

COBRA²

as unique as ever



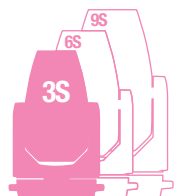
AYRTON

Digital Lighting

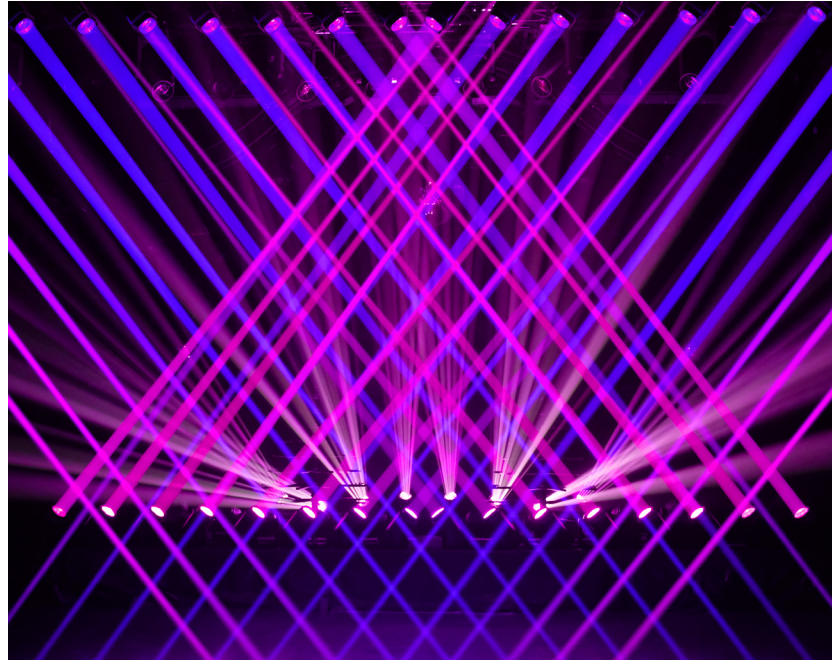


COBRA² as unique as ever

The biggest international concert tours have included AYRTON as an essential partner... And we are proud of it. This encourages us to constantly raise our quality and safety standards to meet the regulatory requirements of every country.



Our luminaires use state-of-the-art technology. They must demonstrate high reliability and outstanding performance in just about any situation. COBRA² is certified and compliant with US FDA CDRH laser product requirements. The product complies with the highest safety standards for laser sources. This luminaire incorporates several sensors that analyse the position of its moving head and the size of the beam in real time. An interface is used to determine the projection exclusion zones and take into account safety distances. The luminaires in the COBRA series are simply unique. Depending on your needs... on your concert tour and location, COBRA and COBRA² can cover all applications. The only differences between the two versions being the additional circuitry necessary for use in the USA and a new visual ID. Both luminaires can be used side by side.



Light Source	Lux at 20 m	Zoom aperture	Frontal Lens	Weight
260 W - 6500 K	386,000	0.6° to 23°	170 mm	30.7 kg



Our ultimate goal is to provide you with a unique visual experience

COBRA² pushes all the limits when it comes to beam definition, with native contrast never before achieved by a digital light source, an incredible beam angle of 0.6°, and an extreme range of focus which permits the beam shape to be adjusted according to the operating distance. COBRA² delivers a record luminous intensity of 1,544,000 lux at 10 meters. Fitted with a 170 mm frontal lens, the proprietary optical system uses 13 lenses, producing an unprecedented 38x zoom ratio and a zoom range of 0.6 to 23°.

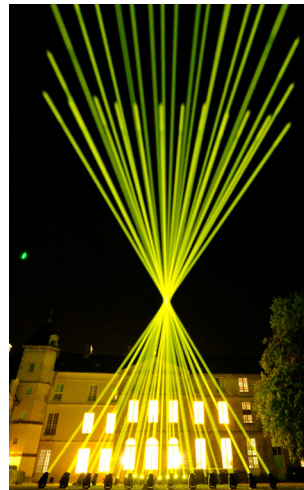
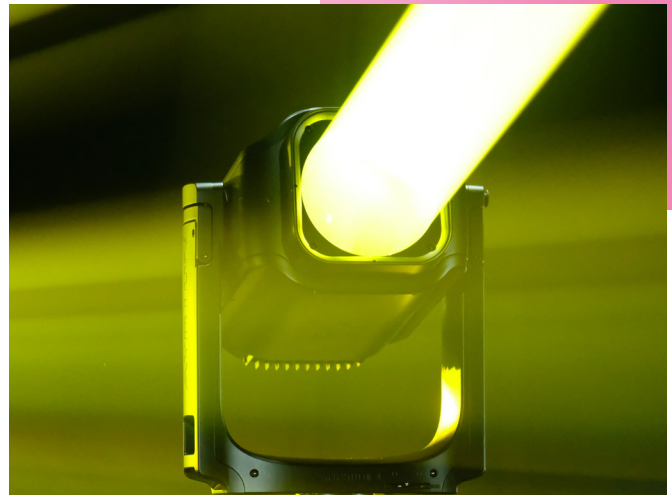




21 fixed colours

COBRA² is an infinite source of inspiration

Several years of development have gone into designing and finalising this exceptional luminaire, which offers a next generation speckle-free laser source, designed for rendering a D65 white point that allows perfect colour reproduction. COBRA² is provided with a highly innovative colour section including a CMY mixing system and a multi-position instant access wheel equipped with six corrective filters, 21 complementary colour filters, and a variable CTO on two concentric circles. COBRA² has unrivalled graphics capability, offering a wide choice of 92 fixed and rotating metal gobos distributed on two wheels specifically created to sculpt light in beam mode and incorporates an animation section on the gobo wheel.



1,544,000
Lux at
10 meters



COBRA² can cover all applications

The gobos can be blended with two sections of four individually combinable rotating prisms allowing you to produce a multitude of volumetric lighting effects. A light and heavy frost filter complete a graphic tool palette. The continuous rotation of the pan and tilt movement multiplies the possibilities for creating complex effects that will impress. COBRA² incorporates a cooling system adapted to the phosphor laser source.

IP65
Water-resistant





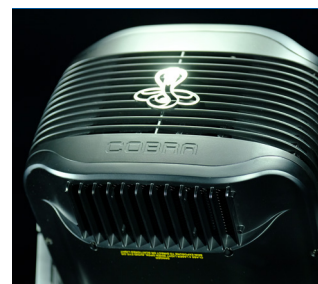
Unprecedented
38-times
zoom ratio
of 0.6 to 23°

In the endless pursuit of new graphic territory

Equally at home indoors or outdoors, the COBRA² is an IP65-rated floodlight designed specifically to withstand extreme conditions, including salty environments. It has a sunlight protection system and an integrated heating system that safeguards against temperatures below -10° C. With its new avant-garde design, COBRA² is an ergonomic machine that's easy to manage thanks to 4 highly integrated handles. By optimizing the thickness of aluminum parts, a significant weight reduction of 10% has been achieved. Complying with FDA certification requirements, COBRA² knows no frontiers.

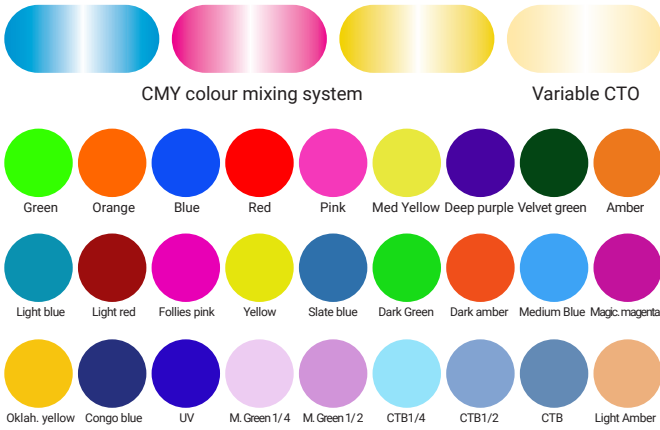


The COBRA²
delivers a D65
white point

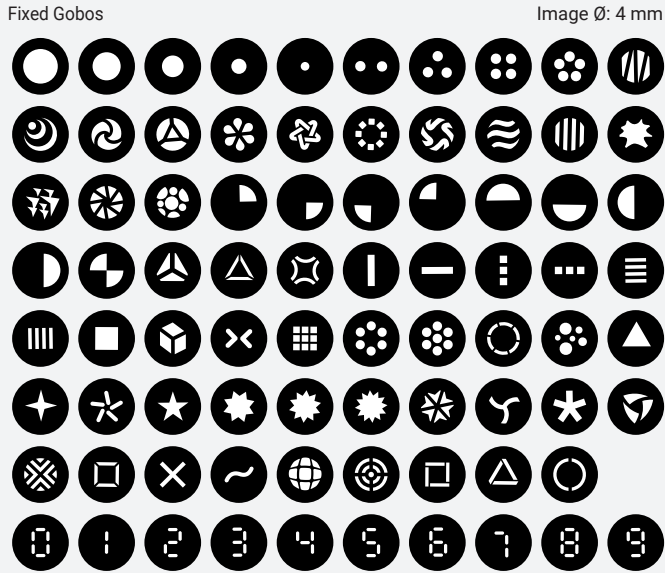




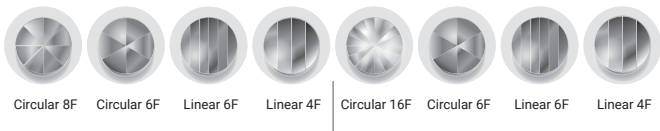
Colours



Gobos



Combinable prisms



Frost filters



Light

Heavy

Dimmer



0 to 100 %

Effects wheel

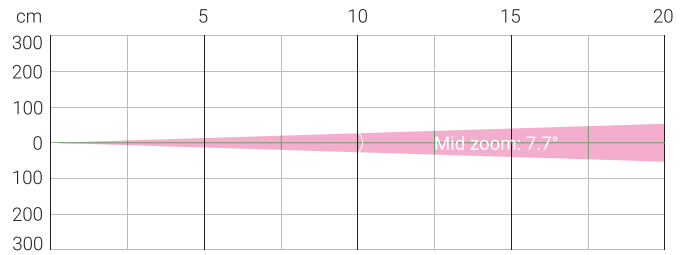


Monochromatic

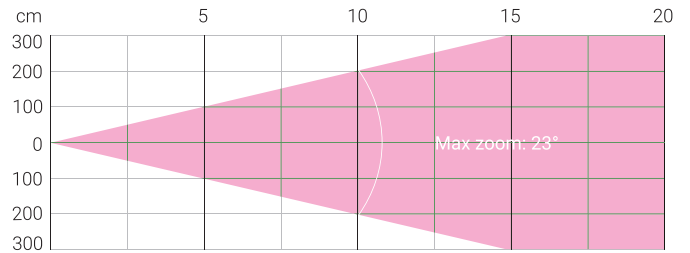
Photometry



Distance (m)	5		10		15		20	
Unit	lux	Ø	lux	Ø	lux	Ø	lux	Ø
White	6,176,000	0.05	1,544,000	0.1	686,222	0.16	386,000	0.21



Distance (m)	5		10		15		20	
Unit	lux	Ø	lux	Ø	lux	Ø	lux	Ø
White	61,496	0.67	15,374	1.35	6,833	2.02	3,843	2.69



Distance (m)	5		10		15		20	
Unit	lux	Ø	lux	Ø	lux	Ø	lux	Ø
White	3,843	2.03	1,691	4.07	752	6.1	752	8.14

Total Flux	8,620 lm Zoom at 128% (Photogoniometer)	
CCT LED Source	9000 (±500 K)	
CCT Luminaire	6500 (±500 K)	
Ra Luminaire	65 (Ra: 65±2)	
TLCI	36	
TM-30	Rf: 62 Rg: 86	

Fan Mode	Noise Level (dBA)	Flux (lm)
Auto Mode	44.6	8,620
Stage Mode	51.3	8,680
Silence Mode	38.9	6,920
Super Silence	33.8	4,690

Note: noise measured at 1m distance, static status, ambient 31dBA

OPTICS

- 13-element 38:1 zoom high-resolution optic system
- Beam aperture: 0.6° to 23°
- Fast motorised linear zoom
- Tempered anti-reflective coated lenses
- 170 mm frontal lens for greater performance

LIGHT SOURCE

- Luminous flux: 386,000 lux at 20 m
- Colour temperature output: 6500 K
- Rated life (L70): up to 12,000 hours
- Speckle-free source

MOVEMENT

- Highly accurate positioning
- Moving-head operated via either 8- or 16-bit resolution
- High-resolution stepper motors operated via microprocessors to ensure extreme accuracy and smooth movement
- Pan and tilt automatic repositioning
- Moving-head range: infinite pan and tilt rotation

COLOURS

- Sophisticated colour mix system providing CMY color mixing
- Fixed colour wheel with variable CTO, 6 colour temperature correction and 21 complementary colour filters

GOBOS

- One indexable rotating gobo wheels with 12 metal gobos, plus open position
- Adjustable-speed rotating gobo in both directions
- Fixed multiposition gobo wheel with instant access to 80 metal gobos
- Rotating gobo diameter: 6.9 mm
- Image diameter: 4.0 mm

FROST

- 2 frost filters: one light, one heavy

EFFECTS

- Monochromatic graphical animation effects wheel with continuous rotation in both directions
- 2 set of 4 combinable rotating and indexable prisms

DIMMER / STROBE

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

SOFTWARE FEATURES

- Local DMX addressing of luminaire and optional parameters through its built-in LCD control panel
- Remote DMX addressing of luminaire and optional parameters through a standard RDM DMX controller
- Information menu including hour counter, temperature, software version

HARDWARE FEATURES

- Graphic LCD display for addressing and special functions settings, with flip function
- 5 menu buttons to set functions
- Excess temperature protection
- Integrated wireless CRMx TIMo RDM receiver from LumenRadio
- IP65 XLR-5 pin male and female connectors for DMX connection
- IP65 RJ45 IN / OUT connectors for ArtNet connection
- IP65 powerCON TRUE1 TOP IN / OUT connectors for power connection

CONTROL

- DMX 512 protocol, through DMX cable or a wireless system
- DMX-RDM compatible
- Stand-alone mode and Master/Slave modes
- ArtNet & sACN protocol through Ethernet cable
- Local control panel, with IP65 LCD display
- Choice of 3 DMX modes (from 35 to 45 DMX channels)

POWER SUPPLY

- Electronic supply with active PFC
- 100 to 240 Volts – 50/60Hz
- Power: 480 W maximum

COOLING SYSTEM

- Advanced liquid cooling system
- Self-adjusting variable speed fans for quiet operation (Auto mode)
- Selectable ventilation user modes with a new Silent Mode
- Safety protection against excess temperature

HOUSING

- Moving-head skeleton made of aluminium and steel metal plates
- Base in die-cast aluminium
- Heatsinks in aluminium and copper
- Moulded covers in self-extinguishing fire retardant ABS PC (V0 class)
- Two-side handles for transportation
- Four heavy-duty feet for better stability
- IP65 protection rating
- Exterior finish: black (Carbon)

INSTALLATION

- Fastening bracket system: two Omega ¼ turn brackets designed for use with standard clamps
- Mounting points: four ¼ turn locking fittings allowing installation of Omega brackets on luminaire
- Safety cable attachment point

OPERATING PARAMETERS

- Operating positions: all (device on floor or fixed to a support)
- Maximum permitted ambient temperature (Ta max): 45° C (113° F)
- Minimum permitted ambient temperature (Ta min): -20° C (-4° F)
- Minimum usage distance: 25 m (82 ft)

COMPLIANCE

EU (EMC & LVD):

- EMC Directive 2014/30/EU
- LVD Directive 2014/35/EU

US (Safety & EMC):

- UL 1573
- FCC Part 15, Subpart B:2018
- FDA certified

SIZE

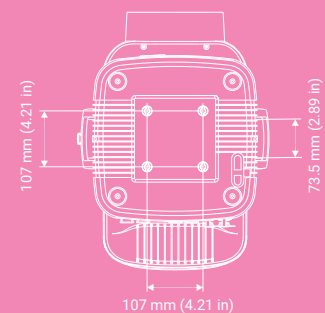
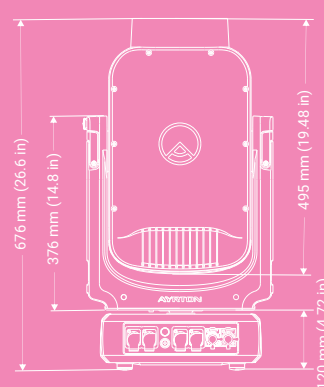
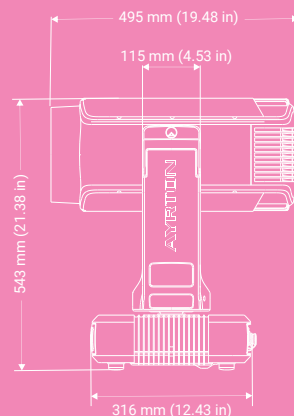
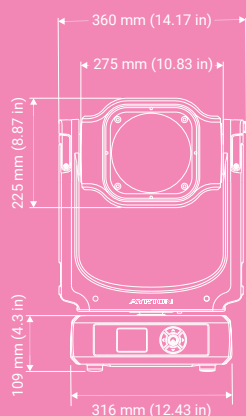
- Product: 360 x 676 x 316 mm (l x h x d)
- Flight-case foam: 485 x 565 x 560 mm (l x h x d)

WEIGHT

- Product: 30.7 kg

PRODUCT CODES

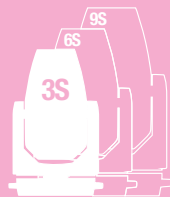
- 014175: COBRA² - LASER SOURCE IP65 3 SERIES





AYRTON

Digital Lighting



www.ayrton.eu

01.2024