#Ayrton live

ISSUE 1 _ SEPTEMBER 2011

Wildsun

THE FAMILY IS GROWING !

DISCOVERY

BENCH TEST

ICECOLOR 1000 TESTED BY SONO MAG

COLORSUN 200 "S"

ARCALINE 2 AT MOULIN ROUGE

WILDSUN 200 "S"

ROYAN'S CATHEDRAL

The power of silence.

ICECOLOR 250 3G LED STATIC LUMINAIRE.

ICECOLOR 250 is a compact luminaire offering the possibility of creating an infinite palette of RICH PASTEL or SATURATED COLOURS. Fitted with an ultramodern fanless and absolutely silent cooling system, it can be integrated into any application without any noise. Respecting the environment thanks to its 85% plus efficiency optics, it is able to produce a lighting flux in excess of 5000 lm for only 200 W of power consumption. Contact us at : **contact@ayrton.eu**

icecolor 250

AYRTON

Light in action

Le parc de l'Événement - 1, allée d'Effiat - F91160 Longjumeau - France • Tél.: 33 (0) 1 69 10 33 90 • **www.ayrton.eu**

Editorial

You will find in this first issue of AYRTON Live many informations concerning our news, new products and more.

We are very excited to introduce on the market many new advanced products which offer rich colors, optic efficiency and state of the art cooling system.

As you know, power consumption will be a key point for the future of the entertainement market, and after several years of research and development, we are proud to introduce LED projectors which have an uncomparable efficiency, thanks to our knowledge based on 10 years of experience on the development of LED lighting fixtures. To be «Green» you have to be efficient, and this is exactly the way we have chosen.

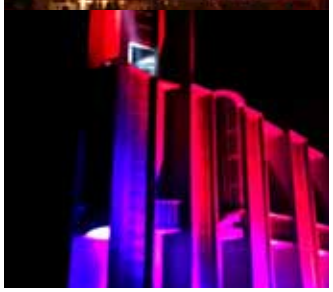
Don't hesitate to contact us if you need any complementary information.

Valère Huart.

CONTACT US :
Le parc de l'Événement
1, allée d'Effiat
F91160 - Longjumeau
France
Tel.: 33 (0) 1 69 10 33 90
Fax: 33 (0) 1 69 10 33 91

GLOBAL INFORMATION: contact@ayrton.eu
TECHNICAL SERVICE: technic@ayrton.eu
SALES NETWORK: sales@ayrton.eu
MARKETING: marketing@ayrton.eu

Summary



AYRTON NEWS

PLASA 2011 NEW PRODUCTS

WILDSUN THE FAMILY IS GROWING !

BENCH TEST

ARCALINE 2 AT MOULIN ROUGE

Le Moulin Rouge, the world-famous French cabaret, has chosen ARCALINE2 3G as recommended by Light Designer Christian Bréan.

32 units are used on stage, providing powerful saturated colors to pastel colors, thanks to its 16 x 10W RGB+W LED modules.

Christian Bréan has selected ARCALINE2 3G for its remarkable even beam and for its rich pastel color palette which is a must to light skin.
The installation was made by the Moulin Rouge technical team which is absolutly satisfied to use one of the most brighter LED bar on the market.

500 ARCALINE2 3G are now used around the world since the introduction of this product on the market in january 2011.

AYRTON 4G

What's behind « 4G » logo ? These 2 characters hide a completely new technology developed by AYRTON, which enlarge furthermore possibilities offered by new projectors benefiting of this technology.

Like our 3G technology, the LED driving system is directly integrated onto the LED Metal-core circuit board, close to the LED sources, thus optimizing their permanent control. But now, our driving system is even better, allowing a very smooth LED dimming with ultra low-light levels, even with newest 10 to 15 Watt RGBW LED modules used today, which are much more powerfull than old generation LED sources.

Moreover, each LED of the projectors can now also be controlled one by one, which offer many new visual effects possibilities. A big amount of pre-programmed Chase patterns makes the control of the projector even easier. The only limit is your imagination !

The very first AYRTON projectors including this technology are WILDSUN 200S, a compact and speedy LED Wash moving-head fitted with a 12 LED-modules matrix, and the COLORSUN 200S, a motorized zoom static projector fitted with the same LED matrix. Each projector totals 200 Watt of LED sources.

MASSIVE BICOLOR CYCLORAMA

Impact Evénement has used ICECOLOR 500 for a massive cyclorama during a convention.


© Agence Lever de Rideau

The cyclorama's dimensions were 20 x 9 m and the end customer wanted to have a perfect homogeneous cyclorama. The production and rental company Impact Evénement, thanks to its brand new ICECOLOR 500, has reached a level of excellence, introducing bi-color and perfectly homogeneous cyclorama with only 14 ICECOLOR 500 on the floor.
Impact Evénement is also an ICECOLOR 250, ICECOLOR 1000 and WILDSUN 500 user.

AYRTON "S" SERIES

These evolutions differenciates from standard models by many characteristics which make these projectors perfect for most scenic applications (concerts, festivals, TV studios…).
First of all, narrow beam angle of the projector has been reduced, approximatively 8° (measured at i/2 peak), and beam edges are now more defined. Therefore, the effective range of "S" versions projectors is increased, wich widens their application possibilities.

Next, Zoom range has been increased to a true 4:1 ratio (measured at i/2 peak), which makes the projector even more polyvalent.
The brand new 4-in-1 RGBW LED modules used are very efficient and have deeper primary colors for their Red, Green and Blue LED chips, improving color mixing hues.

White integrated LED chips have a 6500K color temperature (instead of 4000K for the standard serie), thus greatly reinforcing light beam power « feeling ».
Finally, luminous light flux benefits of 10% raise, compared to standard serie.

ICECOLOR AT LONGCHAMP

24 ICECOLOR 250 and 24 ICECOLOR 500 were used for coloring the Longchamp racecourse for a special event. Longchamp is one of the biggest racecourse in Europe and was totally visually transformed during one night. ICECOLOR Series have an incredible power consumption to lumens ratio and allows the user to install many pieces without massive electrical distribution.

NEW AYRTON SALES MANAGER

Ayrton has appointed Valère Huart as international sales manager from the 1st march 2011. For the past 10 years he has worked as a sales manager for different companies on the French market.

« I'm proud to join an innovative and dynamic company which focus its knowledge on advanced technology » comments Valère.

Contact : sales@ayrton.eu

ROYAN'S CATHEDRAL

22 ICECOLOR 500 were used to illuminate the Royan's cathedral during one month last summer. Light designer Stephane Viallon said « It was incredible to have a range of colors like that, I'm very focussed on colour quality and I was completly satisfied by the ICECOLOR 500, you can obtain some very impressive bi-color effect and the color-changing are very responsive ». The contractor, Ateliers Lumiére from Bordeaux, is a well known French rental and production company which also have WILDSUN 500 in its hire inventory.

The illumination of the cathedral was ordered by the City of Royan.

WIRELESS SOLUTION

AYRTON and WIRELESS SOLUTION Sweden AB's award-winning W-DMX™ technology have announced few months ago an OEM partner agrement on some of our newest LED fixtures.

AYRTON makes several LED projectors factory fitted with W-DMX receivers, like ICECOLOR 500, ICECOLOR 1000, WILDSUN 500, WILDSUN 500S and WILSDUN K series.

Florent Francois, Chief Product Engineer for AYRTON commented, "We tested different wireless DMX systems and W-DMX was clearly the most reliable choice. Working with W-DMX is the best choice for us as well as for our clients as it's compatible with so many products on the market today."

Niclas Arvidsson, CEO of Wireless Solution said, "AYRTON's new LED fixtures are of superior quality and offer a range of uses. With the addition of factory fitted W-DMX, users have even more flexibility in their installations. We're very happy to be part of this product line."

wireless solution

For more information about W-DMX, visit www.wirelessdmx.com

NEW DISTRIBUTOR IN POLAND

Ayrton has appointed a new distributor for the Polish market.

The company Showdesign which is run by Marek Czarnik is now the exclusive distributor of the complete range of products.

Contact : Show Design ul. Prusicka 31, 55-100 Trzebnica, Poland

Tel. +48 71 387 44 30, Fax. +48 71 387 44 31

www.showdesign.pl

marek@showdesign.pl

You can find all our distributor network details on our website : www.ayrton.eu/network.

AYRTON IS NOW ON FACEBOOK !

Ayrton have now is own page on Facebook.

You can follow our news on it, seeing photos and videos from our products in action and more...

You still have access to our website www.ayrton.eu where you can find a lot of commercial and technical informations.

Join us !

AYRTON ON YOUTUBE

Ayrton has now a Youtube's channel where you can discover a lot of videos.

You can find this channel at the following adress :

YouTube

www.youtube.com/AYRTONLIGHTING

MOULDED FLIGHTCASE FOAM

All types of WILDSUN Wash Moving Head are packed in a solid carton box with their accessories, and you will also find inside the box a strong moulded foam which perfectly protect the entire fixture.

This foam is reusable and has been specially designed by AYRTON to help customers to make their own Flightcases easier: no need anymore for complicated foam cutting, assembling and gluing, to match correctly the projector shape. And thanks to its dual density, this dedicated moulded foam will effectively protect your top-of-the-range LED Wash moving head from shocks and vibrations during transportation. And it is delivered for free with the projector !

WILDSUN 200 "S"

The AYRTON LED WASH moving head familly is growing. The succesfull WILDSUN 500 has now a little brother: the new compact WILDSUN 200 S. This projector offer nearly 200 Watt of LED sources Power in a small package, and has amazing color mixing capabilities - thanks to its 4-colours LED modules (RGB+W) - and a high efficiency zoom system.

« Compact » doesn't mean less functions: this moving head integrates our newest « 4G » technology, meaning that each of its 12 LED modules can be controlled individually, offering plenty of matrix effect functions. And because a huge amount of patterns effects is already pre-programmed, creating amazing visual affects using these projectors has never been so quick and easy !

This moving head is from the "S" series, offering a true 4:1 zoom ratio, with a beam angle from 8 to 32°, and benefits of a 6500K color temperature for the White chip of the 4-colour LED module. Red, Green and Blue colors are « deeper », with a close-to-ideal wavelength, offering performing true colors mixing.

Several DMX user's modes, from simple DMX mode to ultra-sophisticated DMX mode, makes sure that you will find the best way to match your needs.

And last but not least, WILDSUN 200 S can integrate on request an optional built-in Wireless DMX receiver from WIRELESS SOLUTIONS. DMX cables issues will not be a problem anymore !

For sure, WILDSUN 200 S will be a Top-class projector for Concerts, festivals, TV shows, and much more events and venues where a fantastic power-to-volume-to-effect ratio is a must.

TECHNICAL SPECIFICATION

OPTICS
- Motorized Linear Zoom system, ratio 4:1
- Beam Aperture: from 8° to 32° (measured at ½ peak)
- 75% optic sytem efficiency
- High-efficiency 45mm PMMA secondary optics

LIGHT SOURCE
- 12 high-power "multi-chip" 4-colour LED Modules
- No light source to replace
- 12 RED sources + 12 GREEN sources + 12 BLUE sources + 12 "COLD" WHITE sources (6500K)
- Light output: up to 4.000 lumen
- Rated sources life: 25.000 hours
- Flicker free sources Management, convenient for TV applications and all video recorded events

MOVEMENT
- Extremely accurate positioning
- Moving-head operated via either 8 or 16 bit resolution
- High-resolution stepper motors operated via microprocessors ensure extreme accuracy and smooth movements
- PAN and TILT automatic repositioning
- Moving head range: 540° (PAN), 270° (TILT)

COLOURS
- Advanced Colour Mixing system combining Red, Green, Blue and White colours
- High Colour Rendering Index (CRI)
- 4,29 billion colours
- Uniform light beam with no colour shadows and rich saturated colour-hues
- Virtual Color Wheel, including most usual White Colour Temperature Presets
- Dynamic Colour Macro Effect with variable speed

DIMMER, STROBE
- Electronic dimmer, allowing perfect light adjustment from 0 to 100% without colour variation
- White or colour strobe effect, with speed adjustment from 1 to 25 flashes per second

SOFTWARE FACILITIES
- Local DMX Addressing of the projector and its Optional Parameters through its built-in LCD panel control
- Remote DMX Addressing of the projector and its Optional Parameters through a standard RDM DMX controller
- Constant Color system, whatever the inernal/external temperature conditions
- Separate control of each LED Modules
- Built-in Pattern Effects with Speed and Fade controls for Scenic applications Information Menu including Hour counter, Temperature, Software version
- Software upgrade via DMX, using dedicated optional update box

HARDWARE FACILITIES
- Graphic LCD display for addressing and special functions settings, with flip function
- 5 menu buttons to set the functions
- Over temperature protection
- XLR 5 pin connectors for DMX connections

CONTROL
- DMX 512 USITT protocol
- Stand-alone Mode and Master/Slave Modes
- DMX RDM compatible
- Optional Integrated DMX Wireless receiver from WIRELESS SOLUTIONS
- Local control panel, with LCD display and 5 buttons
- DMX 512 Input / Output through 5pin XLR connectors

POWER SUPPLY
- Electronic supply with PFC active
- 110 to 240 Volts – 50/60Hz
- Power 250 Watt max
- Power supply input through PowerCon lockable connector

COOLING SYSTEM
- Advanced forced air convection system, using Heatpipes technology
- Fan PWM control with several User's modes
- Permanent thermal regulation
- Safety protection against temperatures excesses

HOUSING
- Selft-extinguishing V0 class fire-retardant ABS PC moulded covers
- Moving-Head skeleton made of Aluminium and Steel metal plates
- Front glass in high transparent Polycarbonate (V0 class)
- Heatshinks in aluminium and copper, satin finish
- Two side handles for transportation
- IP20 protection index
- Exterior finish: Carbon (Black)

INSTALLATION
- Fastening brackets system: two Omega ¼ turn brackets designed for use with standard clamps
- Mounting points: Four ¼ turn locking fittings, allowing two different installation of Omega brackets on the projector
- Salety cable attachement point

OPERATING PARAMETERS
- Working positions: any
- Maximum permitted ambient temperature (Ta max): 40°C (104°F)
- Minimum usage distance: 0.2 m (8 inches)

COMPLIANCE
- EU (CEM): EN 50081-1, EN 50082-1
- EU (electrical safety): EN 60598-1, EN 60598-2-17

SIZE
- 322 x 437 x 242 mm (lxhxd)

WEIGHT
- 14 Kg

COLORSUN 200 “S”

COLORSUN 200 S is an innovative new LED static luminaire.
Thanks to its RGB+W powerfull LED sources and to its silent advanced cooling system it has a very impressive lighting output in a compact housing. COLORSUN 200 S has a double yoke system which act as a stand floor.It has been designed for indoor use.

One of the key point is the presence of a motorized zoom system which allows the projector to have a 8°to 32° beam angle.
This new product also integrates our new « 4G » technology, meaning that each of its 12 RGB+W LED modules can be controled individually, offering a lot of matrix possibilities.

And because a big amount of patterns effects are already pre-programmed, creating amazing visual effects, using this projector has never been so quick and easy.
COLORSUN 200 S benefits of a 6500K color temperature for the white chip of the 4 in 1 LED module.

TECHNICAL SPECIFICATION

OPTICS
- Motorized Linear Zoom system, ratio 4:1
- Beam Aperture: 8° to 32° (measured at ½ peak)
- High-efficiency 45mm PMMA secondary optics

LIGHT SOURCE
- 12 high-power “multi-chip” 4-colour LED Modules
- No light source to replace
- 12 RED sources + 12 GREEN sources + 12 BLUE sources + 12 “COLD” WHITE sources (6500K)

COLOURS
- Advanced Colour Mixing system combining Red, Green, Blue and White colours
- 4,29 billion colours
- Virtual Color Wheel, including most usuals White Color Temperature Presets
- Dynamic Colour Macro Effect with variable speed

DIMMER, STROBE
- Electronic dimmer, allowing perfect light adjustment from 0 to 100% without colour variation
- White or colour strobe effect, with speed adjustment from 1 to 25 flashes per second

SOFTWARE FUNCTIONS
- Local DMX Addressing of the projector and its Optional Parameters through its built-in LCD panel control
- Remote DMX Addressing of the projector and its Optional Parameters through a standard RDM DMX controller
- Constant Color system, whatever the inernal/external temperature conditions
- 2 Light Modes, optimized for Architectural or Entertainment applications
- Separate control of each LED Modules
- Built-in Pattern Effects with Speed and Fade controls for Scenic applications
- Information Menu including Hour counter, Temperature, Software version

CONTROL
- DMX 512 protocol, through DMX cable or Wireless system
- Stand-alone Mode and Master/Slave Modes
- DMX RDM compatible
- Local control panel, with LCD display and 5 buttons
- DMX 512 Input / Output through 5pin XLR connectors
- Choice of 12 DMX Modes (from 5 to 58 DMX channels)

POWER SUPPLY
- Electronic supply with PFC active
- 110 to 240 Volts - 50/60Hz
- Power 220 Watt max
- Power supply input through PowerCon lockable connector

COOLING SYSTEM
- Advanced forced air convection system, using Heatpipes technology
- Fan PWM control with several User’s modes
- Permanent thermal regulation
- Safety protection against temperatures excesses

HOUSING
- Projector fitted with a double yoke system
- IP20 protection index
- Body in die-cast aluminium, Front glasses in Tempered glass
- Heakshinks in aluminium and copper, satin finish
- Yokes in Aluminium
- Exterior finish: black (Carbon)

INSTALLATION
- Double yoke systems, which act as a floor stand
- Several holes into the yoke, to install clamp
- 2 rotating handles, to adjust yoke

OPERATING PARAMETERS
- Operating positions: all (device on floor or fixed to a support)
- Maximum permitted ambient temperature (Ta max): 40°C (104°F)
- Minimum permitted ambient temperature authorised (Ta min): -5°C (23°F)
- Minimum usage distance: 0.2 m (8 inches)
- Never enclose the unit, allow free air circulation on all sides

COMPLIANCE
- EU (CEM): EN 50081-1, EN 50082-1
- EU (electrical safety): EN 60598-1, EN 60598-2-17

SIZE
- 364 x 372 x 260 mm (lxhxd)

WEIGHT
- 8 Kg

wildsun THE FAMILY IS GROWING !

WILDSUN 500 "S"

"S" for **S**tage
"S" for **S**unlight type cool White colour Temperature
"S" for **S**pecially Narrow beam
"S" for **S**uperior light Flux
… In other words, "S" for **S**uccess !

AYRTON is introducing a new version of the already popular WILDSUN 500, the WILDSUN 500 S, perfectly suitable for Stage events and many other applications.

This LED Wash moving-head projector uses new kind of 4-in-1 RGB+W LED source modules, with « deeper » Red, Green and Blue primary colors LED chips, and White LED chip has a 6700K Color Temperature.

Sophisticated Color mixing system offers a uniform light beam with no colour shadows and an infinite color palette, with even more saturated primary colours.

The choice of integrated Cool White LED chips gives more « punch » to the projector's light beam, and allow to reach high Colour Rendering index (CRI).

The 4:1 ratio high efficiency optical zoom system have a narrower beam angle than the standard WILDSUN 500. Beam Angle on the "S" model can be adjusted from 8° to 32°, and associated with a comfortable 11.000 lumen luminous flux, the effective range of the projector is even increased.

Thanks to its separate control of each LED rings and built in pre-programmed pattern effects, WILSDSUN 500 S can also be used as a fantastic dynamic effect projector.

WILDSUN 500 S is definitly the ideal LED wash Moving-Head projector for TV Studios, Concerts or most entertainment events, and will be the best-value projector for rental companies.

TECHNICAL SPECIFICATION

OPTICS
- 4:1 zoom optics system
- 75% optic efficiency
- Beam aperture: from 8° to 32° (measured at I/2 peak)
- Motorised linear zoom

SOURCE
- 31 Multi-chip High-Power LEDs sources
- Light output: up to 11.000 lumen
- Rated Sources life: 25.000 hours
- Flicker free sources Management, convenient for TV applications and all video recorded events

MOVEMENT
- Extremely accurate positioning
- Moving-head operated via either or 8/16 bit resolution
- High-resolution stepper motors operated via microprocessors ensure extreme accuracy and smooth movements
- PAN and TILT automatic repositioning
- Moving head range: 540° (PAN), 270° (TILT)

COLOURS
- Sophisticated 4 colours RGB+W mixed, reaching high Colour Rendering Index Uniform light beam with no colour shadows, and rich saturated colour-hues
- 8 or 16 bit resolution
- 4,29 billion colours
- Virtual colour wheel including most useful Color Temperature White presets
- Pre-programmed colours including bi-color patterns, and rainbow effect

DIMMER, STROBE
- Electronic dimmer for adjustment of light output from 0 to 100% with no colour variation (16 bit)
- High-speed white or full colour strobe effect with variable 1-25 fps flash rate
- Pre-programmed variable strobe effect

CONTROL
- 512 USITT, with built-in Wireless DMX receiver
- Master / Slave functionalities to manage several projectors without DMX lighting Desk
- 17 / 24 / 49 DMX channels required to control all parameters of the projector
- Selectable DMX Modes

SOFTWARE FACILITIES
- Fixture settings for DMX address and functions
- DMX-RDM Ready
- On/off LCD display
- 8/16 bit movement resolution selection
- Pan & Tilt inversion facility
- Sophisticated control of cooling parameters to reduce noise
- Selectable Ventilation User's Modes
- Pre-set sequence control
- Software upgrade via DMX, using dedicated optional Update Box

HARDWARE FACILITIES
- Graphic LCD display for addressing and special functions setting read out, with Flip function
- 5 menu buttons for setting the functions
- Over temperature protection
- Control by DMX 512 standard signal via 3 pin & 5 pin XLR or Wireless DMX
- Pan and Tilt Lock system to ease-up transportation

POWER SUPPLY
- Any AC Voltage power supply between 110 to 240 Volts (50/60 Hz)
- Electronic Power Supply with active PFC (Power Factor Correction)

COOLING SYSTEM
- Advanced ventilation cooling system based on Heatpipe technology
- Self adjusting variable speed fans for quiet operation (Fan Auto Mode)
- Selectable Ventilation User's Modes

HOUSING
- Construction: Self-extinguishing V0 class fire-retardant ABS PC moulded covers
- Moving head skeleton made of Aluminium and Steel metal plates
- Two sides handles for transportation
- IP20 protection rating
- Exterior finish: Carbon (Black)

RIGGING
- Fastening Brackets System: Two Omega ¼ turn brackets designed for use with standard clamps
- Mounting points: Four ¼ turn locking fittings, allowing 2 different installation of ¼ turn brackets
- Safety cable attachment point

OPERATING PARAMETERS
- Working positions: any
- Maximum ambient temperature (Ta): 45°C

COMPLIANCE
- EU (EMC): EN 50081-1, EN 50082-1
- EU (Electrical Safety): EN 60598-1, EN 60598-2-17

SIZE
- 446 x 544 x 305 mm (l x h x d)

WEIGHT
- 22,8 Kg

WILDSUN "K" SERIES

Based on WILDSUN 500 format, AYRTON has developped a range of « White only » LED Wash Moving-Head projectors.
This familly is specially dedicated to be used in exhibitions fairs - Automotive exhibitions for example - where an « environment-friendly » powerfull white source is greatly appreciated… But these projectors will also take place on many other events like concerts, meetings, conferences, TV studios, theaters… thanks to their exceptionnal Luminosity-to-Power Consumption ratio. And because when dimmer is set to 0% means no consumption for LED sources, unlike all ballast-operated discharge bulbs sources, ecological « Green » light is finally becoming reality.

The benefit of the motorized 4:1 ratio zoom system and the precise PAN and TILT positionning makes « projectors focusing operation » becoming simple and quick to realize, which can be done directly through DMX by the lighting desk operator.
3 projectors have been developped to meet most of users needs, each model is differentiated by the Color Temperature of its White LED light source Modules.

wildSun 500 K3 Warm white

This projector integrates 3000K color temperature white LED source modules, offering a warm white beam.

wildSun 500 K7 Cool white

This moving-head projector provide a cool white beam of 7000K Color Temperature, very impressive and powerfull.

wildSun 500 KD Dynamic white

This projector offers the best of both worlds: Its Dynamic White System mix 2 kind of white LED sources type - 3000K and 7000K - and offer the possibility to set the White colour beam of the projector into any Color Temperature included between 3000K to 7000K.

TECHNICAL SPECIFICATION

OPTICS
- 4:1 zoom optics system
- 75% optic efficiency
- Beam aperture: from 11° to 33°
- Motorised linear zoom

SOURCE
- 31 Multi-chip High-Power LEDs sources, totalling 124 LED chips
- Light output: up to 12.000 lumen, depending on models
- Rated Sources life: 25.000 hours
- Flicker free sources Management, convenient for TV applications and all video recorded events

MOVEMENT
- Extremely accurate positioning
- Moving-head operated via either or 8/16 bit resolution
- High-resolution stepper motors operated via microprocessors ensure extreme accuracy and smooth movements
- PAN and TILT automatic repositioning
- Moving head range: 540° (PAN), 270° (TILT)

COLOURS
- K3 model: 3000K warm white Color Temperature
- K7 model: 7000K cool white Color Temperature
- KD model: variable white Color Temperature from 3000K to 7000K 8 or 16 bit resolution control
- Virtual « White balance » wheel including most useful Color Temperature White presets on KD version
- Separate control of each LED rings
- Pre-programmed patterns effects

DIMMER, STROBE
- Electronic dimmer for adjustment of light output from 0 to 100% (16 bit)
- High-speed strobe effect with variable 1-25 fps flash rate
- Pre-programmed variable strobe effect

CONTROL
- 512 USITT, with built-in Wireless DMX receiver
- Master / Slave functionalities to manage several projectors without DMX lighting Desk
- Selectable DMX User Modes

SOFTWARE FACILITIES
- Fixture settings for DMX address and functions
- DMX-RDM Ready
- On/off LCD display
- 8/16 bit movement resolution selection
- Pan & Tilt inversion facility
- Sophisticated control of cooling parameters to reduce noise
- Selectable Ventilation User's Modes
- Pre-set sequence control
- Software upgrade via DMX, using dedicated optional Update Box

HARDWARE FACILITIES
- Graphic LCD display for addressing and special functions setting read out, with Flip function
- 5 menu buttons for setting the functions
- Over temperature protection
- Control by DMX 512 standard signal via 3 pin & 5 pin XLR or Wireless DMX
- Pan and Tilt Lock system to ease-up transportation

POWER SUPPLY
- Any AC Voltage power supply between 110 to 240 Volts (50/60 Hz)
- Electronic Power Supply with active PFC (Power Factor Correction)

COOLING SYSTEM
- Advanced ventilation cooling system based on Heatpipe technology
- Self adjusting variable speed fans for quiet operation (Fan Auto Mode)
- Selectable Ventilation User's Modes

HOUSING
- Construction: Self-extinguishing V0 class fire-retardant ABS PC moulded covers
- Moving head skeleton made of Aluminium and Steel metal plates
- Two sides handles for transportation
- IP20 protection rating
- Exterior finish: Carbon (Black)

RIGGING
- Fastening Brackets System: Two Omega ¼ turn brackets designed for use with standard clamps
- Mounting points: Four ¼ turn locking fittings, allowing 2 different installation of ¼ turn brackets
- Safety cable attachment point

OPERATING PARAMETERS
- Working position: Any
- Maximum ambient temperature (Ta): 45°C

COMPLIANCE
- EU (EMC): EN 50081-1, EN 50082-1
- EU (Electrical Safety): EN 60598-1, EN 60598-2-17

SIZE
- 446 x 544 x 305 mm (l x h x d)

WEIGHT
- 22,8 Kg

ayrton ICECOLOR 1000

Cooled through passive heat pipes

Drawing on the substantial experience gained in the early 2000s in the area of LED lighting, the French manufacturer Ayrton, with head offices in Longjumeau, unveiled a fantastic LED luminaire available in several styles: the ICECOLOR 250 which consists of two modules, ICECOLOR 500 with its four modules and lastly, the eight module ICECOLOR 1000. They each use a passive heat pipe cooling system, which, in simple terms, means that no fan is necessary to cool the powerful LED sources efficiently and provide them with unprecedented output.

Get out your sunglasses - we are about to test the impressive ICECOLOR 1000 designed for large areas.

TEXT: GRÉGORY MACÉ & J-P LANDRAGIN
PHOTOS: GRÉGORY MACÉ

With each of the eight modules accommodating 10 Cree RGBW chips, the ICECOLOR1000 uses a total of 80 10W LED quadruplets. We can expect a significant light output from this imposing luminaire. A number of modes are offered for customised use.

ON THE OUTSIDE

The principle of the LED luminaire implies, by its very nature, a simple, user-friendly and above all, practical design. It is all about minimising its size, since architectural lighting is the main use for this type of product - it is the beauty of the projector's object that should attract our attention, not the projector itself.

It is therefore fitted with two slim albeit sturdy arms each with a pair of robust handles that are vital for handling a heavy product such as this, weighing in at 64 kg.

Two adjustment wheels on either side: the first allows you to adjust the angle of the entire lighting panel, the second controls the top half of the panel. In other words, it is possible to split the panel into two allowing you to light your area on two levels or to 'open out' the light beam. A range of filters also allows you to choose the projection angle for each module or group of modules.

The front of the ICECOLOR comprises eight sets of 10 LEDs each, protected by a glass plate fixed in place by two flat-head captive screws. Optional filters can be installed here.

These RGBW chips are, in turn, located behind a large deluxe honeycomb textured collimator that also doubles as a reflector. It is in this collimator that the colours are mixed . Naturally we are impressed by the single colour beam that is far more elegant than the RGB LED patchwork we often see on similar products.

At the back there is a large fin-type radiator system concealing a heat pipe cooling system, using technology borrowed from computers for the cooling microprocessors. In

WHAT YOU NEED TO KNOW

SONO MAG'S OPINION

WHAT WE LIKE:

Collimators that standardise the colour of the LED mix, a true white, its exceptional flux, numerous modes, so you will undoubtedly find the one you will need.

WHAT WE DON'T LIKE:

The lack of an amber LED to complete the colour palette and its imposing weight.

WHO IS THIS FOR AND WHY?

This is a highly versatile luminaire, ideal for outdoor architectural lighting, in a fixed installation, for concerts, as a blinder or for lighting cycloramas, or audiovisual settings and events. Ayrton is working on developing a special service providers version, with a quick-change diffusion filter holder.

RESULTS

BUILD QUALITY:

Very good. This massive product is housed in a very solid casing. It is not designed to be opened on a regular basis. It is fully watertight and inclement weather conditions are not a problem.

USE:

Ayrton makes versatile units for lighting designers that

01 & 02 / **The other projectors of the ICECOLOR family: ICECOLOR 250 and ICECOLOR 500.**
03 / **Filter holder can be easily removed by 2 ¼ turn screws, no need for tools.**

lay terms, the process consists of transporting a gas in a closed circuit that goes from liquid to gaseous state transferring the heat toward the radiator that disperses it through natural convection. After one hour of full power operation in our 110-m2 enclosed area laboratory, the radiators were obviously very hot. Outdoors and in any large space with good air circulation, this would be completely different.
We also noticed that the Ayrton ran very quietly due to the fact that no fans are used at all inside the panel. We continued our observations. The technology used for the supply and the transfer of DMX control data consists of water resistant connectors and two XLR 5-pin (male/female) jacks. The ICECOLOR is in fact an IP65-classification outdoor projector; the more susceptible parts are therefore fully insulated and protected from harmful interference such as moisture. The ICECOLOR can also accommodate a DMX Wireless card with an antenna that is well protected against any rough handling of the unit.
Lastly, a very discreet display can be found on one of the sides; a small LCD screen next to a menu button surrounded by four navigation

LAMP TYPE:
Led

OPTIC SOURCE:
Led

DMX CHANNELS:
4, 5, 8, 9, 12, 16, 32 ou 40

CONNECTORS:
Waterproof connectors and 2 XLR-5 adaptors

COLOR MIXING:
Led RGB + White

DIMENSIONS:
880 x 300 x 620 mm

WEIGHT:
64 kg

come equipped with all possible macros imaginable and a broad range of diffusion filters to meet all needs.
The ICECOLOR 250 to 1000 range can be installed in any size location and will adorn any type of façade with its superb colours. The wireless connection is an undeniable plus point.

PERFORMANCE:
Very high luminous flux, numerous effects available, a luminaire specially designed to manipulate colours.

BUILD QUALITY:
With cutting edge LEDs, high-quality optimised optics, a high-tech cooling system, sophisticated control electronics and near perfect PFC supply, the price is perfectly justified.

Translated by ITP Belgium from Sono Mag 368 june 2011

04 / **The rear slide of the ICECOLOR 1000 reveals a big quantity of strong cooling fins.**

05 / **View of the dedicated big collimators used inside the ICECOLOR 1000. They allow a narrow 11° beam angle and a very good colour mixing.**

buttons. These buttons are highly sensitive and responsive. It takes some getting used to as it is easy to activate a button without actually having pressed it intentionally.

The unit menu is very comprehensive. The unit can be controlled from the display for autonomous use, in master/slave mode or static lighting mode.

The operating mode can also be selected here. The available options are numerous, a total of nine modes are available, ranging from the use of the entire panel with four settings (RGB + white) to a more complex set-up with the panel divided into eight independent modules backed-up by macros with 40 parameters.

OPERATION

We opted for the most complex and complete configuration for the ICECOLOR 1000, which

MEASUREMENT & TESTS I — LUX AT 10 m

	Center	4060 lux
E Center/2	20 cm from center	3960 lux
(10°)	39 cm from center	3673 lux
Measurements done at 5 m and	59 cm from center	3271 lux
converted by calculations for 10 m	78 cm from center	2679 lux
	98 cm from center	2030 lux
	Beam angle	10°
	Diameter	1,96 m
Average flux value (lumen)		11481 lm
	Center	4070 lux
E Center/10	35 cm from center	3788 lux
(17°)	70 cm from center	2965 lux
	104 cm from center	1896 lux
	139 cm from center	910 lux
	174 cm from center	414 lux
	Beam angle	17°
	Diameter	3,48 m
Average flux value (lumen)		17243 lm
	White RGBW	100 %
	Red	23 %
	Green	38 %
Colours	Blue	6 %
	White only	39 %
	Cyan	39 %
	Magenta	23 %
	Yellow	49 %
	Amber	26 %

DMX CHARTS

	Mode 2	Mode 6	Mode 9
CHANNEL 1	Red (all Led board)	Red (Led board 1 to 4)	Red (Led board 1)
CHANNEL 2	Green (all Led board)	Green (Led board 1 to 4)	Green (Led board 1)
CHANNEL 3	Blue (all Led board)	Blue (Led board 1 to 4)	Blue (Led board 1)
CHANNEL 4	White (all Led board)	White (Led board 1 to 4)	White (Led board 1)
CHANNEL 5	Dimmer	Red (Led board 5 to 8)	Red (Led board 2)
CHANNEL 6		Green (Led board 5 to 8)	Green (Led board 2)
CHANNEL 7		Blue (Led board 5 to 8)	Blue (Led board 2)
CHANNEL 8		White (Led board 5 to 8)	White (Led board 2)
CHANNEL 9		Strobe	Red (Led board 3)
CHANNEL 10		Colour macro	Green (Led board 3)
CHANNEL 11		Colour preset	Blue (Led board 3)
CHANNEL 12		Colour dimmer	White (Led board 3)
CHANNEL 13		Chase pattern	Red (Led board 4)
CHANNEL 14		Chase speed	Green (Led board 4)
CHANNEL 15		Chase fad	Blue (Led board 4)
CHANNEL 16		Dimmer	White (Led board 4)
CHANNEL 17			Red (Led board 5)
CHANNEL 18			Green (Led board 5)
CHANNEL 19			Blue (Led board 5)
CHANNEL 20			White (Led board 5)
CHANNEL 21			Red (Led board 6)
CHANNEL 22			Green (Led board 6)
CHANNEL 23			Blue (Led board 6)
CHANNEL 24			White (Led board 6)
CHANNEL 25			Red (Led board 7)
CHANNEL 26			Green (Led board 7)
CHANNEL 27			Blue (Led board 7)
CHANNEL 28			White (Led board 7)
CHANNEL 29			Red (Led board 8)
CHANNEL 30			Green (Led board 8)
CHANNEL 31			Blue (Led board 8)
CHANNEL 32			White (Led board 8)
CHANNEL 33			Strobe
CHANNEL 34			Colour macro
CHANNEL 35			Colour preset
CHANNEL 36			Colour dimmer
CHANNEL 37			Chase pattern
CHANNEL 38			Chase speed
CHANNEL 39			Chase fade
CHANNEL 40			Dimmer

icecolor 1000

ICECOLOR 1000 3G LED STATIC LUMINAIRE.

ICECOLOR 1000 has been designed for large spaces giving its OVERALL FLUX in EXCESS of 20,000 lm, unequalled on the market. It comes fitted with eight 100 watt RGBW LEDs modules individually controllable. A complete range of filters allows the user to adapt the projector to its environement. With an IP65 ingress protection, it can be used indoor or outdoor and can be controlled remotely through its integrated wireless DMX receiver. Contact us at : **contact@ayrton.eu**

AYRTON

Light in action

Le parc de l'Événement - 1, allée d'Effiat - F91160 Longjumeau - France • Tél.: 33 (0) 1 69 10 33 90 • **www.ayrton.eu**

06 / **One of the four high-class power supply with active PFC, carefully protected from external agressions.**

07 / **Two larges carrying handles per side and easy access to rotation setup: 1 disengageable handle to move both blocks together, and 1 handle to move separately the upper block.**

includes 40 parameters.

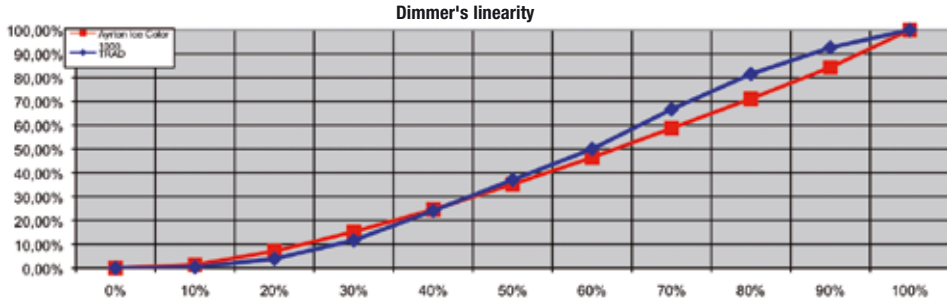
The unit lights up instantaneously, the reset time is minimal: this panel truly emits a lot of light.

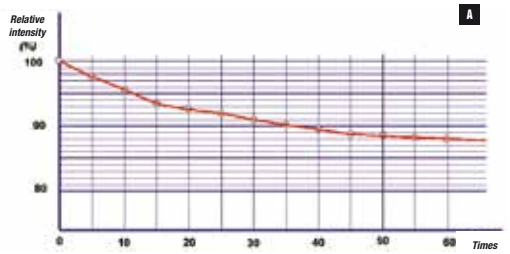
For 'standard' use, i.e. with a 'flat' panel, the angle of the beam is relatively narrow, less than 20°. Each collimator houses a chip with the four colours (RGB + white) and the whole panel lights up with the particular colour that passes.

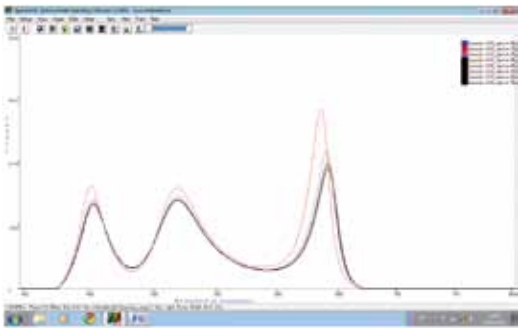
This full mode allows you to use each of the ICECOLOR 1000's eight modules separately, giving free rein to your imagination. Attractive shades of colour can be projected or dynamic effects can be created that are more suited for lighting a show than an architectural environment.

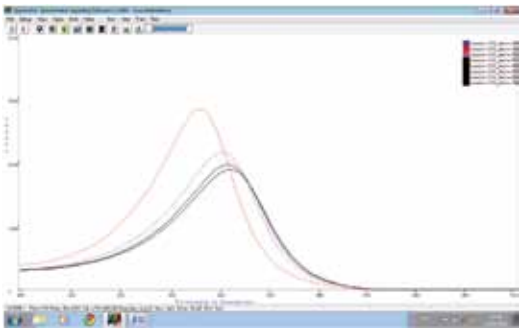
The transition between colours is very slick; LED technology is free of any mechanical parts and we are therefore not limited in this respect.

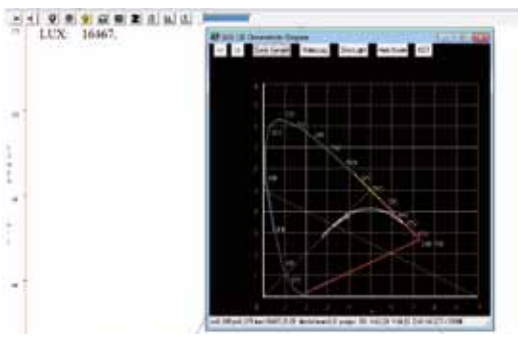
MEASUREMENT & TESTS

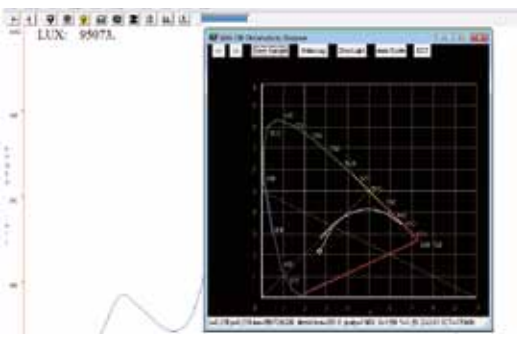












A / **Change of the intensity (or flux) over time. After one hour, the drop is only 11.72%.**

B / **Change of the emitted light spectrum over time (in red: initial spectrum, in black, spectrum after one hour of heating).**

C / **Details of the spectrum in Figure B, around the red line.**

D / **Chromatic coordinates for the light emitted by the white LED groups alone. The colour temperature is 3788 K.**

E / **Chromatic coordinates for the light emitted by all the LED groups working simultaneously at maximum intensity, after more than 2½ hours of heating. The light achieved is quite imbalanced with a characteristic blue tendency ('irregular' colour temperature of 17048 K).**

08 / **Dedicated connectors are waterproof (IP65), and adapters are included.**

The vivid colours are very bright and the white, whether emitted by the dedicated LED or the RGBW unit, is consistent and very pure. It was a little more difficult to produce an intense yellow, which either leaned toward a very pale green, or a very faint amber. However, the intense red, magenta, orange and blue are superb and the pastel palette is remarkable, due mainly to the beauty of the white.

This configuration offers us with a strobe channel with a maximum frequency of 25 Hz. Again we can emphasise the quality of the on-board electronics and its obvious superiority to the more traditional mechanical systems.

The numerous macro channels abound with pre-programmed colours and colour effects and panel matrixing.

These options are designed for live and audio-visual use and the quality of the effects the unit offers in terms of speed and performance is undeniable.

MEASUREMENTS

Since our spectrometer is now operational, we were able to carry out further investigations. The thermal drift of the intensity at the centre (and therefore the flux), was measured with a luxmeter at a distance of 5 m in extreme conditions: in a closed lab, where all the LED groups (RGB and white) were pushed to the extreme. The measurements taken over an hour show an 11.72% drop, which is very low compared to competing devices (the initial cold value is 19890 lux which settled at 17560 lux by the end of the test). The curve is given in Figure A.

A further measurement carried out after 2½ hours of heating resulted in a value of 16350 lux, a loss of 17.8%. Most of the competing products show double this loss, or even more.

As regards the spectral aspect of the drift, we noticed that the drift in intensity is more or less the same for blue and green, which also retain practically constant wavelengths (Figure B). On the other hand, red changes significantly with a greater loss of intensity and a considerable increase in wavelength (Figure C and Table 1).

A notable change ensued in the light coloration, which tended to veer toward blue when hot from a subjective point of view.

The quality of the light output is remarkable: the white LEDs alone provide an attractive, near-perfect white with a relatively warm coloration (Figure D). The colour temperature was 3786 K (after more than 2½ hours of stabilisation). On the other hand, the light achieved with all of the LED groups operating at maximum intensity was, frankly speaking, imbalanced (Figure E). While it is true that this does not match the expected performance for the unit, fortunately the pre-programmed colours provide a full palette of highly balanced whites in a wide range of colour temperatures (Table 2).

We carried out the flux measurements at a distance of 5 m for light intensity of 16350 lux at the centre after 2½ hours of heating: in the worst conditions therefore, as ever. We took E/2 into account i.e. the angle and surface area delineated by the light intensity at the centre divided by two, in accordance with the method used by numerous manufacturers.

As usual, we also took E/10 into account, in other words, the surface and angle delineated by the light intensity in the centre divided by ten.

We also measured the maximum power used by the projector. Consumption reached 838 W for all the LEDs on full power.

The switched-mode power supply includes a PFC (Power Factor Corrector), with a peak factor achieved at 1.45, is close to the optimum 1.414 for a pure sine wave. Since the current consumed by the ICECOLOR power supply was quasi- sinusoidal and in phase with mains voltage, there is no risk of interference with other appliances connected on the same ring main and it benefits from excellent output.

	Red	Green	Blue
At start	636,16	518,86	451,69
After 1 hour	641,74	518,23	453,53
After 2h30	642,14	519,22	453,23

Table 1: Thermal drift of the colour LED wavelengths. Whilst blue and red only drift 1.54 and 0.99 nm respectively, red varies by 5.98 nm, which is a considerable change toward 'deep' reds.

DMX Value (decimal)	Color temperature (K)
005-009	2950
008 (???)	2510
010-014	3460
015-019	5110
020-024	7370
025-029	9030
030-034	18800
035...	Red...
050-054	3790 (white only)
055-059	17600
100-104	2790

TablE 2 : Pre-programmed 'white' range. The colour temperatures shown represent values measured by the spectrometer. The range also includes pure colours, which we obviously have not mentioned in this table.

CONCLUSION

Due to the quality and the quantity of light produced, the ICECOLOR 1000 proves to be a custom-built tool for architectural lighting and is also highly suited to the big stage and stadiums. The wealth of modes makes it adaptable to all outdoor lighting projects, from monochrome projections to single source colour shades or animated projections. Since the DMX network can be connected wirelessly, the restrictions are minimal. The ICECOLOR family is unquestionably destined to light up buildings in France and throughout the world!

We will
rock your nights.

icecolor 500

ICECOLOR 500 3G LED STATIC LUMINAIRE.

ICECOLOR 500 is a versatile LED projector which can be used indoors or outdoors. Including a built-in Wireless DMX receiver, it has been designed for the most demanding lighting designers and service providers. MONOCHROME or DUAL COLOUR CYCLORAMA LIGHTING, Downstage or Upstage lighting, MATRIX EFFECTS, blinding and strobe-light projection in white or colours... the only limitation is your imagination ! Contact us at : **contact@ayrton.eu**

AYRTON
Light in action

Le parc de l'Événement - 1, allée d'Effiat - F91160 Longjumeau - France • Tél.: 33 (0) 1 69 10 33 90 • **www.ayrton.eu**