

# 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](http://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<br>(incl. Spectral Enhancement Filter)                                                                  |
| Gobo animation .....            | Animation wheel, indexing, continuous<br>rotation with variable speed<br>and direction, shake (flow)                              |
| Rotating gobo wheel.....        | 7 gobos plus open, wheel rotation,<br>gobo rotation, indexing and shake                                                           |
| Static gobo wheel .....         | 8 gobos plus open, wheel indexing,<br>rotation and shake                                                                          |
| Iris .....                      | 0-100%                                                                                                                            |
| Framing .....                   | Rotatable framing module, +/-60°,<br>with 4 individually controllable full<br>framing blades with variable angle<br>and position. |
| Prism .....                     | 2 rotating/indexing prisms<br>(4-facet circular prism and<br>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,<br>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,<br>Framing, Gobo Rotation/Indexing,<br>Pan and Tilt |
| Setting and addressing..... | Control panel with backlit LCD display<br>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<br>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<br>(IES TM-30-15 Fidelity Index) .....       | 71                  |
| TM-30 Rg<br>(IES TM-30-15 Gamut Index) .....          | 94                  |
| TLCI (Television Lighting<br>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<br>(IES TM-30-15 Fidelity Index) .....       | 87                  |
| TM-30 Rg<br>(IES TM-30-15 Gamut Index) .....          | 106                 |
| TLCI (Television Lighting<br>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-<br>retardant thermoplastic and<br>cast aluminum |
| Color.....                 | Black & White                                                                 |
| Protection rating .....    | IP 65 (IP 66 with anti-tamper<br>box installed)                               |
| Corrosion resistance ..... | C5-M (very high corrosivity /<br>marine, ISO 12944)                           |

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### GOBOS

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

### INSTALLATION

|                                              |                                                                                        |
|----------------------------------------------|----------------------------------------------------------------------------------------|
| Mounting points                              | 2 pairs of 1/4-turn points for 106 mm<br>(4.17 in.) center-to-center omega<br>brackets |
| Location                                     | Wet locations, must be fastened<br>to surface or structure                             |
| Orientation                                  | Any                                                                                    |
| Minimum distance to<br>combustible materials | 0.2 m (8 in.)                                                                          |
| Minimum distance to<br>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<br>TRUE1 NAC3FX-W (TOP) connector |
| Ethernet Art-Net, sACN in/out,<br>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<br>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<br>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<br>regulated, low noise) |
| Maximum ambient<br>temperature (Ta max.)                       | 40° C                                            |
| Minimum ambient<br>temperature (Ta min.)                       | -20° C                                           |
| Maximum surface temperature,<br>steady state, at 40° C ambient | 75° C (167° F)                                   |
| Total heat dissipation<br>(calculated, +/- 10%)                | 3375 BTU/hr.                                     |

### ACOUSTIC DATA

|                                                                               |            |
|-------------------------------------------------------------------------------|------------|
| Sound Pressure Level (LpA) @ 1 m (default<br>regulated fan mode, full output) | 44.3 dB(A) |
| Sound Pressure Level (LpA) @ 1 m (constant<br>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),<br>EN 62471, EN 62493           |
| EU EMC                        | EN 55015; EN 55032; EN 55035;<br>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

