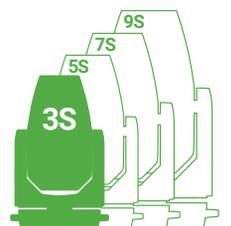# DIABLO

smaller is remarkably better

AYRTON
Digital Lighting

Diablo
smaller is remarkably better

Smaller please... If you think that anything is possible in the movies, but in real life it isn't because technology imposes its limits... you may be in for a surprise.

9S
7S
5S
3S

Ayrton introduces Diablo, a new profile luminaire in a compact format that absolutely defies belief.

Diablo, is a versatile, feature-rich 300 W profile luminaire based on the ultra-compact Mistral format.
The company has taken on the ambitious challenge of making Diablo the smallest, lightest and most efficient luminaire of its category. With a record output of 19,000 lumens and a total weight of 21.8 kg, Diablo is a powerhouse of technology that will tempt the most demanding lighting designers.

3 Series - Source	Lumens	Native CRI	Beam Aperture	Front Lens
300 W - 7000 K	**19,000**	**greater than 90**	**7° to 53°**	**119 mm**
Diablo-S	Diablo-S	Diablo-TC		

Sometimes smaller is remarkably better

To achieve its objective, Ayrton has miniaturised the framing system while maximizing the performance level. As in other profile luminaires of the product line, the framing section allows accurate positioning of its four shutter blades on a 100% surface area in all positions, so that the user can frame any object regardless of the luminaire's position. A new ultra-compact high-output 550 W power supply feeds eight additional motors in the framing system, fitting into the original Mistral format.
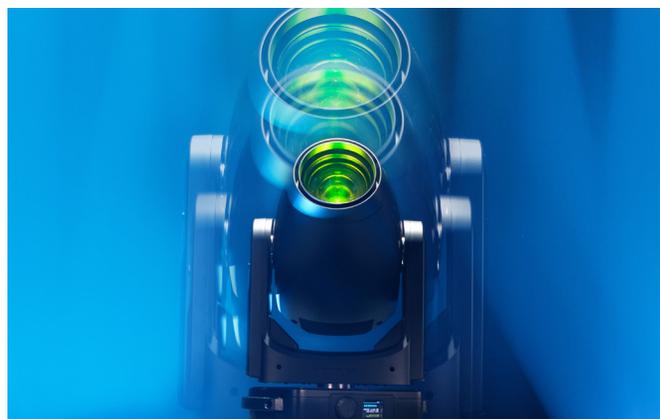
7.5:1 Zoom ratio

You think this is science fiction? Think again.

Diablo borrows the same 13-element proprietary optical system delivering an 7.5:1 zoom ratio with a zoom range of 7° to 53°. The 119 mm frontal lens can produce an extremely uniform flat beam that can render images perfectly in all conditions and at any beam angle.

If you think size matters, **just check the incredibly powerful output of Diablo**

## Diablo will amaze colour aficionados

Diablo is available in two versions: S and TC. Diablo-S, specially designed for stage applications, is equipped with a monochromatic LED light source that can generate extremely high output and metallic white light calibrated at 7000 K.

Diablo-TC is geared for applications that require perfect colour rendition, using a monochromatic light source with a native colour rendering index greater than 90 and high TM30 readings, at a colour temperature of 6000 K. Fully equipped at the factory, Diablo includes a CMY colour mixing system combined with a progressive CTO and a wheel with seven complementary colours that produces an infinite palette of bright pastels and saturated colours.

Ultra-compact format and it weighs only 21.8 kg
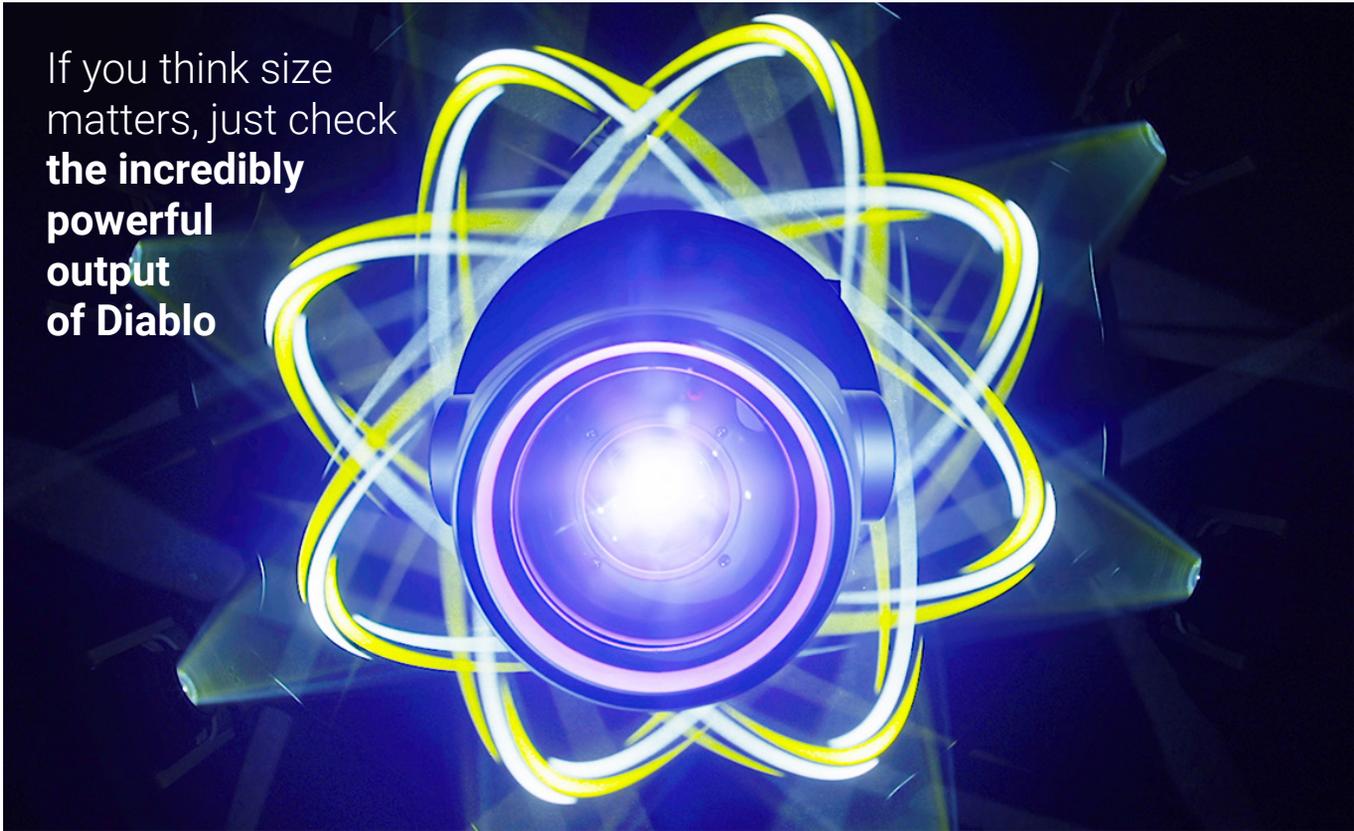
If you think size matters, just check **the incredibly powerful output of Diablo**

Diablo offers a power-to-weight ratio and versatility that were unimaginable until now

The effects section includes a wheel with seven interchangeable HD glass gobos, a continuous dynamic effects wheel, a 15-blade iris diaphragm, a light frost filter and a five-facet circular rotating prism. Diablo has a highly efficient phase-change liquid cooling system using a heat pipe that includes a particularly effective ultra-silent ventilation mode, perfect for stage and studio applications.

Ayrton Diablo wins ESTA Members Choice Award 2020 in the Equipment Category at this year's NAMM show in Anaheim, USA.

ESTA Members
Choice Award 2020

Colours

CMY colour mixing system

Variable CTO
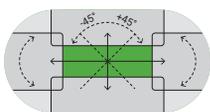

| 1/4 CTB | Magenta | Congo Blue | Green | Orange | Blue | Red |

Gobos

Gobos Ø 25.5 mm | Image Ø 20 mm

Rotating Gobos

Four optional gobos

| Framing system | Iris diaphragm | Frost filters |

100% surface area | 15% to 100% open | Light   Heavy (Option)

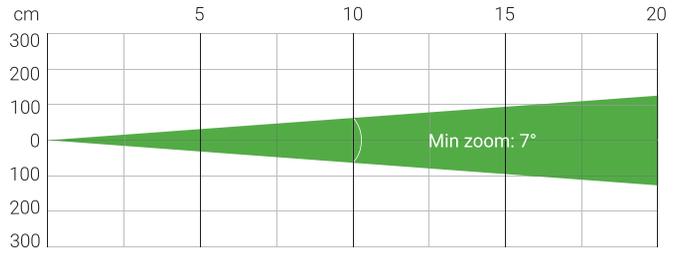Graphical animation effects wheel | Sparkle effect
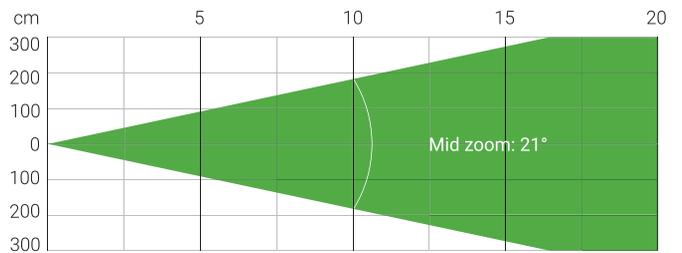

Circular prism | Dimmer | Strobe

0 to 100 % | 1 to 25 fl/sec.
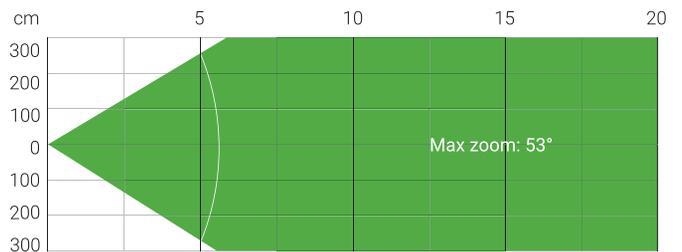
Photometry

Min zoom: 7°

Distance (m)	5		10		15		20	
Unit	lux	Ø	lux	Ø	lux	Ø	lux	Ø
Diablo-S	39,160	0.62	9,474	1.26	4,248	1.89	2,380	2.47
Diablo-TC	24,010		6,115		3,100		1,800	

Mid zoom: 21°

Distance (m)	5		10		15		20	
Unit	lux	Ø	lux	Ø	lux	Ø	lux	Ø
Diablo-S	14,000	1.83	3,619	3.60	1,300	5.33	600	7.20
Diablo-TC	4,569		1,244		660		382	

Max zoom: 53°

Distance (m)	5		10		15		20	
Unit	lux	Ø	lux	Ø	lux	Ø	lux	Ø
Diablo-S	1,188	4.99	350	9.98	169	14.97	98	19.96
Diablo-TC	850		280		132		75	

Version	Diablo-S	Diablo-TC
Total Flux (Integrating sphere)	19,400 lm (zoom at 90%)	13,500 lm (zoom at 90%)
CCT LED Source	8000 (±500 K)	7000 (±450 K)
CCT Luminaire	7000 (±500 K)	6000 (±450K)
Ra Luminaire	71 (Ra: >70)	90 (Ra: ±2)
TLCI	47	90
TM-30	Rf: 68.6 Rg: 93.2	Rf: 86.6 Rg: 94.8

Fan Mode (Noise Level)	Diablo-S	Diablo-TC
Auto Mode: 44.9 dBA	19,400 lm	13,500 lm
Silence Mode: 39.9 dBA	14,500 lm	11,800 lm
Stage Mode: 47.3 dBA	19,500 lm	13,900 lm
Studio Mode: 42.9 dBA	17,400 lm	12,200 lm

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

OPTICS
• 13-element 7.5:1 zoom high-resolution optic system aperture: 7° to 53°
• Fast motorised linear zoom
• Tempered anti-reflective coated lenses
• 119 mm frontal lens for greater performance

LIGHT SOURCE
DIABLO-S
• 26,500 lumens, 8000 K white-light engine
• Total luminaire output: up to 19,000 lumens
• Colour temperature output: 7000 K
• CRI: greater than 70

DIABLO-TC
• 20,500 lumens 7000 K white-light engine
• Total luminaire output: up to 14,000 lumens
• Colour temperature output: 6000 K
• CRI: greater than 90

DIABLO-S & DIABLO-TC
• Rated life (L70): up to 40,000 hours
• Flicker-free source management suitable for TV applications and all video-recorded events

MOVEMENT
• Extremely accurate positioning
• Moving-head operated with either 8- or 16-bit resolution
• High-resolution stepper motors operated via microprocessors to ensure extreme accuracy and smooth movement
• Pan and tilt with automatic repositioning
• Moving-head range: 540° (pan), 270° (tilt)

COLOURS
• Sophisticated colour mix system providing CMY colour mixing
• Variable CTO colour temperature correction
• Fixed colour wheel with seven complementary colours

GOBOS
• Indexable rotating gobo wheel with 7 high-precision glass gobos, plus open position
• Adjustable-speed rotating gobo in both directions
• Gobo diameter: 25.5 mm
• Image diameter: 20.0 mm
• Gobo thickness: 1.1 mm

FRAMING SYSTEM
• 4 individually positionable shutter blades
• Rotation of the framing system module: +/- 45°

IRIS DIAPHRAGM
• Fast iris diaphragm with adjustable dynamic effects
• Iris range: 15% to 100% open

FROST
• Light frost filter (Heavy frost filter in option)

EFFECTS
• Graphic animation effect-wheel with continuous rotation in both directions
• 5-facet circular indexable rotating prism
• Sparkle effect: dynamic animation effect with speed and fade adjustment

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 FEATURES
• Local DMX addressing of luminaire and optional parameters through a 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
• Clicking jog wheel to set functions
• Excess-temperature protection
• Integrated wireless CRMX TiMo™ RDM receiver from LumenRadio™
• XLR 5-pin male and female connectors for DMX connection
• powerCON TRUE1 male and female 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
• Local control panel, with LCD display
• Choice of 3 DMX modes (from 34 to 56 DMX channels)

POWER SUPPLY
• Electronic supply with active PFC
• 100 to 240 Volts – 50/60 Hz
• Power: 550 W maximum

COOLING SYSTEM
• Advanced liquid cooling system
• Self-adjusting variable speed fans for quiet operation (Auto mode)
• Selectable ventilation user modes including a new Silent Mode
• Safety protection against temperatures excesses

HOUSING
• Moving-head skeleton made of aluminium and steel metal plates
• Base in die-cast aluminium
• Aluminium and copper heatsinks
• Moulded covers in self-extinguishing fire retardant ABS PC (V0 class)
• Two-side handles for transportation
• Four heavy-duty feet for better stability
• IP20 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 (on floor or fixed to a support)
• Maximum permitted ambient temperature (Ta max): 45 °C (113 °F)
• Minimum permitted ambient temperature (Ta min): -10 °C (14 °F)
• Minimum usage distance: 1.5 m (4.92 ft)

COMPLIANCE
EU (EMC & LVD):
• EMC Directive 2014/30/EU
• LVD Directive 2014/35/EU

US (SAFETY & EMC):
• UL 1573
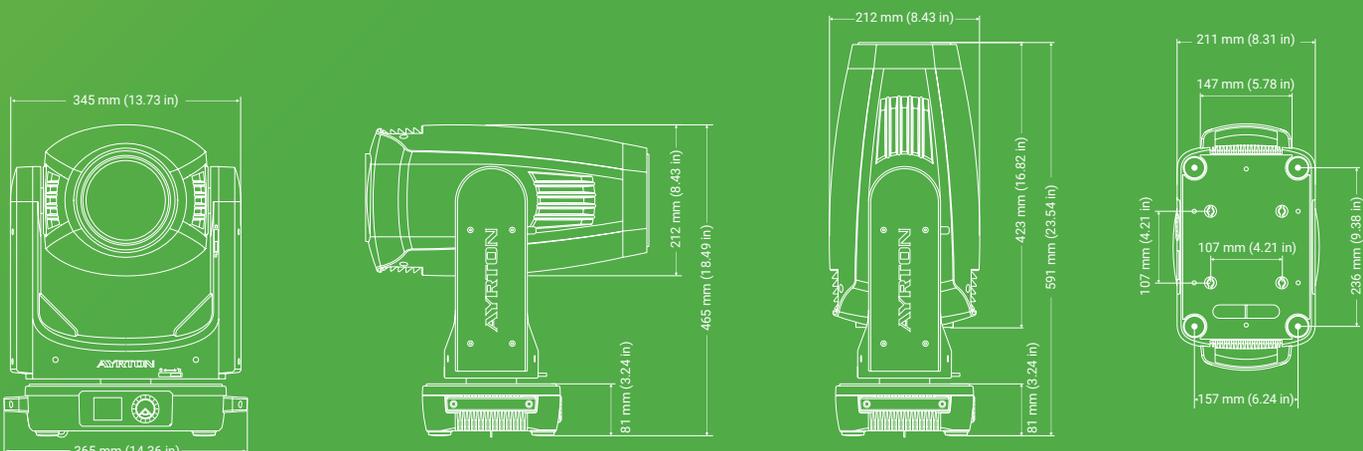• FCC Part 15, Subpart B: 2018

SIZE
• Product: 365 x 591 x 212 mm (l x h x d)
• Flight-case foam: 430 x 660 x 280 mm (l x h x d)
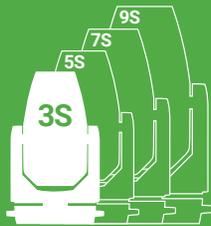
WEIGHT
• Product: 21.8 kg

PRODUCT CODES
• 011340: DIABLO-S – CLASSICAL 3 SERIES
• 011350: DIABLO-TC – CLASSICAL 3 SERIES

345 mm (13.73 in)

365 mm (14.36 in)

212 mm (8.43 in)

465 mm (18.49 in)

81 mm (3.24 in)

212 mm (8.43 in)

423 mm (16.82 in)

591 mm (23.54 in)

81 mm (3.24 in)

211 mm (8.31 in)

147 mm (5.78 in)

107 mm (4.21 in)

107 mm (4.21 in)

236 mm (9.38 in)

157 mm (6.24 in)

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