

# MAC ENCORE™ PERFORMANCE

3000 K WARM LED MOVING HEAD | 6000 K COLD LED MOVING HEAD

SPEC SHEET

## The new, whisper-silent benchmark in performance lighting

MAC Encore Performance integrates cutting-edge LED technology with a proprietary and innovative light engine carefully engineered to generate pristine, full spectrum light with ultra-high color rendition. The feature-packed moving head comes in two dedicated color temperature variants: MAC Encore Performance WRM for unparalleled, 3000 K warm incandescent emulation and MAC Encore Performance CLD for crisp, 6000 K neutral daylight, all housed in a cleverly cooled and packed optical design.

## Unparalleled light quality

Full-featured, next-generation LED moving head that delivers light quality and consistent performance levels never before seen in an LED based stage lighting unit.

## Super silent

Stealth cooling and silent effects operation make this the quietest moving head of its class.

## Best size/weight/performance ratio

Lightest-in-class, completely redesigned frame with truck-friendly dimensions offers fast rigging and cost-effective transportation.



## KEY MESSAGES

### NEW LED TECHNOLOGY

MAC Encore Performance is designed for real life applications, and the 3000 K WRM version is the first LED engine to present a true challenge to the output quality of incandescent fixtures. The pure white 3000 K CCT (WRM) and 6000 K CCT (CLD) offer the most comprehensive spectrum available to date in a white light, LED source, moving head. High CRI, TM-30 and R9 values, ensure that skin tones, costumes, set pieces and more will render their true colors naturally in live productions and flicker-free on camera due to fast LED refresh rates that are compatible with TV and film camera shutter speeds.

### WHISPER-SILENT

MAC Encore Performance will make an immediate impression on you by what's not there; it is the most silent, hard edge moving head we've ever

built. All motorized effects operations—cooling fans, framing shutters, iris, zoom, pan and tilt—are engineered for applications where strict noise levels are a necessity. Even while running at maximum operation mode, MAC Encore Performance is still a stealth operator.

### STURDY, LIGHTWEIGHT DESIGN

With its best-in-class compact design and premium build-quality, MAC Encore Performance lives up to Martin's tour-proven standards. Its slick form factor offers the highest lumen per kg/lb ratio of its class. Combined, you get the lightest and finest fixture on the market (31 kg/68 lbs.) for applications where ultimate light quality is key and where truck, rig and warehouse space are limited.

HARMAN PROFESSIONAL DENMARK APS • OLOF PALMES ALLÉ 18 • 8200 AARHUS N • DENMARK  
HARMAN PROFESSIONAL SOLUTIONS U.S. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA

©2017 HARMAN Professional Denmark ApS. All rights reserved. Martin is a registered trademark of HARMAN Professional Denmark ApS registered in the United States and/or other countries. Features, specifications, and appearance are subject to change without notice.

**Martin**  
by HARMAN

# MAC ENCORE™ PERFORMANCE

3000 K WARM LED MOVING HEAD | 6000 K COLD LED MOVING HEAD

SPEC SHEET

## FEATURES

- Pure white LED engine with 3000 K CCT (WRM fixture variant).
- Pure white LED engine with 6000 K CCT (CLD fixture variant).
- A flat field without color temperature variation during zoom and dimming.
- Flicker-free operation—LED driver frequency suitable for all camera applications.
- Ultra-low noise—Combines convection and forced air cooling with user-selectable output vs. sound level control.
- Fully electronic dimmer/shutter control with various dimming curves and tungsten red-shift emulation.
- Vibrant CMY color mixing with a superior palette of colors ranging from rich, saturated primary colors to light and smooth pastel shades.
- Variable CTB—tungsten to daylight CCT control and expansion of the CMY palette that stays true to the black body curve (WRM fixture variant).
- Variable CTO—daylight to tungsten CCT control and expansion of the CMY palette that stays true to the black body curve (CLD fixture variant).
- Color wheel—6 interchangeable dichroic filters + open.
- 1:4 zoom—precise and fast, silent zoom with auto-linked focus.
- Four framing shutter blades with individual +/- 30° adjustment and entire system rotation of +/- 55° allow for high-precision cue repeats.
- Five rotating glass gobos with next to zero focal separation from the framing system.
- Animation wheel with continuous multi-directional rotation and indexing with variable angle, speed and direction.
- Animation™ FX System—internal dimming effect macros for stunning 3D mid-air and projection effects.
- Precise and tight iris with adjustable dynamic effects.
- Soft frost—a light frost that leaves gobo artwork and framed images visible with a beautiful soft edge.
- Heavy frost also available as an optional accessory.
- Super precise and silent pan/tilt movement and positioning due to 3-phase stepper motor technology and absolute position monitoring.
- Compact size—L: 452 mm x W: 480 mm x H: 733 mm (L: 17.8 in x W: 18.9 in x H: 28.9 in).
- Low weight—31 kg/68 lbs.
- Foam rubber (SiP) flight case insert for secure shipment.

## ORDERING INFORMATION

- MAC Encore Performance CLD / EPS packaging 90234000
- MAC Encore Performance CLD / SIP packaging 90234005
- MAC Encore Performance WRM / EPS packaging 90234015
- MAC Encore Performance WRM / SIP packaging 90234016

## OPTIONAL ACCESSORIES

- Dual-fixture flight case (please order SIP variant fixtures to obtain the required SIP foam flightcase inserts)
- Followspot handles.
- Gel frame to be mounted onto front lens.
- Heavy frost assembly (interchangeable with standard frost).
- Static gobo wheel (interchangeable with animation wheel).



HARMAN PROFESSIONAL DENMARK APS • OLOF PALMES ALLÉ 18 • 8200 AARHUS N • DENMARK  
HARMAN PROFESSIONAL SOLUTIONS U.S. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA

©2017 HARMAN Professional Denmark ApS. All rights reserved. Martin is a registered trademark of HARMAN Professional Denmark ApS registered in the United States and/or other countries. Features, specifications, and appearance are subject to change without notice.

**Martin**  
by HARMAN

# MAC ENCORE™ PERFORMANCE

3000 K WARM LED MOVING HEAD | 6000 K COLD LED MOVING HEAD

SPEC SHEET

## TECHNICAL SPECIFICATIONS

### DYNAMIC EFFECTS

Color mixing	CMY, independently variable 0 - 100%
Color temperature control, CLD variant	Variable 2700 - 6000 K
Color temperature control, WRM variant	Variable 3000 - 7000 K
Color wheel	6 interchangeable dichroic filters + open, indexing, continuous rotation, random color
Rotating gobo wheel	5 interchangeable texture/breakup gobos + open, indexing, continuous rotation and shake
Gobo animation	Interchangeable animation wheel, indexing, continuous rotation with variable speed and direction
Framing	Rotatable framing, +/- 55°, 4 individually controllable blades with variable angle and position
Iris	Variable 0 - 100%
Frost	Variable 0 - 100%
Dimmer/shutter	0 - 100% continuous dimming, regular and random strobe and pulse effects, instant open and blackout
Dimming options	Choice of four dimming curves
Pre-programmed effects	Two ranges of FX, independent or synchronized/combined
Focus	Range varies with zoom angle, from approx. 2 m (6.6 ft.) / 6 m (19.7 ft.) to infinity
Zoom	12° - 48°
Pan	540°
Tilt	268°
Position correction system	Absolute position monitoring

### CONTROL AND PROGRAMMING

DMX channels	38
Setting and addressing	Control panel with backlit graphic display and jog wheel or via DMX
16-bit control	Dimming, rotating gobos, zoom, focus, pan and tilt
Movement control options	Tracking and vector
Fixture identification	User-settable ID number
DMX compliance	USITT DMX512-A
RDM compliance	ANSI/ESTA E1.20
Transceiver	RS-485
Receiver	Opto-isolated RS-485
Fixture software update	USB memory device or over DMX link

### THERMAL

Cooling	Combined convection and forced air (temperature-regulated, low noise, user-definable levels)
Max surface temperature, steady state, at Ta 40° C	75° C (167° F)
Max ambient temperature (Ta max)	40° C (104° F)
Min ambient temperature (Ta min)	5° C (41° F)
Total heat dissipation (calculated, +/- 10%)	2000 BTU/hr.

### PHOTOMETRICS

	WRM	CLD
Light source	3000 K white LEDs	6000 K white LEDs
Total LED engine power	468 W	468 W
Fixture lumen output	9.2 klm	11.6 klm
Light engine lumen output	≥ 31.5 klm	≥ 39.4 klm
CRI	90+	80+
CQS	90+	80+
TM30 Rf	90+	80+
TM30 Rg	98+	95+
TLCI	90+	70+
Minimum LED lifetime	50 000 hours / to >80% luminous output (Figure obtained under manufacturer's test conditions)	

### CONSTRUCTION

Color	Black
Housing	High-impact flame-retardant thermoplastic
Protection rating	IP20

### INSTALLATION

Mounting points	4 pairs of 1/4-turn locks
Location	Dry location only, must be fastened to surface or structure
Orientation	Any
Min distance to combustible materials	0.2 m (8 in.)
Min distance to illuminated surfaces	2.0 m (6.6 ft.)

### CONNECTIONS

AC power input	Neutrik TRUE1 socket (accepts Neutrik TRUE1 NAC3FX-W connector)
DMX and RDM data in/out	5-pin locking XLR

### ELECTRICAL

AC power	120-240 V nominal, 50/60 Hz
Power supply unit	Auto-ranging electronic switch mode
Power consumption, all effects static, zero light output	.64 W
Half-cycle RMS inrush current at 230 V, 50 Hz	10.3 A

### TYPICAL POWER AND CURRENT

120 V, 60 Hz	5.0 A, 596 W, Power Factor 0.998
208 V, 60 Hz	2.9 A, 581 W, Power Factor 0.988
230 V, 50 Hz	2.6 A, 580 W, Power Factor 0.981
240 V, 50 Hz	2.2 A, 585 W, Power Factor 0.979

Figures are typical, not maximum. Measurements made at nominal voltage with all LEDs at full intensity. Allow for a deviation of +/- 10%.

# MAC ENCORE™ PERFORMANCE

3000 K WARM LED MOVING HEAD | 6000 K COLD LED MOVING HEAD

SPEC SHEET

## DIMENSIONS

- Length ..... 452 mm (17.8 in.)
- Width (across yoke) ..... 480 mm (18.9 in.)
- Height (maximum) ..... 733 mm (28.9 in.)
- Height (head straight up) ..... 724 mm (28.6 in.)
- Minimum center-to-center distance  
in side-by-side installation ..... 700 mm (27.6 in.)
- Weight ..... 31 kg (68.4 lbs.)

