," says Huart-Gyors. "We are extremely happy that Ayrton's innovative and creative new fixtures have excited and attracted so many lighting designers, production and rental companies. It is this energy and excitement which inspires us!"

Morpheus Lights, the exclusive US distributor for Ayrton products, executed the 270-fixture booth design with the assistance of Ayrton's Product and Application Manager, Vincent Billard. "The design community response was immediate and enthusiastic. Ayrton continues to innovate and deliver exciting new tools for visual artists," says Mark Fetto, Morpheus' Chief Operating Officer. "The DreamPanel™, CosmoPix™-R and MagicDot™-R fixtures were incredible hits at the show! Watch to see them very soon on high profile events and installations."

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LITTLE BIG TOWN JOINS THE DOTS AT THE CMA AWARDS

For the 49th Annual CMA Awards, which took place at the Bridgestone Arena, Nashville in November, lighting designer, Mark Butts, worked with the show's creative director and segment producer, Raj Kapoor, to light multi-award winners, Little Big Town. The band performed their hit single Girl Crush during the live broadcast, which called for an unusual and ingenious method of lighting them.

Butts created a close backdrop of light using a bank of 180 Ayrton MagicDot™-R fixtures arranged in a 6 x 6 configuration and rigged on five 7ft tall racks with 14" centres. Far from being over-whelming, this was used to produce a sensitive and emotive undercurrent to the ballad as it was performed.

"The idea was that we would use the MagicDot-R units not just as a big wall of light, but to provide a kind of light-ballet which moved in harmony with the music," says Butts. "We cued the MagicDots to emulate the vocals and harmony, and the movement of the MagicDots was smooth enough for us to obtain a graceful and delicate ballet that was in keeping with the tone of the song. We chose not to use any onboard effects, preferring to program each unit individually so we could have precise control over the effect as we wanted. The MagicDot is very versatile in that respect – it is capable of much more than the high-octane energy of rock and roll."

The racks were set on wheels and each fed by a single cable so they could be rolled on and off stage quickly with the minimum of cable-wrangling. "With a ten minute turnaround between each number during the show, we had to be thoughtful about how we designed and constructed the racks, and chose our equipment carefully," says Butts. "One reason we chose the MagicDot-R fixtures was because they are small and relatively light-weight, they don't use a lot of power, and we could daisy-chain through the fixture. So, even though we had 180 MagicDots on stage, we only had six cables and ran everything off 15amps of power. We couldn't have done that with a traditional moving light.

"In addition to that, we knew we needed a quality product we could rely on. With live television, you only have one chance to get it right. The first time we see the rig to know if it is working is when we are live on air, so we have to be able to trust it 100%. We know that Ayrton kit is well made and extremely reliable."

This was the first time Butts had used MagicDot-R fixtures, having been introduced to them at VER. "We did a demo and really liked what we saw, and Raj recognised it was the ideal product for our purposes at the CMA Awards. VER were superb in their support on our quick turnaround, which was less than two weeks from artist sign off to load in.

"The performance was a success because a lot of planning went in to making it bullet-proof, and that includes our choice of product, manufacturers, and vendors."

© Kevin Winter

AN AYRTON MADESIGN™ SOLUTION FOR BRANDON FLOWERS

Sometimes the most original solutions are formulated from the most haphazard moments of abstract thought. Take Steven Douglas, LD for the Killers frontman, Brandon Flowers: "I had a weird thought while we were in Las Vegas for rehearsals of the promo leg of the tour way back in March. I was looking out of the window at the beam coming from the top of the Luxor Hotel and was wondering how much brighter and more defined it would be if we could switch off all the other ambient light coming from the rest of the strip. It got me thinking about how I used wash lights on stage to light the band members; how I can lose impact sometimes from the all spot and beam fixtures."

"So I started thinking if I could find a way to light the band members from really close up. Then I wondered, 'Would I need so many wash lights?' And, as a result, I would also have a whole lot of black space above to populate with beams."

It was with this in mind that Steven Douglas visited Ambersphere Solutions where he found his beam lights and more besides. "I found exactly what I had been searching for apropos the wash light idea.

"The guys had a MADesign from Ayrton in the showroom that they were using as a desk light - for the grandMA2 funnily enough. I was instantly interested in it as it was perfect for what I needed to accomplish a close-up wash; they were also architecturally interesting even when they were off and the added bonus of the RGB strip on the back was great as I figured I could use it to light the drapes in the smaller club venues where depth of stage could prove to be an issue."

The Ayrton MADesign™ is equipped with RGBW LEDs and 45mm optics which produce everything from pastel shades to saturated colours. The upper arm is fitted with five adjustable spotlights with integral wireless DMX/RDM from LumenRadio™ as standard while, as Douglas points out, there is an independently controllable RGB backlight on the rear of the fixture. While all is designed to be deployed as the perfect solution for corporate events, presentations and conferences, Douglas clearly had alternative plans…

"I decided they were perfect as I could have one over the top of each band member and keep them isolated. I've used them as the primary wash light for the backing band and they're used for much of the show in that way. However, they are also a great effect light for chases and strobe moments as well as the obvious solution for solo pickups."

From Douglas' visit to Ambersphere and his meeting with Philip Norfolk and Lee House to check out the beam lights for his design, he also came away with MADesigns – but not as a desk light for his grandMA2 - while some Ayrton MagicBlades™-Rs made a timely appearance at Shepherds Bush for the final show of the tour.

"I've been really pleased with the MADesigns; they do the job I envisaged exactly as I planned and more. It is also a bit special that no-one has used them like this before; it is very nice to have a unique item on stage. I will definitely be using them again when the design calls for it."

Ayrton is distributed exclusively in the UK by Ambersphere Solutions www.ambersphere.co.uk

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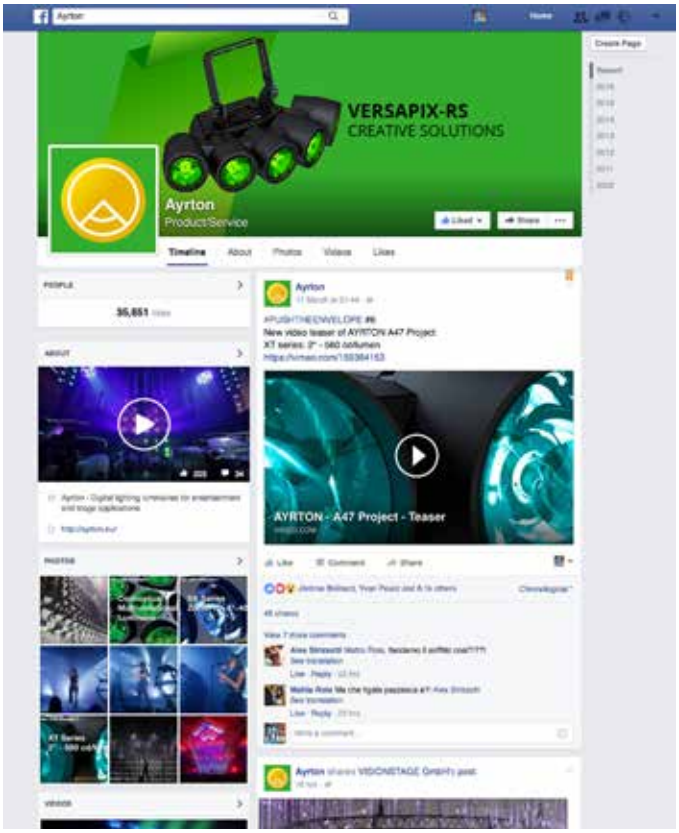

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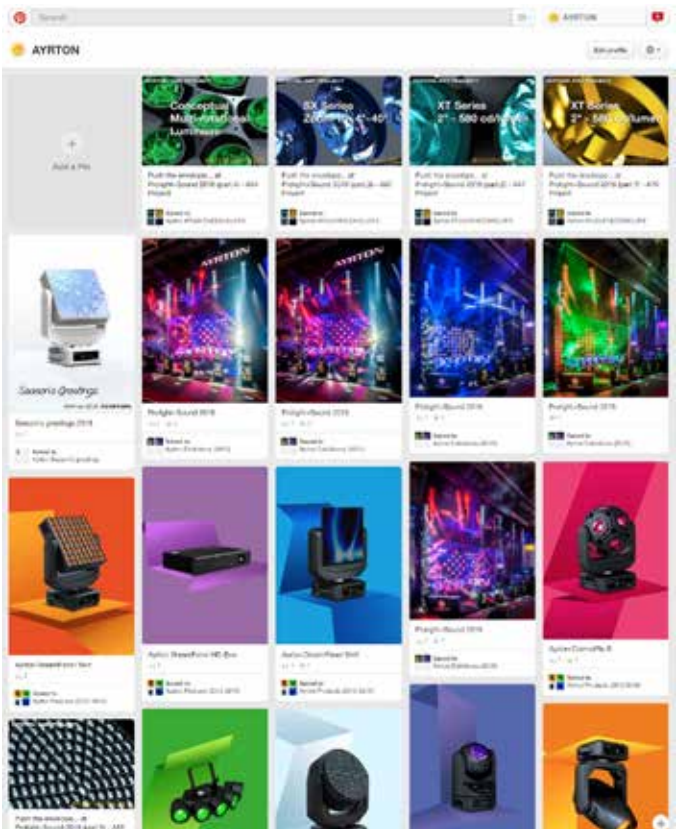

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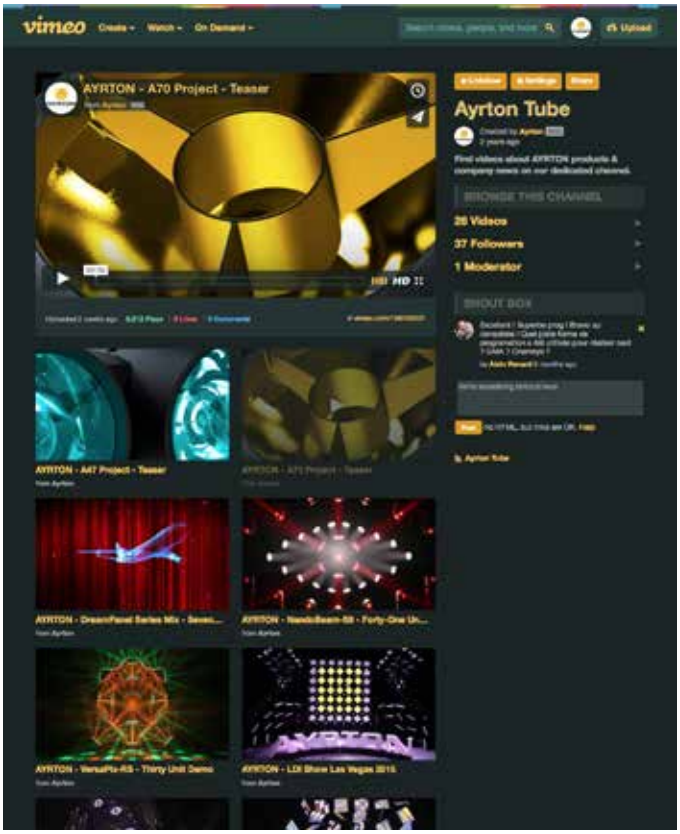

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MAGICDOT-XT

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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PROLIGHT+SOUND 2016

Ayrton presents nine new products – including the world's first automated profile with a laser source!


1


2


3

Ayrton is proud to welcome attendees of Prolight +Sound to Hall 3, Level 0, Stand G81 to witness the latest creations of the fertile imagination of Yvan Péard, Chief Design and Technology Officer, and his R&D team. Ayrton continues to strive to be on the cutting edge of technological innovation – in optics, electronics, mechanics, and heat dissipation.
As always, Ayrton's new products will invite Lighting Designers to test their creativity in ways never before imagined.
This year is remarkable: as Ayrton introduces a product that could revolutionise the world of stage lighting. DREAMSPOT™18K is the world's first automated profile fixture with a laser source.

The product demonstrations: 650 luminaires!

Ayrton's booth has moved to Hall 3.0, occupying 176 square meters dedicated to its product demonstrations, as designed by the esteemed French Lighting Designer Stéphane Migné. 650 new luminaires will be presented in a wild demo that's sure to top Ayrton's efforts from previous years! Migné is a long-term fan of Ayrton products and he clearly knows how to put them through their paces! He has been responsible for most of the product demonstration videos appearing on Ayrton's Vimeo channel.

Now let's join Yvan Péard for a visit to the Ayrton booth to explore these amazing luminaires in detail.

DREAMSPOT™18K
Ayrton presents the world's first profile with a laser source

Lighting designers all over the world have been anticipating Ayrton's first profile fixture, expecting it to be a unique entry into the LED-based genre – ready to do battle in what has already become a highly competitive market.

Guess again!

Ayrton introduces the world's first automated spot luminaire with a laser source. Yvan Péard, Ayrton's visionary Chief Design and Technology Officer, is proud to present DREAMSPOT™18K – the laser-based moving head spot unit with an astonishing 18,000 lumens output, plus continuous pan and tilt capability!

Ayrton Live: What are the advantages of the laser emitter?
Yvan Péard: This new laser source naturally projects a coherent and extremely directional beam – as compared to an LED source with a 120° beam angle, which requires sophisticated optics to focus the beam down to a smaller diameter. Inevitably, such optics create light loss…

1. *DreamSpot™18K*
2. *WildSun™S25*
3. *IntelliPix™XT*

Ayrton Live: You've clearly chosen a really flat field. Does that impact the gobos?

Yvan Péard: That's right! We decided to go for an even and homogeneous field instead of increasing the centre beam intensity. As a result, gobos can be very small but still produce impressive volumetric lighting effects.

Ayrton Live: So, does this mean Ayrton has abandoned development of an LED spot?

Yvan Péard:: On the contrary, we still see the need for a really good LED spot with Shade of color, high CRI and a wider gobo surface area that can really bring out details. The two technologies complement each another. By no means does the development of DREAMSPOT™18K prevent us from continuing R&D on an excellent Ayrton LED profile!

I've been intrigued by laser emitters since 2012. I remember discussing them at Ayrton's 10-year anniversary! There's no better solution for creating the kind of effects that have successfully set the Ayrton brand apart. This technology is able to go from an incredibly narrow ray of light up to a wide, fat beam – which has both coherence and homogeneity! The zoom is a 13-element optical system, that provides a range of 2° to 34° in Beam mode and 6° to 54° in Spot mode. It has a uniform fat beam and no hot spots.

Ayrton Live: It's a fascinating design… but, somehow, it doesn't look like a standard spot.

Yvan Péard: I wanted this to be a signature luminaire – one that's unique and will impress. As you can see, DREAMSPOT™18K is a compact fixture, with a transmitting lens that is about 13 cm in diameter. Overall fixture dimensions are 48 cm wide, 42 cm deep, and 68 cm high.

Ayrton Live: Can you describe what's inside, starting with the source?

Yvan Péard: It all begins with the new OSRAM Laser PHASER™ P6000 phosphor conversion module, which required three years of development and rigorous testing. This monochrome laser emitter is colour calibrated at 5,600°K.

Then, we have a CMY subtractive colour mixing system, plus a wheel of 13 standard colours that includes four levels of CTO correction. Effects include fixed and rotating gobos, an iris, a dynamic effects wheel, rotating prisms, and diffusion filters.

Ayrton Live: What about the cooling system.

Yvan Péard: DREAMSPOT™K18 is equipped with a highly effective new phase-change liquid cooling system using a heat pipe for optimum output and colour temperature stability.

WILDSUN™S25
Incredibly Powerful Stadium Colour

WILDSUN™S25 packs 217 single-chip LED emitters into a moving-head projector to deliver record-breaking light output of 60,000 lumens. This colour-mixing cousin of the WILDSUN™K25 wash light is ideal for dazzling the audiences in concert halls, stadiums, and festivals with magnificent pastels, saturated colours and pure power – equivalent to a 4K HMI.

With a 10° to 60° zoom and six, independently controllable, segments of 36 LEDs, this fixture can both illuminate large scale events and create visual effects that will impress audiences, even in smaller venues. According to the designer, Yvan Péard, "WILDSUN™K25 achieves powerful colour washes with smooth movement on a large scale. In the past, you'd need to cobble together an HMI, a motorised head and a scroller – and change gels after every show – an expensive and unreliable proposition.

The WILDSUN™S25 rivals these 2,5K and 4K HMI luminaires but with far greater flexibility of use and lower maintenance.

Its four-colour mixing is based on an ingenious arrangement of emitters combined with a holographic filter on the output, which optimises the colour mix. It also protects the fixture under extreme conditions, like multisport venues where dust or sand is blowing around – for example, at a motocross competition".

Our proprietary, silicone-based, high-output 6:1 optical zoom ensures perfect colour stability over time, with a zoom range of 10° to 60°. The transmitting lens is equipped with an integrated honeycomb "egg crate" louver to prevent unwanted off-axis glare."

Intellipix™XT
Ayrton slims it down to 2°!

The XT product family now boasts a new member: IntelliPix™XT. This truly amazing unit couples nine LED emitters with Ayrton's new 126 mm diameter optic - with a 2º beam angle. The performance is even more impressive: each individually controlled beam, generated by an ultra-powerful RGBW multichip LED emitter, achieves a centre beam intensity of 580 candelas per lumen - breaking all records!

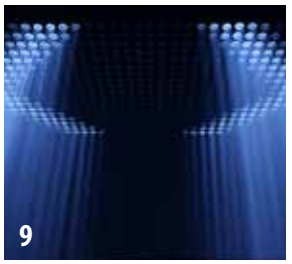
Says designer Yvan Péard, "The efficiency of the new emitter, equipped with the proprietary Ayrton optic, is six times greater than achieved in Intellipix™R. It is capable of keeping its beams perfectly parallel over a greater distance while creating 3D volumetric lighting effects in motion. This luminaire has, in addition, a next-generation power supply unit that ensures efficiency over 95%. This technology enables to run continuously at full power without any loss of performance."

A beautifully designed luminaire that will turn heads, Intellipix™XT can produce a fantastic light-shaft effect – intense, sharp and incredibly coherent over a long throw.

Yvan Péard: "In light of the diameter of the optics, AYRTON's challenge was to create a minimalist physical design to reduce the visual footprint, essentially making the luminaire semi-transparent."

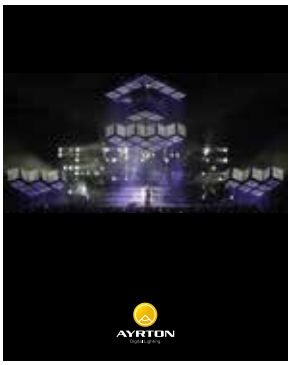
A highly adjustable yoke system enables the luminaire to be used individually to generate complex assembled shapes.

And with a highly precise coupling accessory, multiple luminaires can be perfectly positioned in order to create large-dimension 3D volumetric lighting effects.



4, 5. *DreamSpot™18K*
6, 7. *WildSun™S25*
8, 9. *IntelliPix™XT*

1. *MagicDot™XT*
2. *MagicDot™SX*
3. *AlienPix™RS*
1. *MagicBlade™SX*
2. *MagicPanel™FX*
3. *MagicBurst™*



The catalogue

All these new products have been added to an absolutely stunning 68-page catalogue with splendid, glossy photos of lighting installations, all the technical data, including the specs on the flight cases foam that are delivered standard with each product.
Ayrton has conveniently provided big charts at the end of the catalogue for comparing all the product specifications.

MAGICDOT™XT: Pumped up & Narrowed down to 2°

MAGICDOT™XT is an amplified version of the MAGICDOT™R. Equipped with Ayrton's new proprietary 126 mm diameter collimator coupled with an ultra-powerful RGBW emitter, MAGICDOT™XT projects a 2° beam with centre beam efficiency of 580 candelas per lumen – six times greater than an "R"! Weighing in at 550 grammes, this new high-efficiency lens is the world's largest collimator!
Its ultra-tight, fat beam, is impressive over distances and can generate the sharpest of light curtain effects. MAGICDOT™XT can also be used solo as a spot.
Designer Yvan Péard tells us, "Physically, MAGICDOT™XT is not much larger than MAGICDOT™R. It has the same minimalist design and a similar circular footprint - but it packs much more power.
This new luminaire sports all same features, including ultra-rapid movement and continuous, unlimited, rotation on pan and tilt. The compact footprint permits multiple MAGICDOT™XT luminaires to be installed with a minimum amount of space between them (patent pending).
With an active phase-change liquid cooling system that employs a heat pipe, this luminaire can be used continuously without significant loss of output."

MAGICDOT™SX: The 8:1 Zoom-Dot!

The compact MAGICDOT™SX is a hybrid version of MAGICDOT™R, which captivated lighting designers worldwide following its 2015 debut. Aryton's newly developed zoom optic enables this Dot to deliver beam angles varying from 5° to a 40°, which offers exciting new possibilities for stage and event lighting. MAGICDOT™SX has the identical physical dimensions and transmitting lens diameter as its "R" cousin and is capable of the same ultra-quick infinite rotation – so the two fixtures can be used in combination to create incredible new visual compositions. MAGICDOT™SX is certain to be a big hit!
Designer Yvan Péard tells us, "MAGICDOT™SX is for LDs who love the MAGICDOT™R but need something more versatile. Its zoom optic ranks this luminaire with the best of the Ayrton product line, and its potential for effects is unlimited.
This new luminaire replaces the 4.5° fixed-focus optics with a revolutionary new 8:1 optical zoom that has a fixed transmitting lens, no visible moving parts and a incredible zoom range of 5° to 40° (patent pending). The short stroke of the zoom system permits MAGICDOT™SX to switch from intense Beam mode to sweeping Wash mode virtually instantaneously.
MAGICDOT™SX delivers up to 75% optical efficiency in a tight beam, when the 94 mm diameter collimator is positioned close to the transmitting lens.
This ensures great compatibility and graphical interactivity with MAGICDOT™R units."

ALIENPIX-RS™: Eight continuous rotation axes and six extraordinary beams

ALIENPIX™RS is the brainchild of a designer's wild imagination, combining a multiplicity of effects within a single luminaire. This revolutionary fixture can simultaneously perform up to eight multidirectional continuous rotations with its six, tight, 3.5° RGBW LED beams.
Yvan Péard tells us, "In March 2012, I started to work on the design for this luminaire, which uses multiple continuous rotations that let you cycle through and double the special effects – similar to those that were popular back in the '80s.
It's a saucer, but the five light emitters on the edge can move and even rotate infinitely. They're individually controllable – so they can be pointed forward, then disappear to the rear, fan out, and/or reverse and project light toward the inside".
The effect is astonishing, but when you add the continuous, unlimited rotation of the disk itself with the pan and tilt movement, you're thrust into a world of total fantasy! The main disk of this compact luminaire has a diameter of less than 40 cm, but can light up the world!

Yvan Péard: "As the members of the new "RS" Line, each spot has a powerful 3.5° beam with a centre-beam luminous intensity of over 180 candelas per lumen."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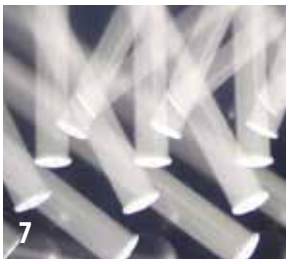
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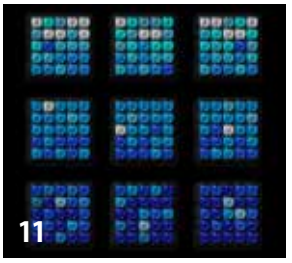
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12

7. *MagicDot™XT*
8. *MagicDot™SX*
9. *AlienPix™RS*
10. *MagicBlade™SX*
11. *MagicPanel™FX*
12. *MagicBurst™*

MAGICBLADE™SX: Pure power and versatility

Ayrton has combined the DNA of RollaPix™100, from 2012, and MAGICBLADE™R, from 2014 – both of which gave a boost of innovation to the market – into MAGICBLADE™SX, a new and evolved hybrid: an ultra-powerful, five-in-a-row, batten, featuring RGBW emitters fitted with 4° to 40° zoom optics – with smooth movement and continuous, infinite pan and tilt rotation. The 94 mm diameter output lenses provide the designer with five, even, tight beams that can be zoomed while creating volumetric effects. MAGICBLADE™SX is also ideal for lighting musicians on stage as a shaped wash light.

Designer Yvan Péard tells us, "MAGICBLADE™R is certainly the best selling Ayrton product. It has been sold by thousands, worldwide, over the last two years.

The new MAGICBLADE™SX features a state-of-the-art short-stroke zoom with a 10:1 ratio for a zoom range from 4° to 40°.

The zoom has no visible moving parts and is fronted by a 94 mm-diameter fixed frontal lens – so MAGICBLADE™SX generates five fat beams that zoom to increase the visual impact of light that appears and disappears when programming volumetric 3D effects (patent pending). Five next-generation RGBW high-output LED emitters power it. Each can be controlled separately. A library of pre-programmed dynamic effects, stored in fixture memory, can be combined with different display modes and colour macros. "

MAGICPANEL™FX: 25 mysterious windows conjure both 2D and 3D effects

Some kind of magic certainly seems to be going on behind the 25 expressively luminescent windows of MAGICPANEL™FX! They are filled with colour at one moment, and then go mysteriously dark… always in motion. Ayrton created these panels to take the next step in 3D effects: projecting tight shafts of light, and then expanding those stunning beams into a wide wash. The MAGICPANEL™FX zoom optics can project a solid beam that initially appear round, but then squares off as it separates into a stunning patchwork of colours. At its widest spread, the smooth field of this elegant and highly original luminaire projects as fully round.

In contrast to the dynamic motion of the fixture's unlimited pan and tilt rotation, the 25 transmitting lenses are entirely stationary. All the magic happens inside. But how?

That's what we asked Yvan Péard, designer for Ayrton's products.

Yvan Péard, "Having fixed front optics was a major challenge, that required automating everything inside.

This panel has a revolutionary new optical zoom system, a 15:1 zoom ratio with a range of 3.5° to 52°. The front face is comprised of a 5 x 5 array of squared lenses with perfectly isolated emitters – which offer new possibilities for creating 2D graphical effects. Each of the 25 squared 65 mm output lenses have an optical surface equivalent to that of an 80 mm round lens, combined with an ultra- powerful, low-etendue, RGBW LED emitter."

MAGICBURST™ – Ayrton's spinning 240,000 lumen strobe

This incredible strobe panel packs 1300 watts of white LED power and is capable of generating a record 240,000 lumens and put them into continuous rotation. Without a doubt, it is the highest performance strobe on Earth! MagicBurst™ can be controlled in individual sections to create graphic arrays, moving checker-boards, flashing letters – and each segment is outrageously bright. Rock 'n Roll lighting designers will adore it!

Yvan Péard: "The 384 x 384 mm squared face supports 3,840 high-output LED grouped into 64 pixels on an 8 x 8 matrix. The strobe duration, speed and intensity of each 60 LED pixel can be individually controlled. A library of fixed images and pre-programmed dynamic effects are accessible.

With a minimalist design and reduced visual footprint, MAGICBURST™ is similar to the form factor of the DREAMPANEL™ product family, which allows you to create giant graphic arrays with no visible structure. What's more, the standardized format of this luminaire allows it to be combined in arrays with Ayrton's other Imaging Display units, like DREAMPANEL™Shift and DREAMPANEL™Twin. Thus, one can create a blend of light beams and strobes, that makes a whole matrix vibrate, and then add continuous, infinite rotation for breathtaking contrasts."

Stéphane Migné
Lighting designer

Stéphane Migné was born into show business: Both parents were music hall entertainers in Nantes, his mother a dancer and his father an orchestra conductor. Stéphane could hardly imagine life without the stage.
He began working in the entertainment industry at an early age, first as stage-hand, then followspot technician, actor and musician. Music was his real passion. When he was young, he aspired to be a drummer, but then changed his path and, as an adult, chose lighting – which also requires a sense of rhythm.
After a three-year stint at the Maison de la Culture, in Nantes, Migné met pop-singer Hervé Vilard while working at a lighting rental company. Thirty-three years later, Migné is still his lighting designer! Other loyal clients include leading French performing artists, such as comedian Jean-Marie Bigard (for 22 years!), actress-comedian Chantal Ladesou, impressionist Sandrine Alexi, guitarist Jean-Félix Lalanne, and burlesque musical group Le Grand Orchestre du Splendid. Having gained the precious confidence of his clientele, Migné, has been fortunate enough to work directly with performers without need of representation by a production house.
Migné has enjoyed the same level of confidence with Ayrton: For the last five years he's been responsible for not only the lighting design, but also for the musical arrangements and composition for the French manufacturer's demonstrations, faithfully assisted at the console by his programmer, Arnaud Pierrel. Today, the lighting designer's established track record spans major events, concerts, and music festivals (such as the heavy metal Hellfest and the Afro-Caribbean Musiques Métisses d'Angoulême). Migné and partner Tibert Demoulin are the principals BineFly, a leading French lighting design company.

Stéphane Migné designs both the light AND the music for Ayrton's product demos

Stéphane Migné is a longstanding fan of Ayrton products, and he definitely knows how to put on an impressive show. Many Ayrton product demonstrations carry his signature: the 2015 LDI show in Las Vegas, as well as the magnificent video demos, which appear on Ayrton's Vimeo page.

We met him in the Ayrton showroom, preparing for the Prolight + Sound tradeshow, while he was programming an impressive rig of some 650 fixtures for the big demonstration. His assistant, programmer Arnaud Pierrel, was at the console.

Stéphane Migné: I love to create these demos. It's a special kind of task that lets me create light for light's sake, to discover all that you can do with each fixture to bring out its maximum potential. In the end, it's a lot like choreography.

Ayrton Live: What's your method?
Stéphane Migné: I start with a sound track. I compose music in sequences and I adapt it to each type of fixture by visualising in my mind exactly the kind of effects, images or movements I want to program. Then, while we're programming the fixtures, I can add a particular sound or bit of track that I need at a given moment.

AL: How did you set it up?
Stéphane Migné: We have a big wall at the back of the stage with all the motorised panels. We have two DREAMPANEL-TWIN™ and DREAMPANEL-SHIFT™ arrays, each with 28 fixtures. They are in alternate positions framing 25 of the new MAGICPANEL™FX and 38 of the MAGICBURST™ strobe units. Then, between each column I mounted 96 of the new MAGICDOT™XT fixtures, which make up their own matrix. So… we already have 215 units on that wall alone!
We've created a mix of images and light and strobes using Arkaos and MadMapper, each controlling the same fixtures at different moments.
Then, at the front of the stage I've hung a line of 48 MAGICDOT™XT luminaires mirrored by a line of 48 MAGICDOT™SX units on the ground in the same vertical plane. The idea is to show light curtain effects, beam intersections and helical rotations.

Above the stage I've hung 5 ALIENPIX™RS units. Wow! That fixture is a lot of fun! It can do a killer disco effect, and you can also use it like a real profile fixture because the sources really perform. The profile tilts are super quick but a little less precise than the moving-head pan and tilt motors and saucer rotation motor, but that's OK… I love them. They're an infinite source of effects.

This fixture is outrageous! By coordinating its centre emitter pan with the pan of the disk, you can slow down the visual effect and even stop it while the unit rotates. It has a really unique look.

AL: Is it as challenging to program as the COSMOPIX™?
Stéphane Migné: It's easier because it has a fixed emitter at the centre that acts as a locator… but it's still a complex device with eight infinite rotation motors.
I've also created a huge ceiling with 180 INTELLIPIX™XT units, above the audience. It's pretty impressive with these big sources that project a fat light shaft that keeps incredibly straight, with a 2° beam angle. We dance them all over the place and deliver powerful bursts, but can also tone it way down and use different textures.
We are controlling it with Madrix. It's the best tool to use considering the enormous array…

Arnaud Pierrel: Madrix is powerful enough for this kind of pixel-effect screen that's easy to use. It has a bitmap-effect generator that's quick and rich in terms of colours and shapes.

Stéphane Migné: Arnaud did a lot of programming work to assemble the arrays, using Arkaos Pro, MadMapper and Madrix software. It takes a while - but it works. We have individual control over all the panels – so we can even take out some if we want.

AL: What do you think about this new MAGICDOT™SX with the zoom?
Stéphane Migné: I just love the new MAGICDOT™SX. Its light, super quick and incredibly compact – the same as the MAGICDOT™R. It consumes almost no energy and it's reliable. With the zoom optic, it can be used anywhere for close up lighting, because it produces beautiful light and the colour mix is perfect for a wash light.

AL: Do you see a difference in speed with the MagicDot™XT, with it's larger, and therefore heavier, collimator?
Stéphane Migné: No, absolutely no difference in speed. It produces an impressive light shaft, which keeps its crisp definition over a distance. We also have NANDOBEAM™S9 and VERSAPIX™R units in the rig. We're planning to hang and program the new laser-source profiles at the last minute because they haven't arrived yet. I'm really looking forward to it.

I'll explore each new luminaire alone to really show all the possibilities, do a build-up with tableaus, and then finishing with a big bang!

INTELLIPIX-XT

INTELLIPIX-XT CREATIVE SOLUTIONS

INTELLIPIX™XT is a versatile luminaire fitted with nine ultra-powerful, low-etendue, multichip LED emitters, which can be controlled individually and are coupled with AYRTON's new proprietary 126 mm diameter optics.
This configuration pushes the limits with a 2° full beam and a centre-beam luminous intensity of 580 candelas per lumem.

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AYRTON
Digital Lighting

THE BÉJART BALLET COMPANY LAUSANNE *chooses LED Lighting fixtures from Ayrton*

In the past, world-renowned ballet company Béjart Ballet Lausanne always opted for automated wash lights with discharge lamps. This year, a big change is in store behind the dancers and the backdrops, initiated by the talented Dominique Roman, the ballet company's dedicated Lighting Designer (LD), and Lucas Borgeaud, Chief Electrician.

The two were captivated by the new, powerful Ayrton NANDOBEAM™S6 automated wash and beam fixtures provided by CAST Switzerland, of Villeneuve (canton of Vaud).

The transition to LEDs began three years ago, and it has been a difficult move for Roman, who was accustomed to a very specific kind of colour rendering and range of shades. But with its ultraviolet-like blue, its amazing weight-to-size ratio, and incredible light output, NANDOBEAM™S6 is a technological marvel that has been given a star role in the company's performances.

Roman and his technical team were seeking the ideal LED wash light to meet their specific needs for powerful emitters and a low-profile in terms of noise, temperature, physical size; and especially, a sharply defined beam that would avoid spill onto the stage borders and legs.

Their criteria for selection were so precise that few manufacturers could come up with lightweight RGBW lamps with saturated colours and a sharp beam.

What tipped the balance from using subtractive colour white-light fixtures in favour of NANDOBEAM™S6 luminaires, was this ability to bathe the stage in saturated colour without emitting any stray light regardless of the beam angle. What's more, the company's team had total confidence in Ayrton's Swiss importer, CAST. Ultimately, Béjart purchased 22 NANDOBEAM™S6 for their company-owned system.

Lucas Borgeaud: Until now, we had an annual rental agreement for these types of fixture, but given the reliability shown by Ayrton products, and after some quick calculations with CAST, we decided to buy our own LED wash lights.

The dynamic NANDOBEAM™S6 luminaires, fitted with 37 15W RGBW LED emitters and an 8-40° zoom optic, are placed behind the borders, bathing the artists in colour. They are used in most of the performances – to wonderful effect.

Lucas Borgeaud: The little anti-halo caps that surround the collimators help to prevent stray light on the borders – which was a continuing problem with the older [discharge] lights. Plus, the colours are magnificent, particularly the range of blues preferred by Dominique Roman, the company's Lighting Designer. We are very happy with our choice.

Partner CAST Switzerland, who was already providing the company with MA lighting products, is planning on supplying them with even more fixtures, likeAyrton's Wildsun™-K25, which is expected to replace existing 2.5 and 4kW HMI Fresnels.

Lucas and Dominique are pinning their hopes on the arrival of LED profile fixtures to eliminate the heat and energy inefficiency generated by the remaining discharge-lamp fixtures in their system, which are used only occasionally but must remain continuously struck, while down on dimmer and in shutter cut offs.

Lucas Borgeaud: We're looking forward to Ayrton's NandoSpot fitted with blades!

OKULUS ADDS A LITTLE MAGIC

to Halsey travels in Europe

© Giles Smith

American singer and songwriter Halsey kicked off the European leg of her Badlands tour in February, starting at Glasgow's O2 Academy.

Creative Directors of production design company Okulus, Louis Oliver and James Scott, turned to Ayrton again when creating their adaptable lighting design for the European tour dates. The designers chose the clean lines and angular appearance of Ayrton MagicBlade-R and MagicPanel-R fixtures to illuminate Halsey's performance at Brixton Academy in February as a key part of a flexible system that could be easily adapted for the whole European leg of the tour.

"Halsey gave us only key item of direction, that she wanted a set based on 'V' shapes," says Oliver. "We continued that visual element through the whole environment, starting with a V-shaped stage, three V-shaped upstage ramps, a V-shaped video screen backdrop and the whole topped off by an inverted V-shaped lighting truss arrangement which was angled forward at 45°."

The lighting trusses were formed of three pairs of angled arms that sweep upstage, on which were rigged 36 MagicPanel-R units, grouped into multiple banks of three. The truss arms were also outrigged with 30 MagicBlade-R fixtures, which were evenly distributed along their length to outline the 'V' structure.

"We used the MagicPanels and the MagicBlades both as block light sources and for pixel effects purposes," explains Scott. The MagicBlade-R units were used to accentuate the shape of the V trusses with their unique configuration of in-line LEDs, and to create mid-air patterns using individual emitters. "We used the MagicBlade-R's 360° infinite pan feature on one number, Hurricane, where we programmed a slow infinite pan with a slow dimmer effect to create an almost tornado-like swirling effect.

"We used the MagicPanels in a rather different manner, effectively treating them as textural washlights with the capability of producing a lot of interesting patterns. We ran simple dimmer chases across the face of the panels during some numbers, or programming them as two groups with the inner and outer cells used to create different shapes, treating them as two different fixtures. We also pixel mapped the panels direct from the console, making use of MagicPanel's 5 x 5 grid configuration to create patterns."

"We used all the Ayrton fixtures in the most extended mode which gave us complete control over every feature of the units, and access to all that these fixtures can do," adds Oliver. "We prefer to do this rather than falling back on built-in effects as it allows us to develop our ideas with great precision."

Scott and Oliver also chose to use the MagicPanel-R fixtures to light the audience. "Halsey loves to see her audience when she is on stage, so instead of going down the traditional Molefay route, and blinding the audience, most of our focus positions on the MagicPanel-R fixtures would bleed onto the front few rows of the crowd, this worked really well to achieve two goals: firstly it drew the audience into specific moments of the show and secondly, it gave our artist what she wanted - a visual connection to those for whom she was performing," says Oliver. "They were perfect for this job."

The show was programmed and time-coded on a GrandMA2 which was operated during the show by Mike Sheck.

"As lighting operator on the 2016 Halsey Europe Tour, I've learned the MagicBlade-R and MagicPanel-R introduce design possibilities that are unparalleled with anything else on the market," says Sheck. "Having the ability to use bitmaps and independent pixel control of each fixture can bring a new level to your production. Another great feature to these products are the infinite pan and tilt abilities, and when used with the pixel control you can create unique looks and moments."

Scott and Oliver chose MagicBlade-R and MagicPanel-R because they knew the fixtures guaranteed a big impact, even in small numbers: "The touring configuration was to be a scaled-down version of the Brixton Academy show, so we needed a design that would work in both scenarios and that we could replicate easily on tour. We have previous experience with Ayrton fixtures we knew they were both versatile and capable of delivering a huge variety of looks. The choice proved a great one and we were able to reposition the MagicBlades to line the top of the LED wall that replaced the V-shaped truss on tour."

"The Ayrton lights are truly multi-purpose fixtures," says Halsey Production Manager, James Sullivan. "The boys at Okulus got creative with the way they used the MagicPanels - less was more a lot of the time - and using only a few of the 'pixels' at a time looked very beautiful at Brixton."

The Ayrton fixtures and all lighting equipment is supplied by Neg Earth, overseen by Amanda Liu and lighting crew boss Neil Johnson, for the European leg of Halsey's tour which culminates in Paris in March.

MIKE SWINFORD SHOWCASES AYRTON *with Jason Aldean*

Three-time and reigning Male Vocalist of the Year at the ACM Awards, Jason Aldean, is currently on tour across America and Australia with his We Were Here tour, named after his single Gonna Know We Were Here.

Lighting designer, Mike Swinford, of UpLate Design Inc, was intent on bringing a fresh new look to the country singer's headline tour, using modern technology and new lighting tools to achieve an inspirational design that would be very different from what Aldean was accustomed to. "We wanted a departure from the very large 'rock' lighting look, with very little video, that we had last year," explains Swinford. "We started the current tour with a new set based upon many diamond shapes, with diamond-shaped video screens upstage, V-shaped stair treads and thrust tips, and five square lighting pods on Whirligigs which can be twisted into diamond shapes above the artists. To add to this cutting-edge look, we wanted a different style of lighting fixture that would really pop. Ayrton was a good place to look as the company produces unique lighting equipment that looks totally different from any others. What we ended up with was a veritable Ayrton showcase!"

Swinford is very familiar with Ayrton having been one of the first lighting designers in the USA to tour with MagicPanel™ 602 fixtures with Florida Georgia Line in 2013. "We had seen the MagicPanel™602 demo video online at first, but when we saw it in rehearsals we were totally floored by it! It also proved extremely reliable and robust so, despite having no direct experience with them, we decided to try the MagicBlade™-R and MagicDot™-R for Aldean's tour. "We took the five diamond video screens upstage and decided to add a surround accent around the large central screen. We used 40 MagicBlade-R fixtures to delineate its outline and create a border. We used the smooth pan and tilt movement to modulate the shape of the borders during the songs, changed the angles of the Blades to create geometric patterns and used the individual emitters to texture the 'face' of the fixtures. At other times, they were used to run some very geometric video content, designed by creative designer, Raj Kapoor, to make use of the lighting portion of the wall, each time altering the appearance of the border. It turned out really well."

"The line of MagicBlades around the screen was really cool and something very different, especially for a country artist," agrees Swinford's programmer, Mark Butts. "We used them in a couple of different ways: as edge lighting, as a frame for the video screen and using straight effects. They are versatile and unique fixtures that lent themselves well to the diamond shape of the screen."

The five overhead lighting pods provide the most dynamic element of the show. Each is formed of 36 MagicDot™-R fixtures (180 in total) arranged in a 6 x 6 matrix and rigged on Show Rig Whirligigs. These Whirligigs raise up and down, track up and down stage, and rotate 360° to give movement across the full X, Y and Z axes. The pods are deployed directly above the stage and obliquely at different angles, sometime right down to almost stage level, and at one point form a wall behind the band as they perform on the forestage. "The pods give us an infinite number of very dynamic, versatile looks which we change for each song and sometimes in the middle of numbers," says Swinford.

"The MagicDots were programmed in banks to produce formations of sweeps and rolls," says Butts. "Having a big array of fixtures lent itself to almost limitless combinations of colours and shapes. I made extensive use of the Grand MA2 layout views and the effects to create complex selections and looks."

This is the first time Swinford has used MagicDot-R and, as a result, has elected to use them on the NBA All Star game in Toronto.

Ten of Ayrton's giants, the MagicRing™-R9, line the upstage runway behind the band where the large faces of the fixtures are perfect for presenting graphics and creating bold beam strokes. "We were looking for something big and bold with a great output to use as a floor accent light," says Swinford "The MagicRing-R9 just had to be tried. They are very powerful beasts and really very nice. We had great fun with them - I just wish they had a zoom on them!"

Finally 24 Ayrton IntelliPix-R panels were embedded around the perimeter of the front thrust stage, providing an illuminated focal point in close proximity with the audience, with Aldean in the centre surrounded by light.

Swinford and Butts, spent two weeks in pre-viz programming the show before rehearsals. "Using a pre-viz system gave us a great leg up on the production," says Butts. "Because of the tight production schedule, which started on Jan 1, had limited rehearsals onsite, we needed to be prepared walking into rehearsals. It also gave us time to step back, and think differently about our approach this year. Working with lighting director, Keith Hoagland, was a huge help; he is intimately involved with Jason's tour, and a huge resource. We split the programming between us, each handling a different part of the rig, and working with him was really key to getting it done."

"Our goal this year was to change it up," says Swinford, "which we did by adding a lot of automation - in the pods and the Ayrton lighting fixtures - which morphs the entire design for different songs and creates different moods throughout. As a result, the number of traditional lights we use – just 60 - is significantly lower than usual.

"Ayrton designs products that are truly innovative. They have taken a different direction from other manufacturers and produced more stylised and unique instruments that really don't look like anybody else's.

"They are very robust and very tour-friendly, and they hold up well. For fixtures that have a continuous pan and tilt and do so many spins, they come back to home with such amazing accuracy, which is very important. You just have to look at an Ayrton fixture and you know that it's a well-made product."

The lighting equipment for the tour was supplied by Bandit Lites of Nashville.

Jason Aldean's We Were Here tour will cross to Australia for the first time this March before continuing throughout America until the Autumn. More photos can be found at www.jasonaldean.com

ANDREAS BOURANI

"*Not only in my head...*"


© Production Partner


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"Seldom has such a coherent and sensitive lighting design been seen on a concert as on the recent HEY tour from Andreas Bourani. In fact, Bourani's own lyric line can be transferred to the lighting design itself. To move visions from the head and implement them on stage is when creative thought becomes a piece of art. In addition, one also needs the right tools as, for example, Ayrton MagicPanel-R or Ayrton MagicBlade-R, both of which were employed to bring this concept to life." - Production Partner magazine.

The creative team of Timo Martens (stage design), Nik Evers (lighting design) and Philip Hillers (content design) created a fascinating set design to suit Bourani and his expressive music. Production Partner talked to Nik Evers, on behalf of the team, about their design and shared why Ayrton MagicPanel-R was so important for the show.

Show Design

The creative team collaborated closely on all aspects of lighting, video and set design. An important design feature of the show was to have a strong emphasis on straight clear lines, with vertical LED towers, and a clean diamond form in the centre, based upon Andreas Bourani's logo. The lighting and the set were to complement each other: the lighting states supported the form of the set design without deflecting attention from the music and the artist, with emphasis passing between the video content on the towers and the lighting states above and on stage. "We wanted to avoid hard-edged beams that would distract from these clean lines, preferring instead that the light should appear as a softly falling downpour from above, in keeping with the emotive music," said Evers.

"We did not want to be governed by the features a fixture had to offer and how we would pack those features in each song - that was not a deciding factor for us. Instead, we went the other way: we considered the set with the music in our heads and asked ourselves what we wanted to see on stage. We wanted to achieve what we had in our imagination and find a fixture that would suit our purposes."

The Diamond

One of the main design elements, alongside the LED-Towers and the stage itself, was the 'Diamond' truss over the stage. In proportions, the Diamond above reflected the triangular stage below, and sloped upwards to be clearly visible from the audience. As well as being a show-piece in itself, the Diamond also served as a platform for the illumination of the musicians. Evers chose to map out its shape using a total of 54 Ayrton MagicPanel-R units, for a number of reasons.

"Because of its multi-functional role in lighting the artists and defining the creative space, we also required that this central design element should be able to run video content and have the ability to orientate in different directions. It was evident that a very special fixture was needed that could combine all these requirements in a single unit," says Evers.

The creative team laid out very precise specifications for the fixture they would need: to light the band in the subtle way required, the beam had to be very tight but, at the same time, very soft, because it was important to the overall picture that the background was not broken up by sharp-edged beams. Ayrton's MagicPanel-R, with its 25 RGBW-15W LED emitters that merge into a single 4.5° soft-edge beam, was able to achieve this. In addition, Evers was able to take full advantage of MagicPanel-R's colour palette which ranges from a high-quality white, through saturated full colours, to the finest pastel shades. Thanks to its special 67mm optics, there is no colour fringing, which ensured the beam did not have a 'dirty' appearance.

Another particular requirement for this fixture was the ability to reproduce abstract content, which would merge with the content of the LED screens on the towers to give a single, unified look across the stage. Ayrton's MagicPanel-R was able to render pixelmapped content and on-board patterns via its 25 individually controllable LED sources.

The Diamond was designed in the formation of a single, bevelled surface because it was important that it presented the same appearance from whichever angle it was viewed. No matter where in the auditorium the audience members were seated, the team wanted the Diamond to always look the same, so that the spectator felt the Diamond was pointing directly at them. To create this 'spatial' diamond, therefore, it was important to be able to align the individual fixtures on their pan and tilt axes, which the MagicPanel-R could do with great precision. Lastly, the face of the fixture required should not be round in shape, but present an angular form in keeping with the whole stage design that was based upon straight lines - a design concept that should not stop at the shape of the lamp.

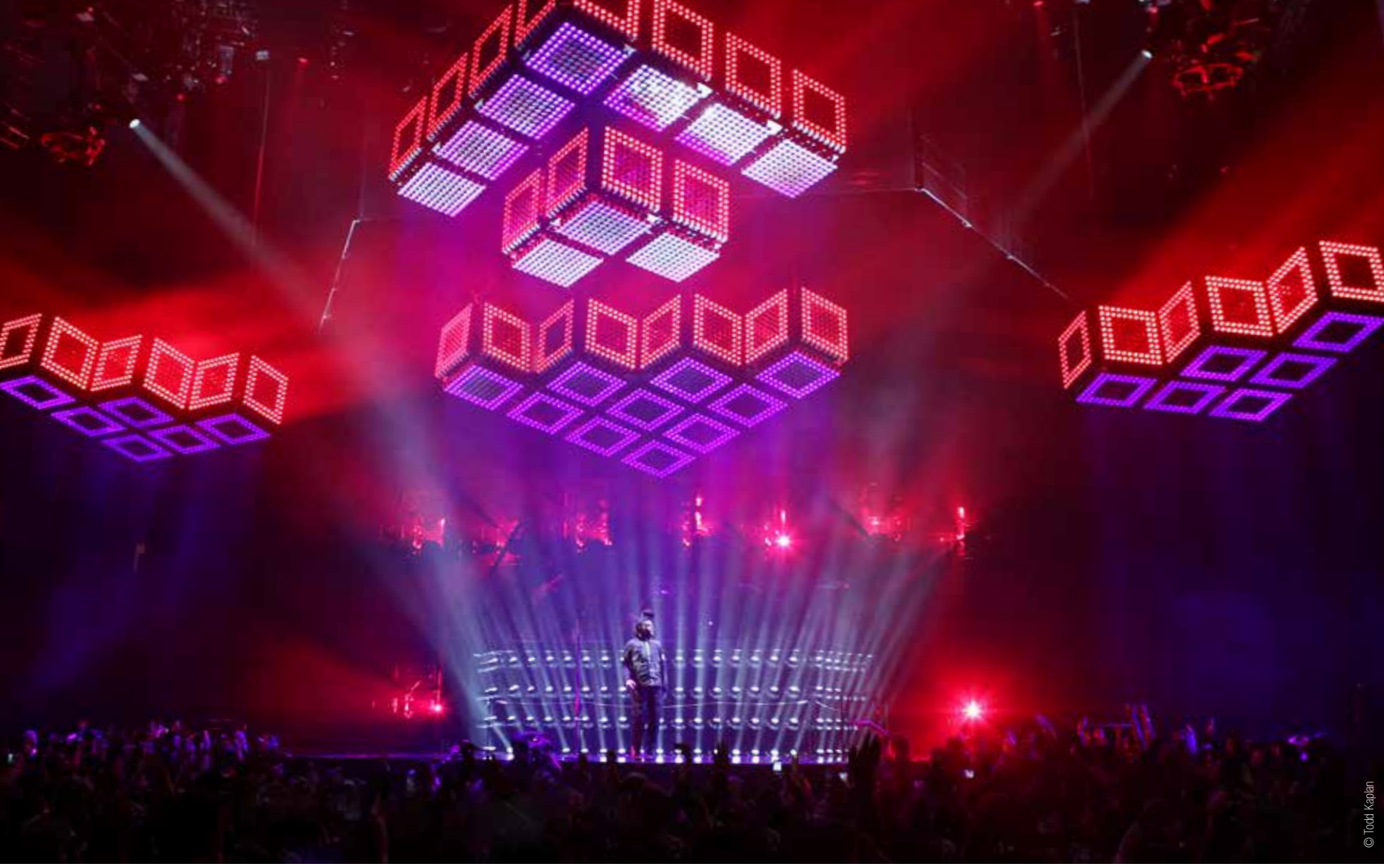
"For all of these reasons, we decided to use the Ayrton MagicPanel-R which was the only fixture with all of these properties," says Evers. "On tour the MagicPanels proved very reliable as not a single lamp had to be changed, we were totally won over by the accuracy of the positioning and, even with the pastel colours, the lamps looked identical to each other across the whole rig."

Evers also used fourteen Ayrton MagicBlade-R fixtures to create a kind of horizontal light curtain at stage level, and bolstered the look by adding some units around the piano on the B-stage where Bourani played his final number.

"We searched for a fixture that would form a kind of light curtain that would give the stage a proper foundation in light," explains Evers. "It needed a beam that was simultaneously tight and soft, but with a colour mixture that was always completely homogeneous. Of course, the colour spectrum should harmonize with the other fixtures, and for this, the Ayrton MagicBlade-R was perfect. It is an absolute match for our application and the optimal complement to Ayrton's MagicPanel-R. That's the beauty of the Ayrton products: each of the different products always harmonize with each other, either in their colours or in the drive, which considerably simplifies the programming. For us, the crucial points are absolute precision, reliability and an exceptionally beautiful colour spectrum with an optimum light beam. We can't find in this in any other fixture on the market."

Andreas Bourani's HEY dates marked the singer's first arena tour, which took him across the whole of Germany throughout January and February this year.

With thanks to Production Partner for sharing information and photos.



TOURING MADNESS

LeRoy Bennett on The Weeknd

By courtesy of
Lighting & Sound America
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Text: **Sharon Stancavage**
Photos: **Todd Kaplan**

Award-winning production and lighting designer LeRoy Bennett, of Seven Design Works, explains, "I've been working with Abel [Tesfaye, aka The Weeknd] on and off over the last few months on various things—the MTV VMAs, the Apple WWDC conference, and so on, so I know his approach to live shows, what he and his creative team like and his persona as an artist. He's a very interesting combination of something that spans between Michael Jackson and Trent Reznor. There is a mysterious side to him; he's not a pop star. He has more of an arty-type approach to music."

For The Weeknd's The Madness Fall Tour, Bennett created a scenic design with layers of transparency, atmosphere, and depth. Far upstage are a high and a low truss comprised of 14 Philips Vari*Lite VL4000 Beam Washes placed directly behind a 64.1' x 17.6' V-Thru LED wall, provided by PRG-Nocturne. "I chose the V-Thru because it is the most transparent, highest-resolution LED screen out there," he says. "It's there and then it's not there. I don't have to move anything." Video content is provided by Los Angeles-based Strangeloop Studios.

Alternating with the LED screen is a massive 60'-wide wall of the original Ayrton MagicPanel-602 units—240 in total—that illuminates the stage, chosen, Bennett says, "because there are very big dynamic moments, musically, in the show."

The stage is also home to an angled, three-sided V-Thru closedown that appears throughout the production. "[Tesfaye] starts up behind the V-Thru closedown and then rises above it [on a scissor lift supplied by Lititz, Pennsylvania-based TAIT] that reaches 18'], so it's almost like a birth," Bennett says "From there, he comes back down to the stage, and, at the same time, the closedown flies out; he's open to the stage. It's not like he's caged; it's a new freedom and a new horizon and a new level of his life." The opening can also be seen as a representation of The Weeknd's rise from obscurity to fame. "This is big leap for him in his career. He's stepped up into the big leagues, and deservedly so; he's super-talented," Bennett adds.

The closedown lends to the production a sense of intimacy. "It enables you to centrally focus the visual," Bennett says. "It starts off very centralized, very intimate, and grows over the first section of the show. But it is three-sided, not flat; we're pulling the focus in a dimensional way towards the stage."

In addition to the MagicPanel wall, the show makes use of 240 Ayrton MagicDot-R units; The MagicDot-R is an automated LED fixture with a single 94mm diameter optical collimator with continuous double rotation on the pan and tilt axes. Bennett says, "The MagicDots are the fascia of the band riser, but they're also his background when he's standing on the main stage." Twelve Ayrton MADesign architectural units, here used as band lights, are located on the riser.

Over the stage, Bennett has four triangular pods comprised of 256 Ayrton IntelliPix-R units and 22 Robe ROBIN BMFL Spots. "All of the light pods are on Tait variable-speed Nav Hoists controlled by the Navigator

Automation System," notes Brian Levine, director of project management at Tait. This enables the pods to articulate and create astonishing shapes in the air. "The main person in the creative team, and partner in The Weeknd's direction, is Lamar Taylor," Bennett says. "Abel is basically the master of maintaining the branding of the group. Another guy, named Drop, is also part of that creative team. They wanted the pods of light. They wanted something more Queen-style, but I wanted to do something a little different."
Each IntelliPix-R unit constitutes a 5 x 5 array of independently controllable 4.5º LED emitters on a 10cm pitch, which can be used for either color or media. "We were going to run content through them, but when we started doing it, it bogged the system down," Bennett says. "We resorted to using pixel mapping, which we can do in the [MA Lighting grand] MA—basically, I maxed out an MA, which has never been done before. That's why we have to have two consoles."

From a lighting standpoint, however, the IntelliPix-R does exactly what Bennett needs. "I wanted to use it so that it creates beams of light horizontally and vertically, being able to use both dimensions to play off each other as far as aerial graphics," he says.

"As a company, Ayrton is unique in what it has created in the last three years," Bennett says. "The first time I used them was on Nine Inch Nails, which had MagicPanel-602 units. Last year, I had the MagicBlade-R units on Maroon Five, but also I used them on the Korean pop band Big Bang; now they've come out with the Magic Dot and the IntelliPix. Ayrton is a great company that is willing to listen and wants to know how to improve its products."

The production has no front light; there are two VL3015s with the pan/tilt disabled, which serve as truss spots. Operators are seated in Tomcat SC360 rotating spot chairs. Bennett says, "Abel is not a frontlight kind of guy; he's like Trent Reznor or when I used to work with Shakira or did lighting for Robert Smith; it's very contrasty side light. When an artist is dark and moody, they don't want anything in their face."
The lighting package is provided by Sycamore, Illinois-based Upstaging; flame effects are supplied by Pyrotecnico, located in New Castle, Pennsylvania.

The Weeknd's tour ended in mid-December. He can be seen later this year on tour with Rihanna.

SOMETHING FOR THE WEEKND
from Ayrton

The sold-out Madness Fall Tour by Canadian singer, songwriter and record producer, The Weeknd, in support of his third studio album, Beauty Behind the Madness, was a spectacular production, with set and lighting design by LeRoy Bennett of Seven Design Works. It incorporated over 650 lighting fixtures from Ayrton - including 'every available IntelliPix™-R fixture on the planet' – to help realise a design concept that delivered a multiplicity of looks from the subtly atmospheric to a totally engulfing spectacle.

The music of Abel Tesfaye, the musician known as The Weeknd, is very dark and cinematic. Bennett reflected this by creating a mutable set with lots of transparency, depth and changing personalities.

Ayrton fixtures featured heavily in its creation with a grid of 270 MagicPanel™ 602 fixtures forming a back wall that hid two rows of washlights, and which itself was concealed behind a transparent V-Thru screen. Tesfaye's band was elevated on a high band riser fronted by 140 MagicDot™-R units, with the band members individually lit by Ayrton MADesign™ architectural fixtures. Above the stage hung a massive arrangement of 264 IntelliPix™-R panels, rigged in five pods that broke apart to shape, texture and illuminate the stage.

The result was the formation of layers upon layers of imagery and light, set against a deep black background, in support of a compelling, dramatic performance.

Bennett placed the MagicPanel™-602 units in a 30-wide x 9-high matrix far upstage and ran video content and abstract images through them to act as a backdrop to the band: "The wall made a big rectangular rig with the 6x6 configuration of each MagicPanel delivering a total of 9270 LED emitters," says programmer, Jason Baeri. "It was a dream to pixel map, which we did using a Hippotizer media server to create really clear images and run the video content." Baeri, who Bennett refers to as his 'Master of Programming', is one of the most experienced users of Ayrton products. "We have been using these MagicPanel models for a number of years and they continue to be rock solid," he confirms.

Ayrton's unique MADesign™ fixture was originally designed for use as an interior architectural light, but Bennett found them 'perfect for lighting a band'. The stand-alone MADesign has five independently controlled, RGBW LED emitters on a long 'boom' arm which Bennett used to create an isolated lighting system

Text: **Julie Harper**
Photos: **Todd Kaplan**

around each band member. Two fixtures were used to light the drummer and one each for the guitarist and base player, proving an ideal solution that melded beautifully with the carefully crafted atmosphere around the performances. "The MADesign is a really low profile key light that produces a lot of light out of a tiny little strip," says Baeri. "It's ideal for subtly

side and back lighting the band without putting too much light in from the front. It was easy to use, with handy lenses that pop out and focus individually, so we could focus tight on each musician yet keep the lighting low profile."

The MagicDot™-R fixtures were wrapped around the front of the band riser in a 28 wide x 5 high grid. "We used them primarily to create a brick of light behind Abel and to add a little extra punch to the musical accents," says Baeri. "MagicDots are the quickest thing on the market right now, and their tight beam makes them a great effect light, especially when we use them en masse."

Having first used Ayrton IntelliPix™-R on a small scale for Korean K-pop band, Big Bang, Bennett was determined to use these modular beam projection panels to build a structure for a large-scale application. The Weeknd tour was his first opportunity to put this into practice.

Bennett created five overhead pods that form irregular, three-dimensional 'chevrons' with IntelliPix-R panels on all horizontal and vertical surfaces. The central structure, made of three interlocking clusters, spanned the upstage and downstage areas and could break apart into sections to constantly change the shape of the performance space. Two outer pods situated over the VIP areas left and right could be raised and lowered independently and orientated in all directions, using a TAIT Navigator control system.

"My original intent was to have individual moving cubes, but there are only so many IntelliPix panels on the planet!" Bennett says. "So I modified the design to the bounds of reality while maintaining the concept of the vibe. As it is, we set out on the road with every available IntelliPix fixture in the world." Ayrton's US distributor, Las Vegas-based Morpheus Lights, assembled the 'all-in' IntelliPix package for the tour's lighting contractor, Upstaging Inc. of Sycamore, Illinois with the cooperation of VisionStage of Detmold, Germany and Impact Evènement of Paris, France. All contributed their total stock of IntelliPix-R fixtures, with Ayrton manufacturing the remainder to meet Bennett's design specification. "Morpheus is fantastic at responding to my requests and procuring whatever I want from all over the world!" says Bennett.

"It was quite the logistical exercise to achieve the 'critical mass' of IntelliPix-R units to meet Roy's vision," says Morpheus' Managing Partner, Paul Weller. "We are deeply indebted to Ayrton's other distributors and dealers who helped Morpheus pull out the stops to enable this incredible rig to be realized."

Bennett used the overhead structures to change the shape of the stage and create a different configuration for every song, compressing the show to a small intimate space one moment and expanding it outwards at others in a range of dynamic stage effects, with the units being used both as light sources and to display graphical images. His use of the semi-transparent IntelliPix-R was subtle and immensely varied, with lighting fixtures across the whole rig deliberately kept barely visible until the moment they were brought into action.

"Able is not a pop star," Bennett explains. "His music is darker, like Michael Jackson meets Nine Inch Nails. He likes to be lit with a high degree of contrast and little front light, so there were no front spots and only two side spots in my design. Instead, I used the IntelliPix to create little 'rooms' of light around him from above: the units are so punchy and bright that, even from a height of 30/40ft, we were able to key him out in any colour, using only 30/40 emitters, and really isolate him from his surroundings."

Baeri agrees: "IntelliPix-R is a subdued fixture which we can keep hidden until we need it, then we can suddenly unleash its giant beams of light."

Yet he also enjoys the creativity the fixtures allow: "IntelliPix-R produces the tightest beam of all Ayrton fixtures so patterns read like video content. For example, we made a fire effect using the individually controllable emitters to 'paint' an image and found the panels were able to project images of the fire into the sky adding another layer of depth above and beyond just a normal low-res video panel.

"We were able to do this because we chose to control the IntelliPix manually, without any pixel mapping. We made a conscious decision to work this way because I wanted to be able to drill right down to the individual emitters and use them as pixels to paint a picture. We took each emitter, set up groups, took hundreds of selections and re-orientating the images manually. It was time consuming but I'd hate to have a fixture as intricate as the IntelliPix-R and not use it to its full potential."

With a total of 16,480 points of light emanating from the Ayrton fixtures alone, Bennett and Baeri had a lot of potential to play with: "We don't do a lot of simple!" says Baeri. "We used 140 DMX universes and maxed out the Grand MA2 console so ran the show off two desks – one controlling the video content and MagicPanel 602 fixtures, and the other controlling the IntelliPix-R units and the rest of the lighting rig. Upstaging did a great job of putting it together – the network was very taxing but they built a very sturdy system."

"The array of different Ayrton fixtures gave us a lot of versatility which was perfect for the job," concludes Bennett. "Ayrton lights are like different individuals within a family, each with their own personalities, which all work really well together as a team. They are really fun to work with - well made and very reliable.

"I am a great advocate of the company because of their ambition, and the level of support they give. We have a good dialogue with the people at Ayrton who are open to modifying their products to give the result we want. They have been very supportive on this show, as they have been on all the shows we have done with them over the past few years."

Ayrton is distributed exclusively in the US by Morpheus Lights www.morpheuslights.com

Dimitri Vassiliu Illuminates JOHNNY HALLYDAY

Back to the roots of rock with a MagicPanel™ array

1

Dimitri Vassiliu, lighting designer (LD) for French rock superstar Johnny Hallyday, invited us backstage at the AccorHotels Arena during the on-going "Rester Vivant" marathon tour to talk lighting, video, and rock & roll.

This was a new experience for the talented LD, who had already worked on some of the biggest music tours in France. Now, to helm not only the lighting but also the scenic and video design for over a hundred concerts by France's rock icon was an exciting new challenge. Johnny Hallyday was back on the French concert stage, prepared to go all out in the true spirit of rock & roll.

Lead guitarist, Yarol Poupaud, has forsaken his six-string for this tour to act as the band's musical director, joining the LD, the promoter, and Johnny himself in this rock revival production. The team opted for a lean and uncluttered vintage stage that nevertheless boasts cutting-edge technology in both projectors and screens.

The set consists of 834 video modules that pepper the Arena stage along with an impressive array of 192 Ayrton MagicPanel™602 luminaires suspended upstage – no doubt, the biggest rig of this type ever used in France. As expected, it's a big rig, and Johnny makes his spectacular, surprise entrance from out of a fantastic giant skull that cracks open in a nebula of smoke, under a wash of red light. Johnny wouldn't have it any other way.

Vassiliu takes some bold risks with his decisions on a new lighting scheme that blends old-school beams and flashes with ultra modern video.

The point was not just to break all the rules but also to give the rock star a new lighting and graphic concept.

We met with the LD himself, who also mans the console on this tour, assisted by Philippe Marty and Stéphane Chiron in the booth.

Custom design: a mix of vintage rock and modernity

Upon arrival, we saw the immense stage, prepared by Vassiliu for Decibels Production, in the concert hall of the AccorHôtel Arena. A perfect mise en scène for the French rock god: A giant motorised skull lowers like a lift onto the stage that measures 15 metres from front to back with an additional 12 metre B-stage, and out comes Johnny. Vassiliu installed six specially designed moving

SMD LED black video screens and some beautiful luminaires positioned on trusses all around the room on totems, both to the sides and behind the stage. What really impressed us was the wall of 192 Ayrton MagicPanel™ fixtures framed in a matrix, all waiting to be switched on, suggesting an army of Star Wars droids poised to draw their weapons when Johnny gives the cue.

SLU: Dimitri, tell us how you got involved with the "Rester Vivant Tour"?

Dimitri Vassiliu: "It's the first time I've done lighting for Johnny. I'm excited because I really wanted to do this project. An offer I just couldn't refuse!

And I especially wanted to do it this way – with a back-to-the roots rock theme. Since that's exactly what Johnny wanted too, it all worked out.

His idea was always to do a tour that focuses on the band, and the whole atmosphere that goes along with it. So the lighting had to follow along those lines.

SLU: Working for Johnny Hallyday must be a lot of pressure, I would imagine.

Dimitri Vassiliu: Sure, but I've been given a lot of freedom. I get all the information I need from the manager, from Johnny, Yarol, and even Laetitia [Johnny's wife]. I've been provided with all the elements I need to do my design in total freedom. We listened to each other out and discussed which direction to go in. And that's the direction I took. I really lucked out with the right band, the right tour, the right concert producer, the right year. And, I was able to choose my own team.

SLU: You were talking about wanting to keep to the rock & roll image. Any other specific requirements?

Dimitri Vassiliu: Nothing else in particular – just the main idea, which is to do a rock revival. We started to work on the project a year and a half before the tour. I was in charge of everything from the stage design to the lighting and video.

I called Emmanuelle Fabvre to help out with the scenic design, and both of us decided how to mix the technology and vintage aspects.

The concert producer and Johnny really wanted something fairly sober. I liked the idea – an uncluttered stage.

And let's not forget about the audience. At Johnny's shows, the lights are everywhere.

Ayrton MagicPanel™, the other star of the show

SLU: So you needed big light sources? How did you choose the projectors for your gear?

Dimitri Vassiliu: I built everything around the MagicPanel™ array. Of all the ideas I floated, they chose that one, my favourite, along with the skull. I had already been thinking about using screens and motorised drum risers, and playing with the shape of the stage.

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SLU: Why did you insist on using the MagicPanel™ fixtures upstage?

Dimitri Vassiliu: I really wanted to add them to the rig, test the video with them. What I was looking for was a real rock & roll effect, a lighting unit that, when lit up in white produces a powerful fat beam, but could also project video and special effects.

Testing the luminaires at festivals and concerts

SLU: How did you decide on the rest of the fixtures? Any preferences?

Dimitri Vassiliu: We started off the tour doing festivals and we brought in a small rig with about half as many MagicPanels. Philou [note: Operator Philippe Marty, who programmed and ran them at the show] and I found some new ways to program and use the MagicPanel™ fixtures. We also made use of gear that

1. *In a closer, more intimate setting, the formidable rock star and his band enchant us from the B-stage, lit simply by the followspots, with the MagicPanel effects, adding to this intimate moment.*

2. *The fantastic skull in front of the MagicPanel array.*

3. *A display of Dimitri Vassiliu's talent: He has managed to compose an eclectic rig of multiples sources, media and brand names, creating a monochrome red harmoniously bringing together video screens and MagicPanel arrays.*

Dimitri Vassiliu
Lighting Designer

Dimitri learned his trade as assistant of Laurent Chapot, a finest french lighting designer. He was a spotlight operator, blocker, lightboard operator. He worked for Rouveyrollis, he was a spotlight operator for Goldman, several times for Alain Longchamp. He also worked with Régis Vigneron, of whom he has fond memories.
And then one day Laurent Chapot suggested that he contact a singer who was looking for a lighting designer, he himself didn't have the time. It was Zazie for a club tour and he created lighting for his first four tours. Then he met Pascal Obispo.
He chained since lightind designs for many great french artists : M, Gérard Depalmas, Calogero, Thomas Dutronc, Mylène Farmer, M, Julien Clerc, Benabar, etc
His secret?
He knows the performers well, their issues as performers, which helps to understand their needs. There are certain techniques that he knows in order for the artist to feel good. For exemple to look after their entrance, their exit, not to illuminate the audience too much at the wrong time, etc. He has an overall vision of the stage at all times.


4

was already there and checked out some new equipment and installations... So, this period actually turned out to be a test lab for our rig, and we then had a clear-cut idea of what we'd use for the rest of the tour.

SLU:You used two rather impressive Wash arrays on the sides...
Dimitri Vassiliu: I wanted very powerful sidelight beams that would be enough for the big stage with nothing else.

SLU: Do you use any of the fancier features of these wash lights, any special effects?
Dimitri Vassiliu: No, nothing fancy at all (hey, this is a show for Johnny after all!), except maybe – and this is the exception – the Ayrton MagicPanel™, when we need to be subtle and create a scene with little stars. We want to play with the pixels."

His carefully selected lighting rig has a modern touch, leaving a lot of open space on the big stage, making it look even bigger. The front line of fixtures include six motorised SMD 6 mm-pitch black Xenon portable screens that can move up and down, or remain suspended as if to defy gravity. Their revolutionary concept integrates video into the design as a light source in itself. With Dimitri at the helm, no more need for heavy equipment, CO_2 projection or pyrotechnics. To create the effect of fire, the screens do all the work with images of flames, plus other fabulous effects in 3D.

Totally Johnny! But with Dimitri's touch!

SLU: You've really freed up the stage and lightened up the heavy rig that we're used to seeing at Johnny's concerts.

Dimitri Vassiliu: "We still have him appearing from out of the skull that lowers and opens, as the drummer on the risers goes up.
But what's new is that the heavy part of the rig is now the six portable screens.
Another reason I'm on this tour is also to redo the whole Johnny show – make some changes, bring in a new dimension, and not just repeat what's already been done.
It isn't necessarily better, just different, like the scenes where he starts to sing in the dark, lit by just a single overhead spot, which I think was hard to do before. It's another way of showing Johnny. He likes to be in a lime light of course, but considering how much emotion he puts into his songs, that gives us license to enhance the effect with more dramatic lighting.

SLU: So how does Johnny react to this new style of lighting design?
Dimitri Vassiliu: I think we are all on the same wavelength – Johnny, the musicians, the concert producer, and the audio-visual technicians. And Johnny is the ideal subject: he never complains, not about the strobes in his face, or the smoke or the projectors. He's no wuss, and his audiences aren't either.

SLU: Are you the one controlling the screens?
Dimitri Vassiliu: Yes, and it feels good to be back at the console (a Hog 4) for this tour. I've done all the shows from the start. I run the screens. I have two Catalyst media servers to process the images created by Peggy M and Cutback.
I've been collaborating closely with Peggy for a long time. She created 70% of the images. CutBack did the 3D ones, which are fewer but still essential.

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Playback video is always oriented to rock & roll… with all the proverbial eagles, skulls, snakes, etc. The idea was to mix the styles to get a modern but vintage effect."

The result: teamwork lighting.

Dimitri Vassiliu shares the lighting booth with two co-workers: Philippe Marty is in charge of the technical systems. He programs the Ayrton MagicPanel™ luminaires and much of the light show. Stéphane Chiron, had worked with Vassiliu in 1988 for pop star J. J. Goldman, calling the followspots, and has been assisting him at the console on major tours.

These veteran operators never forget that their primary function is to light the musicians, the stage, the audience, and resist the temptation of technical overindulgence, however trendy or effective, when controlling the LED units.

SLU: How do you divide up the work for the live playback?

Dimitri Vassiliu: "I handle the video screens, and Philippe controls the MagicPanel arrays, and some other Beam lights and Wash projectors, from a grandMA.

Stéphane controls the Spots and all the other fixtures from another Hog 4. Honestly there's more than enough work to go around! I selected grandMA for the programming and playback for the MagicPanel™ luminaires. We have a dedicated Catalyst for all the media.

SLU: Was it difficult to program the MagicPanel™ units?

Dimitri Vassiliu: We did actually spend a lot of time. Considering what we'd heard about the product, expectations were high. So we weren't going to go halfway and just stay with the macros!

SLU: You weren't tempted to do what a lot of people do and call some computer geek to program them?

Dimitri Vassiliu: Sure we were, because some pretty cool things had already been done with those units! That put the pressure on. I met the group Ez3kiel at a festival and saw the work they did with the MagicPanel™ and also saw what Chanel had done… Philou and I knew that that was a hard act to follow!

But I don't really think the two of us work in exactly the same way and want the same thing. But I'll admit we did think about it…

Finally, we found what worked best for both of us. We didn't want too much geek factor. There's a song where three skulls are displayed on the MagicPanels. Peggy M. produced some video content with the skulls and we transferred it to the panels… Didn't need a computer guy for that.

We do lighting for the main purpose of projecting light, and I don't want to be out of phase with Johnny Hallyday's band."

Philippe Marty programs the MagicPanel units

SLU: Did the programming take long?

Philippe Marty: "Sure it's long, mostly because there's a lot of it. Afterwards, of course, we needed a system that functioned, so we had to program with the GrandMA to directly merge the Catalyst output for the fixture and simplify the network management. That's why MA Lighting beats the competition for this kind of thing.

SLU: Did you work more on abstract textures or images?

Philippe Marty: We worked more on the textures. All the videos were done specially for the format and pitch of the MagicPanel™, with attention to the negative space between the projector faces.

4. *The array of 192 Ayrton MagicPanel™ luminaires controlled in Extended mode (160 channels).*

5. *The 192 MagicPanel™ luminaires set the tone. Totally rock & roll – powerful, white, something to light up the room.*

6. *The powerful playback video, displaying Johnny Hallyday's world, were created by Peggy M for the MagicPanel™ array, showing skulls.*

TECHNICAL LIGHTING TEAM

Lighting Designer: **Dimitri Vassiliu**

GrandMA & Wysiwyg Programmer: **Philippe Marty**

Hog 4 Programmer: **Stéphane Chiron**

Encoding video console: **J ulien Ribes**

Technicians: **Martial Blond, Jean Philippe Willocq, Pierre Yves Orieux, Enrique Elixander, David Bergue, Christian «lou» Carlichi.**

Technical manager for Dushow : **Didier Dast**

Creative direction of visuals: **Peggy M.**

Creative 3D visuals 3D: **Cutback**

Scenography: **Emmanuelle Fabvre**

TECHNICAL VIDEO TEAM

Jean Luc Antoine

Thierry Moncel

Matthieu Kapp

Gregory Bon

Robinson Viricel

Soline Marchand

Cédric Tacussel

Christophe Paillet

SUPPLIERS

Lighting : **Dushow**

Video : **Skynight**

Design & manufacture of mobile screens : **Artixium**

Motorization : **Wi Creation**

7. *A subtle and tasteful blend of light and video.*

8. *This beautiful tableau shows the contrasting elements of the lighting/ video rig on a sober, uncluttered stage. Portable screens work as a light source, and the MagicPanel™ luminaires add a touch of class and taste.*

I also made some videos myself using After Effects, and the results were impressive.

SLU: Do you have the new version of MagicPanel™?

Philippe Marty: No it's the original version, the 602, and we didn't use the infinite rotation because it doesn't return to position with enough precision, especially in a huge rig like this, where we can't afford even a minute degree of shift.

We control them simply via DMX, since Ethernet would need a network splitter, which is trickier. I have 12 NPUs [Network Processing Units from MA Lighting] behind the console to handle 89 DMX universes with 40,500 active parameters! And I have a second console behind and a Catalyst for backup.

Big and heavy, it's only old rock & roll... but we love it.

It's all because of Johnny (who's always in perfect form) and his handpicked band that are focused more than ever on achieving a real gritty roots rock & roll sound. Under the watchful eye of the giant skull (keeping the faith in the true Johnny tradition!) the brilliant stage and video design is geared to preserve the timeless authenticity of rock and blues.

Really spectacular lighting – often in pure white. The stage looked out over the concert hall and on a B-stage that jutted out into the audience, Johnny and his band treated us to an awesome jam.

Dimitri Vassiliu has revolutionised Johnny's lighting and yet remained faithful: deftly balancing the authentic vintage and the modern. Johnny Hallyday, the real deal, appeared that night, lit by Ayrton MagicPanel™ luminaires, black SMD screens and other fixtures in this 21st century rig, sometimes in a blaze of colour, sometimes with just the smallest bit of illumination, but always radiating charisma and sincerity.

This could be the theme of the Rester Vivant tour: To bring Johnny Hallyday up to date while honouring his rock roots. ■

Excerpts from the paper published on the Soundlightup Webzine
Text: **Isabelle Elvira** *Photos:* **Monique Cussigh**
More informations & photos: **soundlightup.com**

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www.ayrton.eu

AYRTON
Digital Lighting

THE QUEEN CLUB IN PARIS

Evolves with new Ayrton lighting, designed by Giglam

The "rain" of pure saturated colour in the central line of Ayrton MAGICBLADE™R fixtures...

When he decided to move the legendary temple for Parisian club goers to a new location, Philippe Fatien chose a spacious 1200-m2 venue still in the vicinity of the Champs-Élysées. As part of the renovation, he decided to equip the club exclusively with LED lighting equipment. Fatien, the club's empressario, teamed up with Laurent de Gourcuff on this project and hired long time collaborator, Lighting Designer Vincent Rautureau, to develop not only a new concept in sound but also in lighting – relying heavily on luminaires from Ayrton.

In a two months' installation, Vincent raised the ceilings to hang innovative fixtures like Ayrton's MAGICDOT™R, MAGICBLADE™R and COSMOPIX™R.

The club reopened in 2015, with noted DJ and re-mixer David Guetta manning the turntables (as he had in 1992 at the original club's début soirée on the Champs-Elysées). We interviewed Vincent Rautureau and Philippe Fatien under a constellation of elegant luminaires. On the night of our interview, Ayrton-generated beams were lighting up the dance floor in anticipation of a show by French house-music jockey Bob Sinclar. We basked in the light of a thousand LEDs. We'd never seen lights like these in any club before.

Excerpts from the paper published on the Soundlightup Webzine
Text: Isabelle Elvira
More photos & videos on the webzine
www.soundlightup.com

Giglam's mission had been to master this new kind of lighting and act quickly – with only one summer to install the lights and unleash the magic.

They got it right!

SLU: Were you able to finish the project quickly?

Vincent Rautureau: Yes, we had a very short time between the decision to move and when installation work began. We presented the first designs in May, and because we had a chance to work with Philippe Fatien's team, who were really great, our proposal was accepted in no time at all.

Giglam immediately bought into the idea of doing a more sleek and sober club, all in LEDs, and we developed a 3d model that showed a number of different renderings.

SLU: What did your client need?

Vincent Rautureau: They wanted their club and brand to be at the very high end of the industry, showing a level class and taste

that would attract a maximum number of discerning club patrons. We also had to adapt to the limitations of the space, which, even though it was bigger than the old club, had a lower ceiling despite all the renovation we did.

SLU: The schedule worked out for you, right after Prolight + Sound?

Vincent Rautureau: Yes, we discovered the new Ayrton products at Frankfurt, in April 2015, and since we had this ceiling height limit and I absolutely wanted clean lighting that was ecologically sound (meaning LEDs and nothing else), the choice was obvious. It was perfect timing for us with these new products being launched. So we were the first to take delivery of the COSMOPIX fixtures from Axente and one of the first to have the MAGICDOT-R units.

SLU: What expectations did you have of LED projectors?

Vincent Rautureau: Considering the Queen is one of the only Paris clubs open 365 days of the year, from 11pm to 6am, I needed reliable and stable lighting.

We push the motors hard and they move a lot. And the original club consumed a lot of lamps.

Choosing LEDs, and especially the latest technology, was also essential when considering the long term.

The cost of the bulbs, the maintenance, and the energy consumption are actually much lower with this type of source. Anyway, these are the points I emphasized when I recommended LEDs to the owner, and that's what weighed in favour of Ayrton products. It's true that the initial cost is higher, but the long-term benefit is unquestionable.

We're confident because we already know the MAGICBLADE-R, and we've got enough experience with them to know how reliable they are over time.

New jewels for the new Queen

SLU: So what is your "ecological" ceiling made up of?

Vincent Rautureau: We have 72 Ayrton MAGICDOT-R and 9 COSMOPIX-R fixtures, 48 MAGICBLADE-R units. The COSMOPIX-R was our best discovery at Frankfurt. I'm a total fan because it reminds me of the Cosmos Balls from the old days. It's a beautiful object in itself, and it evokes the nostalgia of the old clubs but displays all the speed and dynamics you'd expect in 2015.

We love MAGICDOT-R because it's a super compact product that delivers the light exactly the way we want it. Its colours are spot on, especially with the continuous pan/tilt rotation, not to mention its quick, almost instantaneous, movements – just what you need for clubs.

Plus, it has a cool look, which is a must, and that counts for 50% when I make my choice.

With the MAGICDOT-R, I'm planning on more than just a couple. I want to group them together.

SLU: We've written about the fact that mixing colour is tricky with optical systems that have very tight beams like in the MAGICDOT-R. Have you noticed this here?

1. *A view of the new Queen club with the low, but well-equipped, ceiling full of Ayrton luminaires: MAGICBLADE™R (central line), MAGICDOT™R in horizontal waves, and COSMOPIX-R balls, all of which flood the dance floor with tight, gyrating beams.*

Vincent Rautureau: Yes, but I think we're probably the only ones to have noticed! That's the one single point that bugged us when we were making up our minds, but it was no big deal…

Even if we can see the RGB separation a little bit, especially in the white, that doesn't matter in this particular setup.

SLU: Installing Ayrton MAGICDOT-R fixtures in horizontal waves is really innovative, especially in this kind of place. How are you organising the space?

Vincent Rautureau: We've tried to stay really symmetrical. That's my way as a designer. I like things to be clear-cut. I'm not in favour of multiple machines, multiple lamps, or complex concepts. I like the design to be very graphic, have a real effect, and be radically different.

Here we use a central row of MAGICBLADE-R fixtures, which I call "the rain" with LED strobes on the sides and two waves of MAGICDOT-R fixtures.

Vincent Rautureau
Lighting Designer

From the age of 6, Vincent Rautureau always wanted to create spectacular shows. So determined was he, that at Christmas time, only spotlights or mixing consoles were on his wish list. As a teenager, he started to do the sound and light for parties using that rig.
In 1994, before the age of 18, Rautureau created his own company, CASL, a audio-visual services outfit. The budding firm was ultimately bought by a media communications group and evolved into Barakuda. Rautureau remained a partner for four years.
In 2001, he founded Stagecraft, which soon became a major player in the event-services, TV, fashion and live entertainment market.
In 2009, Rautureau merged Stagecraft with Novelty, the rental equipment supplier, where he took over as general manager, head of HR and marketing.
Yielding to his more creative aspirations, he abandoned the Novelty venture (selling his shares in the process) to invest 100% of his time in Giglam, another ambitious brainchild. Ever since, the young versatile designer has invested heart and soul in the creative part of the industry. In addition, he is a partner in 12 other companies. Today, he is happy with Giglam, impassioned by the Queen project, but also involved in the Electrobeat festival, the French M6 television channel, and a variety of events spanning Europe from the Champs-Élysées to Ibiza, Spain.


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We needed this wave shape to achieve a softening and billowing effect and counteract the stiffness of the architecture, which is pretty stark. With a graphic central bar of in-line MAGICBLADE-R fixtures, which is very graphic, it really softens the entire presentation. The pillars with faceted mirrors also add to the effect.

Innovate but keep the tradition

SLU: Has this rig helped to update the opening show according to today's taste?
Vincent Rautureau: Yes, and it gives us so many possibilities! Our light show is entirely programmed and customised (there will probably be others during the year, season by season, for instance). By working over the intro with some original music and very specific lighting, we get the same excitement as at the Queen of the old days.
It's nice to return to these rituals: Do a blackout, then do the intro show, and then wow the audience!

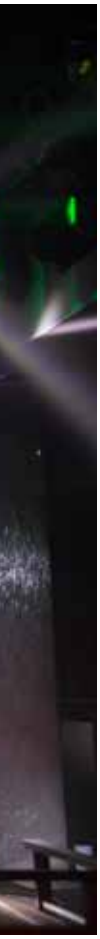
A new way to program

SLU: The intro sequence is time-coded but how do you work during the show? With a lot of programming?
Vincent Rautureau: Two lighting operators alternate here, and sometimes the DJs bring their own console operators, who just love the fixtures in our rig.
It's always hard when you're a designer and you come across a rig you're not familiar with. We've worked a lot with Andréas Monschauer (in charge of programming), and he understands what I'm shooting for.
You'd think that it's easy just to hang the fixtures from the ceiling to do whatever, but I always focus on the stage picture.
So here, practically all the units are pixel-mapped.
This way of programming opens up so many more possibilities than with conventional programming, and the console we've picked helps a lot.

SLU: What console do you use?
Vincent Rautureau: A Chamsys MagicQ PC Wing. We had to use this lighting console because of its pixel-mapping features and quick response time, and of course, its cost.
Once again, the right product at the right time.

When all the lights come on

SLU: Club lighting is being modernised, and your design here is a perfect illustration of that. But is there still a certain code of tradition?



2. *Vincent Rautureau adores Ayrton COSMOPIX™R spheres. We do too – such power and presence!...*

3. *The network rack with a NetGear switch, 4 ELC dmXLAN Node 6X nodes, 6 ELC DT2210 splitters and, at the top, the Arkaos Pro media server.*

4. *Queen's magnificent opening show, created by Vincent Rautureau, fully exploits new gear that is revolutionary for a discothèque, creating rich, saturated colours, columns and graphic effects in 3 dimensions - thanks to the elegant beam projectors from Ayrton..*

5. *Philippe Fatien (left), owner and creator of the Queen, and other trendy Paris nightspots like the Mix at Montparnasse with Designer Vincent Rautureau.*

6. *The visual power of the central line of MagicBlade™R fixtures, whether on or off, in monochrome or multiple colours.*

Vincent Rautureau: After 6 years of doing club lighting, I've come to realise that the owners need to rethink lighting as a totally separate element, as it was with the big parties in the 80s. For a long time, lighting was not a priority but, as you can see in Ibiza and everywhere in the world, it's becoming the main focus again, requiring a lot of energy.

The clientele that has always been much more into sound is now starting to get interested in the club's visuals, which for us is really positive.

Today's club goers are very much aware of our lighting – especially at the Queen – because they're caught right in the middle of the fixtures and beams."

At the new Queen, Vincent is using his favourite products in a radical but controlled way.

The rain of light from the Ayrton MAGICBLADE™R fixtures is spectacular, with the thick, monochrome beams literally showering down on our heads.

The soft waves of MAGICDOT™R projectors, the superb COSMOPIX™R luminaires that dance (definitely our favourites), and the coloured strobes reveal the designer's preference for using lighting to give depth to the venue wit h a 3-D effects.

There is elegance in these almost austere vertical columns of MAGICBLADE-R fixtures, tempered by the waves of beams from the MAGICDOT-R luminaires, which were clearly a challenge to hang. Once lit and set into motion, they create an unreal effect in the atmosphere, perfect for this type of space.

There are strobes galore: We are in a nightclub, after all.

"A cool project", in the words of the designer, who was proud and excited to take on this ambitious task at such short notice.

It is a sober and elegant design that will win over the public, according to Fatien, the club's owner, content with his long-term investment in the LEDs.

Confronted with tight deadlines, the teams at Giglam and Axente (Ayrton's French distributor), proved to be cool, calm and responsive.

Fatien had already involved his favourite designer Rautureau in the creation of the Mix at Montparnasse and of the original Queen club. His goal has always been to capture a cosmopolitan clientele that is multi-cultural, multi-generational, and from all walks of life.

At the new Paris Queen, everyone dances all year round, all night long, under the dazzling Ayrton LED luminaires. ■

Queen Club staff

Manager of Queen Club

Philippe Fatien

Queen Club Architect

FFD - François Frossard

The Giglam team

Lighting Designer:
Vincent Rautureau

Technical Director:
Bertrand Desaintpern

Chamsys engineer:
Andréas Monschauer

Sound Designer:
Florian Pancrazi

AMBERSPHERE: THE SOLUTION

1

Ambersphere Solutions Ltd is the exclusive UK sales, support, service and training centre for Ayrton, Clay Paky, MA Lighting and Robert Juliat entertainment lighting products. It comprises a team of 15 highly skilled personnel who, between them, have redefined the role of distributor and act as a true manufacturer's partner for each of the four carefully selected brands they represent. The company operates out of a 600sqm facility in the lighting production hub of Park Royal in West London, and currently houses a state-of-the-art training area, showroom, service department, and sales, office and warehouse spaces, but will relocate to larger premises in mid-2016.

With nearly 1000 clients on its books, Ambersphere sells directly to the UK rental market, which in turn supplies many of the live music world tours that both originate in the UK and come to Europe from outside. AyrtonLIVE spoke to Managing Director, Glyn O'Donoghue, and Sales Director, Philip Norfolk, to find out more about what makes Ambersphere roll.

Text & Photos:
Julie Harper

The origins of Ambersphere

Julie Harper: How did Ambersphere begin?

The origins of Ambersphere were with MA Lighting UK Ltd which, as a subsidiary business to Lightpower in Germany, acted specifically as a UK office for MA Lighting, distributing only MA products. Its three original members of staff - Philip Norfolk, Chris West and David Baldwin - worked out of a small unit in Queen's Park, offering service, support, operation and training. They successfully built the MA brand in the UK over three or four years, but being a distributor for just one brand was a challenging business model.

Meanwhile Clay Paky was supplying and servicing the top twenty companies in the UK directly from Italy, which was proving an expensive and inefficient process for them.

Glyn O'Donoghue, previously a Director of UK distributor, AC Lighting, was familiar with both Clay Paky and MA Lighting, and got together

with Ralph-Jörg Wezorke, owner of Lightpower Group and MA Lighting International, to devise a new concept. They decided to put the two brands together under a single company that would become the authentic manufacturers' representative and office in the UK.

Glyn O'Donoghue: The new company would operate with the same ethos that made MA so successful: that of a clear focus on training, service and support throughout the whole sales process from pre-sales, through sales and into post-sales, to the same level as a manufacturer's own office. This was a very different concept from conventional UK distribution companies, which, up until that point, were more focused on supply and demand. Our new format was very successful from the moment we put us a fantastic opportunity, as representatives of the two companies, to explain how Ambersphere operated with a different concept from standard distribution. The next thing we knew, we started getting calls from other manufacturers to represent them.

JH: What made Ambersphere so instantly appealing?

Glyn: Ambersphere is as close as you will get, without share-holdings, to being a manufacturer's office within the country. Whatever a manufacturer would do to promote, sell and support their products, we will do. We do right by the brand.

Philip: We truly represent the manufacturers wants, needs, wishes, desires,

it together. After a short trial, we re-named the company Ambersphere Solutions in September 2011.

JH: Where did the name Ambersphere come from?

Philip Norfolk: We had fun choosing the name! It was decided we needed a name that would identify us as an independent company, not a subsidiary or distributor of a particular manufacturer. We felt it was important to have a name we could build into its own brand: the Ambersphere brand must stand for something in its own right. We have good products, of course, but the Ambersphere name stands for all the other aspects that go with that: good service, genuine and trusted support, depth of knowledge etc. All these things are pivotal to the success of any project and what better symbol of that than the control ball at the corner of a control desk. The amber sphere.

The new company made its first public appearance at PLASA 2011, shortly after moving from Queen's Park to a larger facility in Park Royal.

Glyn: Clay Paky supported us wonderfully at the PLASA show. It gave functionality, support – we put that at the forefront of our activities, rather than the interests of Ambersphere. And by this process, Ambersphere becomes worthy of its reputation.

The Ambersphere DNA House

JH: How do you maintain these standards?

Glyn: We have a very clear view of how we conduct business and the Ambersphere DNA determines the foundations of how we act.

Glyn: We run our business based upon the simple principles of the Ambersphere DNA House. Our solid foundation is competence. The pillars that support the company are Honesty, Reliability and Modesty; and covering it all is Continuity - we behave in this manner at all times. Any decision is based strictly on these principles and anyone in the company can make a decision based on these criteria. Sometimes it may not be the best thing for our pocket, but it is always the right thing to do. It is a stratagem which is absolutely core to our business. We have set ourselves a goal and we don't just talk it, we live it 100%.

1. *Ambersphere's building*
2. *Showroom in action always ready for Ayrton's fixtures demos*
3. *Showroom*

Glyn O'Donoghue
Managing Director
Glyn started in the industry 30 year ago, initially working for stage engineering company, Hall Stage, before moving to lighting when he joined the AC Lighting group. His role progressed through technical sales and marketing to various Director level positions within the group, including a 2-year stint in the US. He became a partner and Managing Director of Ambersphere Solutions when it was renamed in 2011.

Philip Norfolk
Sales Director
After leaving school in '84 and not pursuing a degree in Genetic Engineering, Philip joined CCT Theatre Lighting in their small Bristol hire office. Cleaning cables and lanterns to begin with, he moved on to small productions, occasional followspot operating and eventually a role in sales.
A few years later Philip moved to the Lighting Technology Group in sales and technical support, staying until 2000 when he moved to Chicago to work for Tech Lighting. Returning to the UK, he joined Martin UK as the sales manager for the touring sector. He eventually left to have a short break before joining VLPS (Vari-Lite Production Services) which became PRG. Deeply involved in the distribution of Vari-Lite, he became the Commercial Director there before moving to MA Lighting in 2008.
A passionate believer in technology, Philip still takes photographs on film and can often be found FOH at events helping creative teams get the best that they can from Ambersphere's stable of products. He likes tea.

Philip: It's a very simple set of rules, and once you chose to live by them - which is not a difficult decision to make as it means you are fundamentally honest all the time - it becomes a very pleasant experience for everyone.

JH: How did Ambersphere choose its product portfolio?

Glyn: We have a number of criteria that must be met when we are investigating a new product range. It must be complementary to what we are already selling: we have a commitment to the brands we already represent and we don't want to be deflected from that; it has to suit our core customer base: we don't want to go off on a tangent to other customers for similar reasons; it must be a company that we believe in and can have a close association with the management; and they have to sell cool stuff! We want to sell things we are interested in and that we like. Life's too short not to sell what we believe in and enjoy!

JH: Robert Juliat was one of the manufacturers who recognised that?

Glyn: They did, and their product and ethos were very much in alignment with our thinking. When Robert Juliat approached us in 2013, it seemed like a perfect fit. Straight away we reorganised to show our full commitment to the brand. We employed more staff, took our whole team to the Robert Juliat factory for training, and expanded into the unit next door to facilitate the operation properly. Our remit was to rebuild sales though offering superior support and service which, I am pleased to confirm, worked well.

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JH: Why did you choose to be Ayrton's exclusive UK distributor?

Glyn: Ayrton had recently launched the innovative Radical Series and was looking to increase its UK profile. The UK is a critical market for international touring with a thriving, active design community that punches above its weight. Many specifications and tours are specified from the UK, and it became apparent Ayrton needed strong representation in the UK to raise awareness of the product and help create international demand.

When Ayrton approached Ambersphere, we were very excited. It was such a complement that they chose to approach us. We already knew of the company because Axente, the Ayrton distributor in France, also works with MA Lighting, and we knew Ayrton had some fantastic products, and a great team of people whom we like and trust. We analysed the product range closely and it ticked all our boxes. Our exclusive distributor status was announced at PLASA 2014.

Philip: Ayrton marked an interesting sea-change for us. Until that point, Ambersphere had represented well-known, established brands, but with Ayrton we were handling a new product line that was not so well known in the UK. We were able to put the products in front of the lighting creatives and the product was also to speak for itself. We found little resistance from the rental companies to invest in the Ayrton products which was a simultaneous stamp of approval for both Ayrton and Ambersphere: customers were demonstrably placing faith in the fact that we had done our homework and were endorsing good, trust-worthy products.

JH: Why are you not distributing low cost fixtures?

Glyn: For all the reasons we chose the brands we work with. That's not who we are or what we do. We want to support innovation. It's not the low cost aspect, it's the lack of innovation and low quality that we dislike. If all a manufacturer does is copy products, make them cheaper and cut corners, without the R&D costs of the innovators, it's just morally repugnant. We don't want anything to do with it, or the people who support it.


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MagicBlade-R was the iconic Ayrton fixture of 2015

JH: What do you think of the Ayrton product line?

Philip: LED is slowly becoming a technically mature product, and Ayrton has embraced and understands LED as a technical light source better than any other manufacturer. They have created some genuine, extraordinary innovations in that style of product.

Glyn: Ayrton is so clever at making fashionable, attention-grabbing, very visually creative products that are built for touring applications. Designers can achieve an unlimited amount of original designs by using the Ayrton fixtures in different configurations.

Ayrton's main designer, Yvan Péard, is so clever in the way he designs the fixtures. He focuses on the key factor in each product, whether it needs to be super fast or super narrow, for example, or have perfect colour consistency, and sees the design goal in a way that is very pure.

1. *A part of the team*
2. *Offices*
3. *Parts stock*
4. *Technical service*

But he is also inspirational in his understanding of the visual effect they create: in addition to the properties of each fixture, he envisages what each product will look like when there are a hundred of them together. The way the fixtures are constructed and bolt together, the visual design aspect with the central point of light in each fixture, all lend themselves to such a variety of uses. He designs in a way that is rental-company friendly, producing fixtures that work as modular elements which lighting designers can put together to create their own fresh new looks. He has real passion for what Ayrton product is.

JH: Which are the most popular Ayrton fixtures?

Philip: The Creative Solutions range is the most popular for us, being high quality and not very expensive. MagicPanel-R is a real winner, and MagicDot-R has taken off fantastically. But MagicBlade-R, without question, was the iconic Ayrton fixture of 2015. It really surprised me how many varied looks the MagicBlade delivers. Steve Bewley's design for Enter Shikari was an excellent example. He built MagicBlade-R into a

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series of interesting reveals which worked differently, song by song, with no repeat. I was amazed how much he could do with them. It's such a flexible fixture and designers are really loving it.

JH: Is there a general knowledge of Ayrton in the UK or do you have to do a lot to inform and educate?

Philip: There is a little bit of both. At first Ayrton wasn't on anyone's radar, but their clever ideas won through, and because we were supporting it, people were happy to buy it. Initially rental houses may have heard of it on a rider, but Ambersphere encouraged them to try it out. The combination of Ayrton product and Ambersphere support gave clients the confidence to enquire further and invest. It feels like our influence has helped.

One of Ayrton's biggest assets in showing the potential of their product is their online video presentations. These show what can be done with mass arrays of a single product. The programming is stunning and they have proved an extremely popular resource, with thousands of hits online and across social media. Ayrton has now reached a critical mass of knowledge within the market: customers know who they are and what they are doing. We therefore spend less time explaining who Ayrton is, and more time being the point of contact for clients to find out more about the product. There is a huge amount of excitement building at the prospect of more new products later this year.

JH: Ambersphere works very closely with all its manufacturers. Why is it so important to you to be part of a team?

Philip: A key aspect of Ambersphere's service, that our manufacturing partners embrace and we enjoy living up to, is the very high level of customer connectivity that we have. The team at Ayrton are very complementary about our ability to connect with designers and people in the creative processes. It comes very naturally to us, as we are all lighting people with lighting backgrounds. We also insist on a direct line of communication to our manufacturers' R&D teams through which we are free to feed back our experience and the designers' reactions at any time. Lighting designers also find this a very positive experience and we have taken a number of top designers to Ayrton HQ to talk to Yvan about their design trends, plans and requirements. The result is a strong symbiotic relationship for both manufacturer and designer which Ambersphere is able to facilitate.

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Glyn: It's a character trait of our company that stems from its MA origins: we act as we would if we were a manufacturer, for all our manufacturers. Occasionally this means we may not be the easiest of distributors as we have the advantage of being a free agent with the ability to give direct feedback to the R&D departments. But ours is not a normal client / supplier relationship – we work as closely with the manufacturer as we do with our own customers. We are all part of the same production team and we try to fit in with their world.

Philip: As part of this we visit all our manufacturers' facilities several times a year to maintain that level of connectivity. We have to know the company well to represent them in the way they want. They are our co-workers, not our suppliers. This is not a luxury, it's an essential. The connectivity with Ayrton has been exemplary. They are a real designers' company.

JH: Ambersphere prides itself on its quality in product, service, support and training. Tell us more.

Philip: The training, service and support aspects are what we are about, and in everything we do, we try to exceed expectations. It's all about giving the client the best experience possible when buying a product from us. We try to do more than a normal distributor would do, and we can only do this because we are very focused on our four brands. For example,

Chris West

Training and Support Manager

Working in theatre from the tender age of 12, Chris spent a year working in professional theatre from the age of 18, before achieving a degree in Technical Theatre. He worked for a number of manufacturers as training manager, then moved to UK sales and rental company, White Light, where he spent a several years running the support department. For the past 6 ½ years Chris has been running and writing training courses for MA Lighting. Today he holds the dual role of Training Manager for MA Lighting International whilst managing the Training and Support team at Ambersphere.

Doug Kelly

Technical Service Manager

Determined to work with entertainment lighting from an early age, Doug studied Electrical Engineering at Liverpool University which gave him a solid grounding in all things technical. 4 years with Prism Lighting followed, gaining experience and understanding of touring and rental companies. Doug then moved to Entec Sound and Light in Middlesex where he stayed for 12 years, first as a technician, before moving onto warehouse duties and progressing to warehouse manager. In 2004 he joined PRG as Field Service Engineer where he was responsible for technical support for both rental and sales customers. Doug joined Ambersphere late in 2011 and, as Technical Service Manager, is responsible for the service and repair of the Ambersphere product range, and the sanity of many a production manager.

1, 2. *Training room*
3. *Stock*

we are happy to give demos either at our offices or the client's, but we aim to add value to that experience and often deliver product onsite for the client to try out on a show before they buy. We want them to be sure it is absolutely the right product for them before they buy.

Glyn: Ambersphere exhibits at all three UK PLASA exhibitions, ABTT and distributor open days up and down the country, but our greatest strength lies in the energy of our sales team. Philip Norfolk, Matt Cowles, Lee House and Thor Saether, and myself on occasions, are continually out visiting clients with products. Nothing replicates putting the product in people's hands, letting them play with it and fall in love with it. It is then that the designers specify them and rental companies buy them. We do what we do simply and we try to do it well.

You are a company of very technically minded people. It must be a great advantage for technicians to receive training from the best people who really understand the products.
Glyn: It's true that Ambersphere is a very good at technology, but we are also very experienced in the field. So we understand not only the products, but the conditions under which our customers operate.

We train over 300 people a year in product and service. Much of our training is given pre-sales, helping the client to decide which product is best for their purposes and giving them the confidence to use it. We have state of the art in-house training facilities where we offer a quality experience, but are equally happy to go out and train on site as required.

We run service training on products for rental companies, even on the consoles: how to run them in rental environments, what to do between rentals, for annual and weekly service, in operation and technical products.

We have a lot of resources: dedicated trainers for each product, dedicated support people ready to help people with problems or emergencies, and dedicated service engineers ready to fix hardware problems if they arise. It is important that we give our customers the best experience possible at every stage.

Philip: We are prepared for all eventualities. It's easy to be a successful supplier when all is going well, but you can only be truly tested when things go wrong and are judged on how well you respond. Our Service Department is led by Doug Kelly who has toured and worked in rental for many years before joining us when we first started, and there is not much he doesn't know about all of our product range. Ambersphere carries a comprehensive stock of spare parts which enables us to respond quickly when things go wrong. We want customers to have the confidence on tour that they are backed up by a company of the calibre of Ambersphere and think 'thank goodness we went with them'.

Glyn: We are not the largest UK lighting distribution company but we do try to be the best. We want our customers to be confident as an Ambersphere client, to have access to the best control on the market, the best moving lights, the best creative LED, the best theatrical luminaires, followspots, and cyclorama lighting, backed up by the best service and know-how possible.

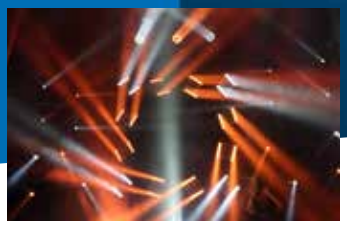
JH: What is Ambersphere's most valuable resource?
Philip: Our most valuable resource leaves the building every day at 5.30pm (or sometimes earlier if we can get away with it!) We can't stress enough how good the team at Ambersphere is.

Glyn: A key to our success is the quality of staff because there are no weak spots. Everyone is here because they deserve to be here, and each one is someone we are proud to work alongside and work with.

JH: What keeps you all so enthusiastic?
Philip: We have to be enthusiastic and interested because that passes to our customers. And why wouldn't we be? We have the very best brands in our industry, and because of that we have user bases, designers and events that are some of the best in the world. We get to be part of that because they really value our opinion and input. Some of the stuff we get to play with is insane and we would never deny we have a lot of fun with it, or that we have a very good time with our customer base. In our view a customer is anyone who has some form of contact with our products, from a technician who changes a gobo, or a world-class designer, to the world's largest production house. It's not just someone who buys the products. If someone touches one of our products they are clients and we want them to have the best experience possible.

Glyn: We love what we do, and who and what we work with. It is fundamentally, tremendously rewarding. That's the payback.

MAGICBLADE-SX



MAGICBLADE-SX CREATIVE SOLUTIONS

MAGICBLADE™SX is an advanced variant on the award winning MAGICBLADE™R luminaire. The versatile MAGICBLADE™SX features a state-of-the-art short-stroke zoom with a 10:1 ratio for a wide zoom range from 4° to 40°. The zoom has no visible moving parts and is fronted by a 94 mm-diameter fixed frontal lens – so it generates five fat beams that zoom to increase the visual impact of light that appears and disappears when programming 3D effects (patent pending).

www.ayrton.eu

AYRTON
Digital Lighting

DREAMPANEL™TWIN
Combines Light and Video

With an 8 x 8 beam projection array on one side and a video display on the other, both mounted on a continuous rotation yoke, the innovative Ayrton DREAMPANEL™TWIN made its US début in November 2015 as a central component of LeRoy Bennett's design for The Game Awards, the international video game award ceremony.

Text & Photos: **Stéphane Mocret** *for Soundlightup*

More photos & videos on the webzine
www.soundlightup.com

DREAMPANEL™TWIN is a hybrid luminaire made up of two LED matrix assemblies. The imaging display side of the fixture is a video tile with a 64 x 64 grid of 0.25 W RGB multi-chip LEDs mounted in a new, flat black matte housing that provides superior contrast while minimizing stray reflections from other lights in the rig. This display solution was developed entirely by Ayrton, with 4096 RGB emitters at a 6 mm pitch. On the flip side, we have a MagicPanel style Beam Projector, fitted with 15 W RGBW Ostar Stage LEDs coupled with 6°, 45mm diameter collimators, which achieve an astounding optical efficiency of 85%! The luminaire side is a powerful projection matrix and its resolution is sufficient to display effects, whether independently programmed by the operator or pixel-mapped.

A visit to dreamland

DREAMPANEL™TWIN was conceived to display video images in full HD (1920 x 1080) by assembling these luminaires in a 30 x 16 configuration. To facilitate this, Ayrton engineered the yoke arms to be as thin as possible in order to minimize the space between the tiles and ensure the best possible rendering of the overall image.

The base enclosure has a colour LCD User Interface with six navigation buttons, along with handles on both sides. Despite the unconventional shape of this luminaire, the pan and tilt locks and the relatively light weight (@24 kg) make it easy to carry. The fixture ventilation system and foam anti-dust filters are built into the side of the fixture's base. Connectors are on the rear of the base: mains power with pass through via PowerCON TRUE1 connectors, two Ethercon RJ45s for ArtNet & sACN control. RDM and DMX 512 are supported via ArtNet. Two Neutrik® HDMI 1.3a connectors are for input and pass through of the modified processed HDMI signal.

The base also houses the specially designed power supply units as well as the video circuit board, developed by Ayrton to interpret and display the correct segment of the complete video signal to the tile's 4096 RGB LEDs (1 LED = 1 pixel). Ayrton's chief software development engineer, Cyril Union, tells us that this board is actually capable of driving 128 x 128 pixels. It is underused by a factor of 4 to prevent the signal from slowing down or images from jumping.

The yoke has a continuous rotating connector on the pan axis, with over 40 circuits transmitting the video and data signals and the power. The French manufacturer's design team continues to use a dual-axis gear assembly, a drive belt, and a tried-and-true three-phase hybrid stepper motor. The circuit board that controls pan and tilt drives is in one of the yoke arms.

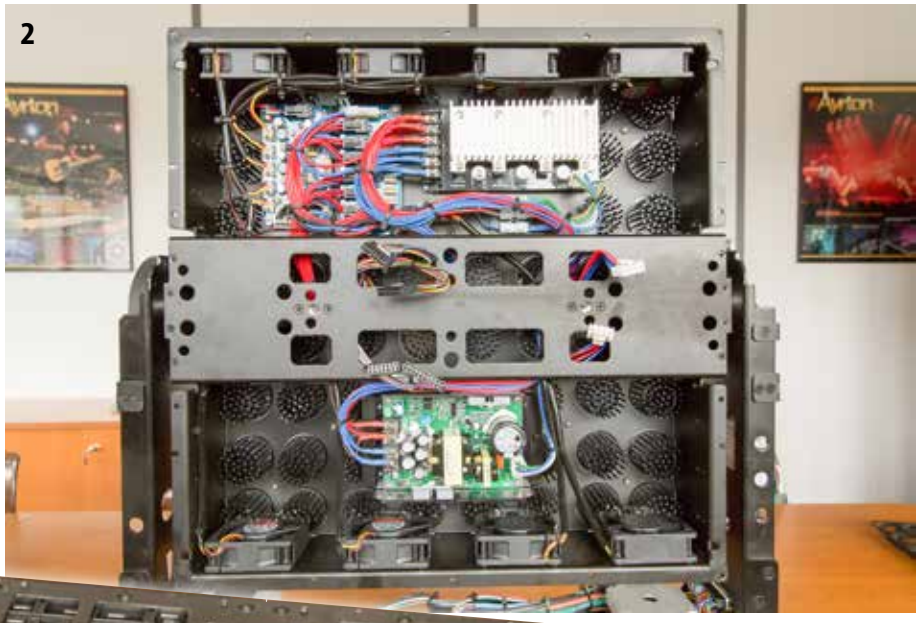
The head contains two power supply connectors: one for the beam projector LEDs and the other for the video LEDs. Another circuit board controls the eight fans in the head: four above and four below. The fans are installed on the top in alternating pairs, with one side providing intake and the other outtake, and at the bottom they are reversed. This creates two cross-ventilation paths. The custom heat sinks are found behind the 15 W LED chips: one per emitter. They were specially developed for this fixture and manufactured using an extrusion process. The 64 LED emitters on the beam projection side are mounted on two separate circuits cards each with a separate control board. Four "registration" holes surrounding each LED position the collimator with precision to optimise the

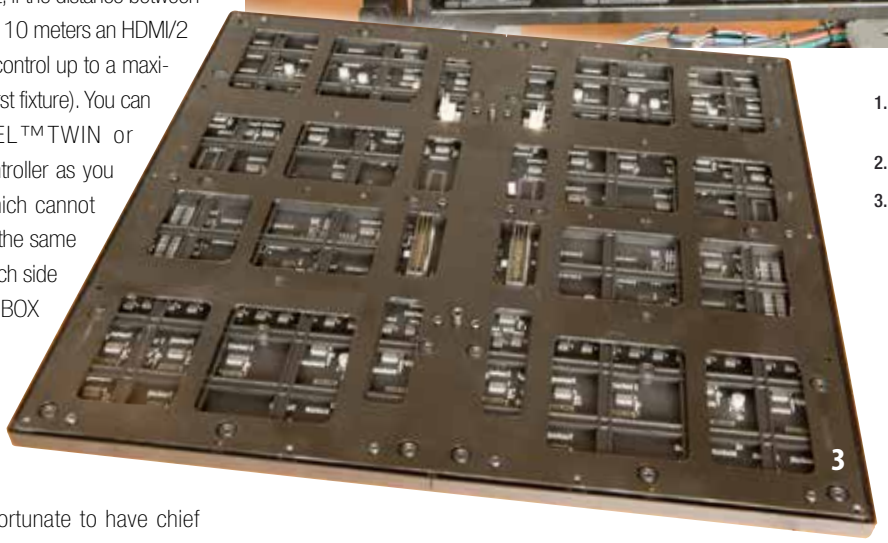
colour mix. The video side also has two circuits, each controlling 64 x 32 RGB LEDs. Two power and two data connectors are mounted directly on the base. For simpler mounting, these plates are assembled on a frame that is attached to the head by screws.

The DREAMPANEL™TWIN HD-BOX, running Ayrton's proprietary HMDI Software Manager™ program, processes the video signal that is sent to the individual fixtures. Both DREAMPANEL™TWIN and its cousin, the DREAMPANEL™SHIFT, (which simply has the video display side) can be controlled in a mixed array, with the first fixture positioned up to 10 meters from the rack. A full 1920 x 1080 pixel image can be sent over the network, with each video tile rendering the pixels assigned to it.

DREAMPANEL™HD-BOX has a touch screen User Interface on the front for configuring the video inputs, outputs and other menu functions. The rear panel has two DVI and two HDMI inputs, each with a pass-through. Four HDMI "Custom" outputs are available to send the processed video signal to either type of DREAMPANEL™ fixture. A standard HDMI output connector supports a standard (full screen) monitor. Ethernet and USB ports are provided for using the control software, which runs on a separate Windows-based computer. Two 5-pin XLR connectors enable DMX pass through. DMX is used to control internal macros and certain parameters, such as brightness, or to select the video source (These functions are also soon to be supported via ArtNet protocol).

Because Ayrton has chosen to send the data for the video tile settings over only one pair in the HDMI connector, it's not possible to use a standard video repeater. As a result, if the distance between the controller and the fixture is greater than 10 meters an HDMI/2 x RJ45 adapter must be used to extend control up to a maximum of 50 meters (from the rack to the first fixture). You can daisy-chain as many DREAMPANEL™TWIN or DREAMPANEL™SHIFT fixtures to a controller as you choose - the limit is the image size, which cannot exceed 1920 x 1080 pixels. If, however, the same image is being displayed twice, e.g. on each side of the stage, a single DREAMPANEL™HD-BOX will cover it.





1. *On the back of the unit, there is an IN/OUT for each type of connector.*

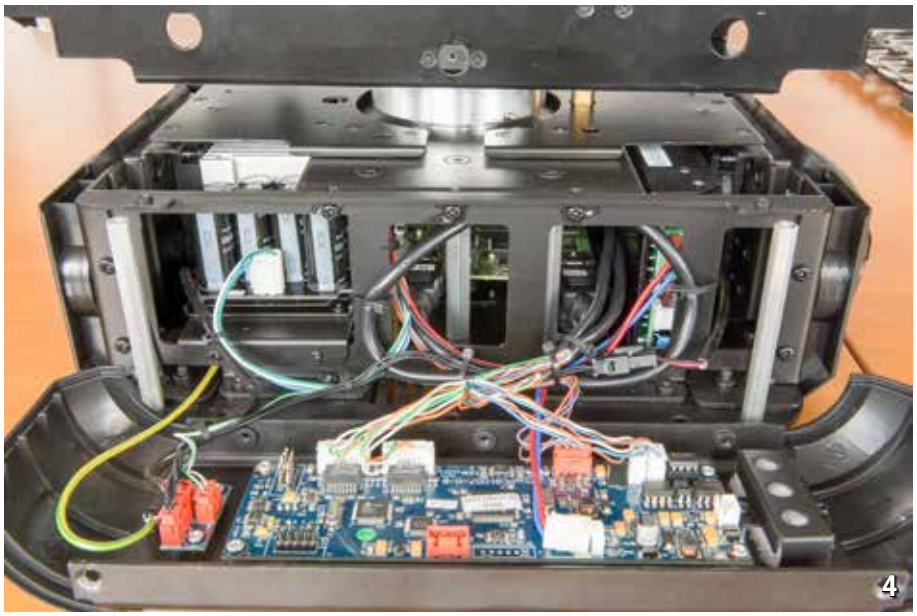
2. *The head is fully loaded..*

3. *The back of the video display side.*

From dream to reality

When we visited Ayrton's office to try out the DREAMPANEL™TWIN, we were fortunate to have chief software development engineer, Cyril Union, present to answer questions and help us to install and connect the video system. One of the more surprising aspects of this fixture is that, except for a few common parameters (e.g. Pan and Tilt), each side is independently driven, one side with a standard console and the other with a video source (e.g. a media server). So on one side there's the graphic beam projector, with the pan/tilt and LED array, and on the other, the video tile.

Typical system configuration: An example of wiring path from the lighting console and media server to the DREAMPANEL™HD-BOX, DREAMPANEL™SHIFT and DREAMPANEL™TWIN units. The beam projector side has three DMX control modes: Basic (18 channels), Standard (20 channels), and Extended (272 channels). We can almost hear you cry out, "272 channels! But then you can't even control two fixtures on one DMX universe! There would be control gaps everywhere. No way!" The good news is that, in the options menu, it's possible to split the Extended mode into two and assign control to separate DMX addresses: one for the fixture base and the other for the LED emitters. So, you wind up with two blocks



4. *The screen controller card and buttons on the front panel, part of the video card and the other power supply.*

5. *A 45 mm collimator that achieves 85% LED efficiency.*

6. *Half of the ventilation system in the head.*

of DMX channels, one with 16 and the other with 256, to which we can patch one or two fixtures (1, 1+101 or 1.1+1.2). More importantly, we can group sets of 64 LEDs by twos into one universe (2 x 256) and up to 32 bases on another universe. This is the configuration that we used for our testing.

For the video side with a single tile there was nothing complicated. The media server source was connected into one of the DREAMPANEL™HD-BOX input. A green LED indicator light tells us that the HD-BOX is receiving a strong signal from the media server. Then we connected one of the four HDMI output to the HDMI video input of the DREAMPANEL™TWIN.

We used Ayrton's HMDI Software Manager program to configure the system, which includes the controller(s) and video tiles, and to keep it simple, we connected a Windows PC to the DREAMPANEL™HD-BOX via USB.

This software is very intuitive, and therefore easy enough to use. Since it's one of the early versions, some items are lacking such as a tool for doing a circle configuration or a solution to create templates for standard spacing between fixtures. Ayrton is responsive when it comes to meeting most customer demands.

It's that simple. Now we could control all the parameters. The 64 emitters on the projector side hardly pass unnoticed, and when the projector shines on you in RGBW, it could burn your eyes! In terms of movement, the tilt was slower (1.72 sec) than on the MagicPanel™602 (1 sec) over 180°, whilst the pan was improved from 2.24 to 1.72 seconds. Movements were perfectly executed. In rapid transition, no jerky movement was visible to the naked eye on a full range of motion or when viewing the video.

Like with most Ayrton products, the pan and tilt can be indexed or used in continuous rotation mode. Indexing is at 540° or 630° in pan, and 240° or 540° in tilt; the indexing amplitude can be selected in the menus.

Seasoned programmers find that in order to obtain a clean transition between continuous motion and fixed position, it's advisable to transition through black.

The dimmer and strobe parameters worked perfectly. As for the colour, the 45 mm collimators gave us uniform mixtures in volumetric light or in surface lighting no matter what the hues.

Colour management is entirely satisfactory. In addition to RGBW, seven standard colour temperature presets (2700 K, 3200, 4200, 5600, 6500 et 8000 K) are pre-programmed, + 14 of colour, three rainbow effects and a dimmer for the colour pre-sets. I loved the function that lets you play with an RGBW colour preset to change the shade! We also discovered macros for transitioning between two hues, which seem especially suited for colour temperature correction.

Last but not least, the internal features: 113 chases are controllable with one channel for speed and another for transition – so they run on three DMX channels. These features can't do everything but they are very useful if you don't have a sophisticated console to control the fixture or a media server, or if you simply don't have a lot of time to program (and it's frustrating to have great fixtures that you can't fully take advantage of).

Simply do a 180° rotation on the tilt axis to find the video side! Obviously, it is less bright than the projector side — almost by a

MEASUREMENTS AT 5 METERS - PROJECTOR SIDE - FULL RGBW	
Beam Diameter at I/2	0,63 m
Corresponding Angle at I/2	7,2°
Beam Diameter at I/10	1,27 m
Corresponding Angle at I/10	14,48°
Light output at the center after Derating	18 000 lux
Light output at the center when Switching On	25 740 lux
Flux after Derating	10 600 lm
Flux when Switching On	15 215 lm

MEASUREMENTS AT 5 METERS - PROJECTOR SIDE - ONLY WHITE	
Beam Diameter at I/2	0,63 m
Corresponding Angle at I/2	7,2°
Beam Diameter at I/10	1,27 m
Corresponding Angle at I/10	14,48°
Light output at the center after Derating	11 340 lux
Light output at the center when Switching On	11 410 lux
Flux after Derating	7 600 lm
Flux when Switching On	7 650 lm

COLOURS	Relative %
WHITE (RGBW)	100 %
RED	20,48 %
GREEN	34,65 %
BLUE	4,17 %
YELLOW	52,74 %
MAGENTA	23,48 %
CYAN	38,61 %
ONLY WHITE	49,13 %

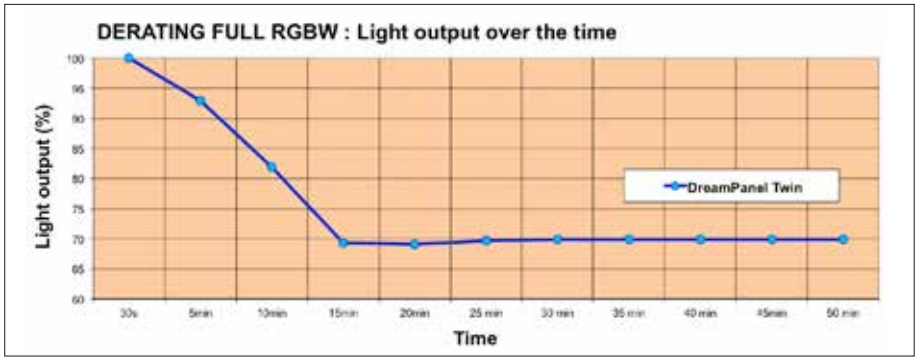
factor of 10 — but the transition between the two is pretty remarkable. The 6 mm pitch is perfect. Even on a single tile, and from close up, we could see the image clearly. There was some colour correction to be done, but we found the right adjustments fairly easily with this new generation of LED. The blacks were good as well. We didn't have too much surface space for the test but we detected no latency or image jump. The only problem (which is apparent on the promotional video) is the appearance of persistent pixel lines of varying lengths. Cyril Union tells us that it is a software problem that is solved today.

A final evaluation

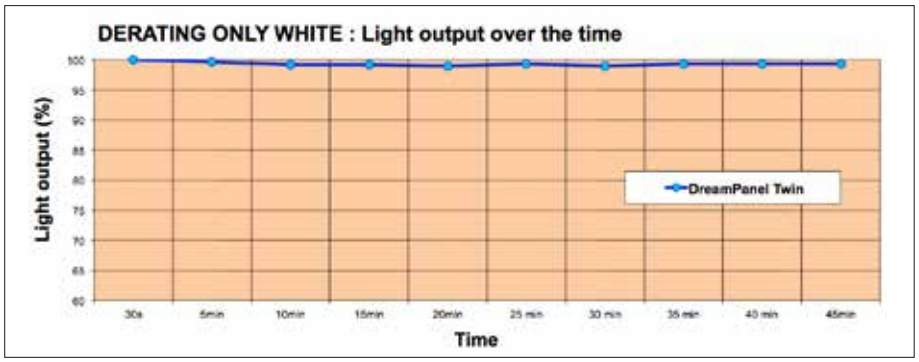
The luminaire in itself is rather simple, and measuring the light was quick, and the results were impressive. We started with the dimmer curve, and knowing the Ayrton team, our expectations were high, but you never know… Anyway, we saw no problems during testing. The values came out perfect!

We were curious about the derating because the developers didn't skimp on the cooling system. Ayrton is no novice at this. We took a look at the MagicPanel™602 bench test in SLU to refresh our memory. With those 36 LEDs fully lit, we measured a derating of 35%.

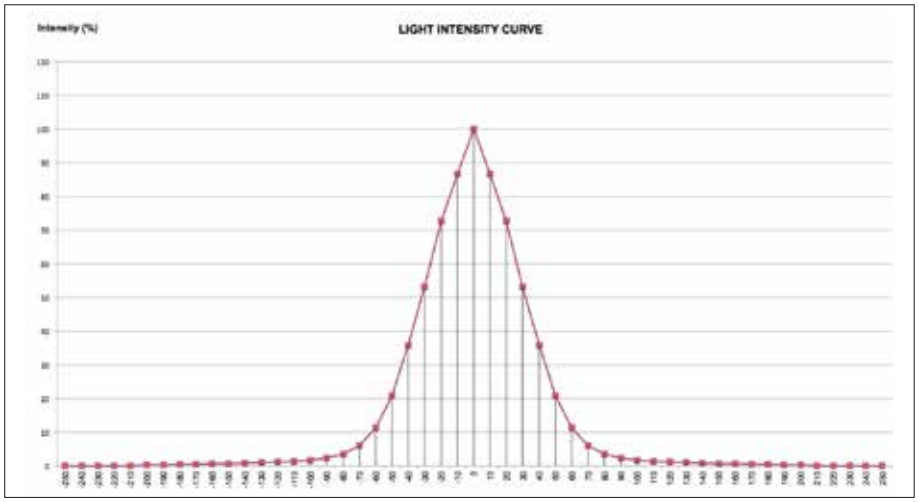
So, what about 64 LEDs? The two curves start off almost the same, with the DREAMPANEL™TWIN curve a little more uniform, but both drop off rapidly. Both products reached the lowest value in 15 minutes. Then came the surprise: With more LEDs on the DREAMPANEL™TWIN, its light output dropped less – only 31%, almost a 5% gain. This demonstrates the strides that

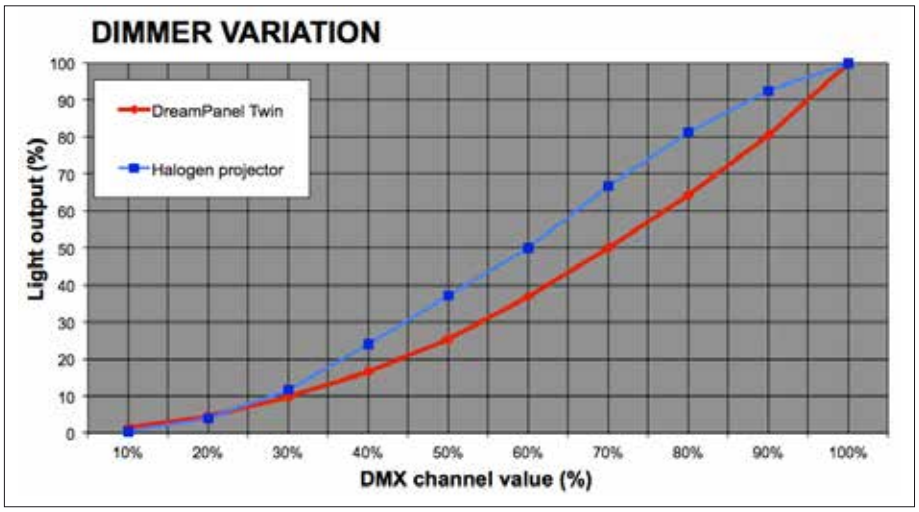


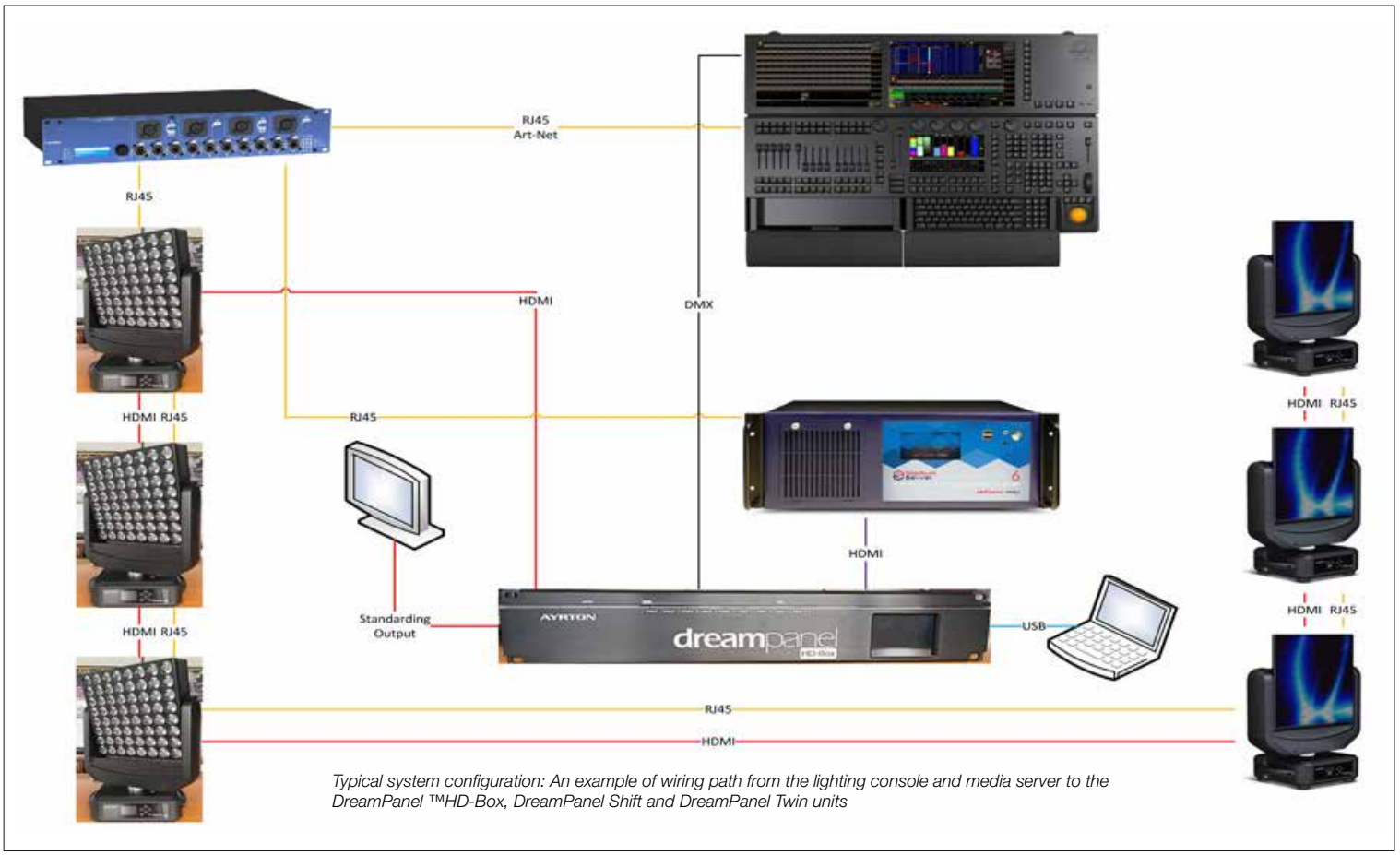
A 30% derating for almost 1000 W of LEDs in a confined space.



Less than 1% attenuation.







Typical system configuration: An example of wiring path from the lighting console and media server to the DreamPanel ™HD-Box, DreamPanel Shift and DreamPanel Twin units

THE PLUSES

- **The power of the light side**
- **Sharpness and contrast of video face**
- **The ease of patch**
- **The dimmer presetst**

THE MINUSES

- **The lack of Artnet input on Dreampanel Box HD**
- **The lack of internal HDD Player with the Dreampanel Box HD**

the Ayrton team has made in cooling LEDs. Then, when a single LED was tested in white (heavily used for effects), output dropped less than 1%.

Illumination at centre at 5 meters was 25,740 lux cold. After derating (31%!) we measured 18,000 lux. Total flux reached 15,210 lumens cold and 10,600 lumens after derating.

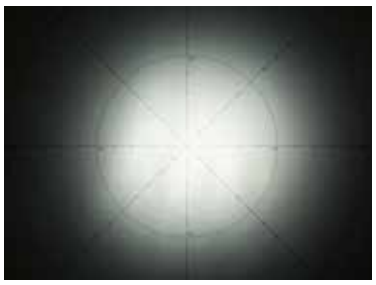
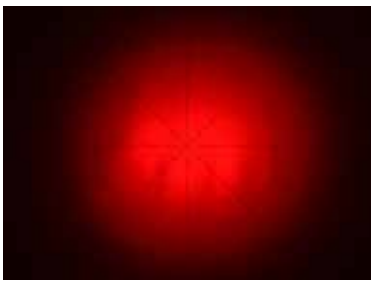
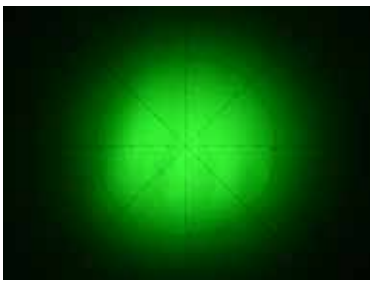
(Under similar conditions with the MagicPanel™602, we had measured 10,600 lumens after switching it on and 6,800 lumens after derating).

The beam angle at I/2 was 7.2° and 14.48° at I/10. The power and beam angle were very impressive, not only for rendering special effects but also for lighting musicians or set pieces.

When lighting the white LED alone, we measured an illumination of 11,400 lux cold at centre and 11,340 lux after derating, which is almost nil (> 1%). The flux reached 7,650 lumens cold and 7,600 lumens after derating: an amazing result when compared to the 70% full white in RGBW after derating!

Conclusion

With the DREAMPANEL™TWIN, Ayrton has invented a hybrid between light and video, offering lighting designers a high-performance product with new possibilities for creating a wide variety of scenes that will fascinate audiences. The beam projector side performs much better than the MagicPanel™602, and the video side has superb contrast. Both sides work together with precision. This exciting fixture, used by the talented LeRoy Bennett to magically light the stage for one of the world's big media events, has earned our congratulations. The future of the DREAMPANEL™TWIN looks brilliant! ■


DREAMPANEL TWIN

DREAMPANEL TWIN IMAGING DISPLAYS

A hybrid luminaire with the MAGICPANEL™ on one side and the DREAMPANEL™SHIFT on the other. Capable of continuous double rotation on the pan and tilt axes, the DREAMPANEL™TWIN can alternate between displaying high-definition video images and 3D volumetric lighting effects. The 6 mm pitch of the video side offers the perfect balance of definition required to display video media on stage, of screen size for enabling full HD, and of overall system brightness.

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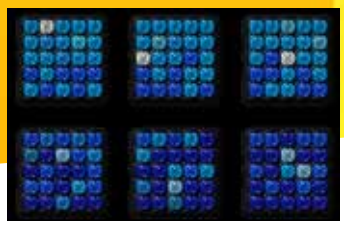
MAGICPANEL-FX



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 3.5° to 52°. 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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