

ERA 700 Performance IP

680W IP65+ LED-BASED PROFILE WITH FULL CURTAIN FRAMING AND CMYC COLOR MIXING

SPEC SHEET



Martin Professional's ERA 700 Performance IP delivers greater immersive lightshows while withstanding extreme environmental conditions in permanent outdoor archtainment settings. It includes a CMYC color mixing system, full curtain framing system, dual gobo wheels, dual prisms, dual frost, animation and new gobo selections. Its compact design boasts 26,000 lumens of output and incorporates an anti-tamper box, securing against unauthorized power and data access while simultaneously increasing the fixture rating to IP66. This makes it a reliable workhorse for many archtainment applications. Supporting Art-Net and sACN, it also offers seamless integration and features fail-safe bypass technology ensuring uninterrupted operation and data passthrough.

KEY MESSAGES

COMPREHENSIVE TOOLKIT AND NEW GOBO DESIGNS

CMYC color mixing, dual gobo wheels, dual prisms, dual frost, new gobos, animation and a full curtain framing system offer the lighting designer a full toolkit to turn heads in any application. New gobo designs ensure that rock and roll to theatrical and archtainment applications are all capably supported.

ANTI-TAMPER BOX FOR SECURITY AND ADDED OUTDOOR PROTECTION

Prevents someone from removing power/data from the fixture in more public environments while also enhancing environmental protection around power/data connectors and increasing the ingress protection rating to IP66.

ALL-WEATHER AND C5M ENVIRONMENTAL PROTECTION PLUS ACTIVE HUMIDITY CONTROL

With an IP66 outdoor rating, this fixture can be used outdoors and can withstand extreme environmental conditions including rain, snow, heat, and dust over long periods of time. C5M marine-grade salinity protection ensures protection in increased saline environments. The active humidity and heating control system monitors humidity levels inside the fixture to ensure the optical system is working optimally and protected from moisture and condensation.

EASE OF SERVICE AND EASY ACCESS

A clever gasket design and innovations borrowed from Martin Exterior products enable easy access to gobo changes and serviceable items without the use of specialized tools and without damaging the IP protection.

NETWORKING WITH FAIL-SAFE BYPASS

New for the ERA family, support for Art-Net and sACN capability enables seamless integration into lighting systems with fail-safe bypass technology, ensuring uninterrupted operation and data passthrough, even in the event of a fixture failure to ensure non-interruption of the network stream.

IDEAL WEIGHT AND SIZE PLUS SEAMLESS AESTHETICS

Rental/touring and installation applications require IP66 fixtures to be lighter and more compact, and the ERA 700 Performance IP comes in below 40kg and measures just 759mm in height. Available in white (and black), the ERA 700 Performance IP blends seamlessly in many outdoor installations, including theme parks and cruise ships.

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FEATURES

- All weather protection
- C5M environmental protection
- Anti-tamper system for power & data
- Active humidity control system
- New gobo design toolbox supporting wider application use
- Ease of service
- IP65+ (Fixture body IP66 with anti-tamper system installed)
- 26,000 lumen Output via 680W 7,000K light engine (6,500K out of fixture)
- CMYC Color Mixing system
- Zoom 5.4 to 44
- 1 x Rotating Gobo Wheel 7 all new designs
- 1 x Static Gobo Wheel 8 all new designs
- 1 x Animation wheel (new design)
- Color Wheel with Spectral Enhancement filter pre-installed (CRI 90)
- Full curtain framing system
- 2 x Prism (Linear and circular)
- 2 x Frost (heavy and medium)
- Iris
- DMX/RDM and Art-Net/sACN via network with bypass
- Available in Black and White as standard

ORDERING INFORMATION

- Martin ERA 700 Performance IP in cardboard box P/N MAR-90290010
- Martin ERA 700 Performance IP White in cardboard box P/N MAR-90290015
- Flightcase, two unit, for 2 x ERA 700 Performance IP P/N MAR-91515059

INCLUDED ITEMS

- Two omega brackets with 1/4 turn fasteners for rigging clamp attachment 2 x P/N 91602001
- Anti-Tamper Environmental Protection Box

RELATED ITEMS

- Martin Companion Software Suite (including firmware uploader) Free download from www.martin.com
- Martin Companion Cable USB/DMX hardware interface P/N 91616091



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ACCESSORIES

POWER INPUT CABLES

- Power Input Cable, H07RN-F, 2.5 mm², 14 AWG, bare ends to TRUE1 NAC3FX-W (female), 1.5 m (4.9 ft.) P/N 91611797
- Power Input Cable, H07RN-F, 2.5 mm², 14 AWG, bare ends to TRUE1 NAC3FX-W (female), 5 m (16.4 ft.) P/N 91611786
- Power Input Cable, SJ00W, 12 AWG, bare ends to TRUE1 NAC3FX-W (female), 1.5 m (4.9 ft.) P/N 91610173
- Power Input Cable, SJ00W, 12 AWG, bare ends to TRUE1 NAC3FX-W (female), 5 m (16.4 ft.) P/N 91610174

POWER CONNECTORS

- Cable Connector, Neutrik powerCON TRUE1 NAC3FX-W TOP (female) P/N 91611789HU

INSTALLATION HARDWARE

- G-clamp (suspension with fixture hanging vertically downwards only) P/N 91602003
- Half-coupler Clamp P/N 91602005
- Quick Trigger Clamp (suspension with fixture hanging vertically downwards only) P/N 91602007
- Safety Cable, SWL 60 kg, BGV C1 / DGUV 17, black P/N 91604006
- Safety Cable, SWL 60 kg, BGV C1 / DGUV 17, silver P/N 91604007
- T-shape omega bracket with 1/4 turn PN 91602008



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TECHNICAL SPECIFICATIONS

DYNAMIC EFFECTS

Color mixing	CMY, independently variable 0-100%
Color wheel	7 color filters plus open (incl. Spectral Enhancement Filter)
Gobo animation	Animation wheel, indexing, continuous rotation with variable speed and direction, shake (flow)
Rotating gobo wheel	7 gobos plus open, wheel rotation, gobo rotation, indexing and shake
Static gobo wheel	8 gobos plus open, wheel indexing, rotation and shake
Iris	0-100%
Framing	Rotatable framing module, +/-60°, with 4 individually controllable full framing blades with variable angle and position.
Prism	2 rotating/indexing prisms (4-facet circular prism and 6-facet linear)
Frost	Soft frost effect and heavy frost effect
Color temperature control	Variable 6,500 - 2,700 K
Electronic dimming	0 - 100%, four dimming curve options
Electronic shutter effect	Strobe effect, pulse effects, instant open and blackout
Zoom	Motorized
Pan	540°, coarse & fine control and speed
Tilt	270°, coarse & fine control and speed
Focus	Motorized

CONTROL AND PROGRAMMING

Control options	DMX, RDM, Art-Net, sACN
Protocol detection	Automatic
DMX channels	Basic 42 Extended 54
16-bit control	Dimming, CMY, CTO, Zoom, Focus, Framing, Gobo Rotation/Indexing, Pan and Tilt
Setting and addressing	Control panel with backlit LCD display and battery powered operation
DMX compliance	USITT DMX512/1990
RDM compliance	ANSI/ESTA E1.20
Art-Net Compliance	Art-Net 1, 2, 3 and 4; including RDM over Art-Net
sACN Compliance	ANSI E1.31 - 2016
Transceiver	Opto-isolated RS-485

OPTICS

Front lens diameter	120 mm (4.75 in.)
Zoom range	5.4 to 44 (1:8)
Light source	680 W LED engine
Minimum LED lifetime	20,000 hours (to >70% luminous output)*
Binning	Tight color and flux binning

*Manufacturer's figure obtained under manufacturer's test conditions

PHOTOMETRIC DATA

Light engine luminous output	41,600 lumens
LED refresh rate	3,600 Hz

PHOTOMETRIC DATA STANDARD (AWAITING FINAL LAB TEST RESULTS)

Fixture luminous output	26,000 lumens
CRI (Color Rendering Index)	70
CQS (Color Quality Scale)	68
TM-30 Rf (IES TM-30-15 Fidelity Index)	71
TM-30 Rg (IES TM-30-15 Gamut Index)	94
TLCI (Television Lighting Consistency Index)	46
CCT	6,500 K (+/- 350 K)
Peak Luminous Intensity	1393059 Cd (narrow)

PHOTOMETRIC DATA WITH SPECTRAL ENHANCEMENT FILTER (AWAITING FINAL LAB TEST RESULTS)

Fixture luminous output	16,420
CRI (Color Rendering Index)	90
CQS (Color Quality Scale)	88
TM-30 Rf (IES TM-30-15 Fidelity Index)	87
TM-30 Rg (IES TM-30-15 Gamut Index)	106
TLCI (Television Lighting Consistency Index)	73
CCT	6,400 K (+/- 250 K)
Peak Luminous Intensity	TBA

* All Photometric Data measured in steady state (30 minutes warm-up time) at 25°C ambient.

CONSTRUCTION

Housing	Recyclable high-impact flame-retardant thermoplastic and cast aluminum
Color	Black & White
Protection rating	IP 65 (IP 66 with anti-tamper box installed)
Corrosion resistance	C5-M (very high corrosivity / marine, ISO 12944)

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TECHNICAL SPECIFICATIONS

GOBOS

Maximum image diameter	19 mm (0.75 in.)
Gobo material	Borofloat 33
External diameter	23.0 mm +0 / -0.2 mm (0.906 in. +0 / -0.008 in.)
Maximum gobo thickness	1.1 mm (0.04 in.)
Coating	Speciality coating, including CT correction

INSTALLATION

Mounting points	2 pairs of 1/4-turn points for 106 mm (4.17 in.) center-to-center omega brackets
Location	Wet locations, must be fastened to surface or structure
Orientation	Any
Minimum distance to combustible materials	0.2 m (8 in.)
Minimum distance to illuminated surfaces	2.0 m (6.6 ft.)

CONNECTIONS

DMX and RDM data in/out	5-pin locking XLR
AC mains power input	TRUE1 compatible socket, accepts TRUE1 NAC3FX-W (TOP) connector
Ethernet Art-Net, sACN in/out, including fail-safe bypass	Neutrik etherCON

ELECTRICAL

AC power	100-240 V AC nominal, 50/60 Hz
Power supply unit	Auto-ranging electronic switch mode
Typical half-cycle RMS inrush current at 230 V, 50 Hz	14A
Max leakage current	0.43 mA
Power Factor	0.97 @ 100 V / 120 V / 230 V / 240 V
Typical current draw	11.1 A @ 100 V / 120 V 3.7 A @ 200 V / 230 V / 240 V *

POWER CONSUMPTION

Maximum	990 W
Typical	856 W *
Idle	114 W
Hibernation	19 W

* Measurements made at nominal voltage. Allow for a deviation of +/- 10%.

Typical: full output white, no effects moving, regulated fan speed.

Idle: no output, no effects moving, regulated fan speed.

Hibernation: no output, motors de-energized, fans stopped, wake-up procedure to re-use fixture.

THERMAL

Cooling	Forced air (temperature regulated, low noise)
Maximum ambient temperature (Ta max.)	40° C
Minimum ambient temperature (Ta min.)	-20° C
Maximum surface temperature, steady state, at 40° C ambient	75° C (167° F)
Total heat dissipation (calculated, +/- 10%)	3375 BTU/hr.

ACOUSTIC DATA

Sound Pressure Level (LpA) @ 1 m (default regulated fan mode, full output)	44.3 dB(A)
Sound Pressure Level (LpA) @ 1 m (constant fan mode ultra low)	38.3 dB(A)

ENVIRONMENTAL

RoHS	Compliant
REACH	Compliant
WEEE	Compliant
Proposition 65	Compliant
Efficacy (max output)	29.6 Lm/Watt
LWR*	655 Lm/Kg

*LWR = Lumen-to-Weight Ratio

APPROVALS

Global CB Certification/IECEE	IEC 60598-2-17 (IEC 60598-1)
EU safety	EN 60598-2-17 (EN 60598-1), EN 62471, EN 62493
EU EMC	EN 55015; EN 55032; EN 55035; EN 61000-3-2,-3; EN 61547
US safety	UL 1573
US EMC	FCC Part 15 Class B
Canadian safety	CSA C22.2 No. 166
Canadian EMC	ICES-003 Class B, ICES-005 Class B
Australia/NZ	RCM



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DIMENSIONS

PHYSICAL

- Length (head): 542 mm (21.3 in.)
- Length (base):..... 436 mm (17.1 in.)
- Width (base):..... 314 mm (12.3 in.)
- Width (across yoke): 450 mm (17.7 in.)
- Height (head straight up): 759 mm (29.8 in)
- Height (maximum):..... 767 mm (30.2 in)
- Weight 39.7 kg (87.3 lbs.)

MEASUREMENTS SHOWN IN MM

