3,000 K WARM LED MOVING HEAD | 6,000 K COLD LED MOVING HEAD

SPEC SHEET

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

Designed to produce rich color and premium white light in a wide variety of applications where light quality is critical, the MAC Encore Wash is available in two dedicated color temperature variants: WRM for unparalleled, 3,000 K warm incandescent emulation and CLD for crisp, 6,000 K neutral daylight, all housed in a cleverly cooled and packed optical design. The WRM variant is a perfect replacement for the much-loved, discontinued MAC TW1, and the CLD variant is an LED-based alternative to the MAC Viper Wash DX. Both variants can also be used as modern replacements for generic fixtures like tungsten or HMI based Fresnel fixtures, with the additional benefit of color mixing and movement.

# **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 costeffective transportation.



# **KEY MESSAGES**

#### **NEW LED TECHNOLOGY**

MAC Encore Wash is designed for real life applications, and the 3,000 K WRM version, first introduced in MAC Encore Performance, presents a true challenge to the output quality of incandescent fixtures. The pure white 3,000 K CCT (WRM) and 6,000 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 Wash will make an immediate impression on you by what's not there; it is the most silent, soft edge moving head we've ever built.

All motorized effects operations—cooling fans, barndoors, 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 Wash is still a stealth operator.

### STURDY, LIGHTWEIGHT DESIGN

With its best-in-class compact design and premium build-quality, MAC Encore Wash 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 (28.5 kg/62.9 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.



3,000 K WARM LED MOVING HEAD | 6,000 K COLD LED MOVING HEAD

SPEC SHEET

# FEATURES

- Pure white LED engine with 3,000 K CCT (WRM fixture variant).
- Pure white LED engine with 6,000 K CCT (CLD fixture variant).
- No color temperature variation during zoom and dimming.
- Flicker-free operation—LED driver frequency suitable for all camera applications.
- Whisper-silent—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.
- Fresnel lens: 1:4 zoom—precise, silent and fast zoom.
- PC lens (optional): 1:5 zoom—precise, silent and fast zoom.
- Internal barndoor system with two shutter blades and iris. Shutter blades can overlap for full blackout and the entire system rotates +/- 100°. Repeats cues with great precision.
- Precise and tight iris with adjustable dynamic effects.
- Animotion™ FX System—Internal dimming effect macros for stunning 3D mid-air and projection effects.
- Super precise and silent pan/tilt movement and positioning due to 3-phase stepper motor technology and absolute position monitoring.
- Compact size—L: 452 x W: 480 x H: 745 mm / L: 17.8 x W: 18.9 x H: 29.3 in.
- Low weight-28.5 kg/62.9 lbs
- Optional foam rubber (SIP) flight case insert for secure shipment.

## ORDERING INFORMATION

•	MAC Encore Wash WRM / EPS packaging	P/N 90234025
•	MAC Encore Wash WRM / SIP packaging	P/N 90234030
•	MAC Encore Wash CLD / EPS packaging	P/N 90234040
•	MAC Encore Wash CLD / SIP packaging	P/N 90234045

## **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.
- PC Lens (interchangeable with standard Fresnel Lens).





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.

3,000 K WARM LED MOVING HEAD | 6,000 K COLD LED MOVING HEAD

SPEC SHEET

CLD

## **TECHNICAL SPECIFICATIONS**

#### DYNAMIC EFFECTS

Color mixing	. CMY, independently variable 0 - 100%
Color temperature control, CLD variant	. Variable 2,700 - 6,000 K
Color temperature control, WRM variant	. Variable 3,000 - 7,000 K
Color wheel	. 6 interchangeable dichroic filters + open, indexing, continuous rotation, random color
Barndoors	Internal, two blades with individually controllable insertion, +/- 100° module rotation
Iris	. 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	. Motorized
Pan	. 540°
Tilt	. 268°
Position correction system	Absolute position monitoring

#### CONTROL AND PROGRAMMING

DMX channels
Setting and addressing Control panel with backlit graphic display and jog wheel or via DMX
16-bit control
Movement control options Tracking and vector
Fixture identification
DMX compliance
RDM compliance ANSI/ESTA E1.20
Transceiver
Receiver
Fixture software update USB memory device or over DMX link

### **OPTICS**

Light source	. 3,000 K white LEDs	6,000 K white LEDs
Total LED engine power	. 468 W	468 W
Minimum LED lifetime	. 50,000 hours / to >8 (Figure obtained und test conditions)	D% luminous output der manufacturer´s
Zoom range with Fresnel lens	. 14°-60° one-tenth p	eak (1:4)
Zoom range with PC lens (optional)	. 11°-58° one-tenth p	eak (1:5)

#### CONSTRUCTION

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

#### PHOTOMETRICS

Light engine luminous output	≥ 31.5 klm	≥ 39.4 klm
Luminous output with Fresnel lens	8.5 klm	11 klm
Luminous output with PC lens (opt.)	9.5 klm	12 klm
CRI (Color Rendering Index)	>90	>80
CQS (Color Quality Scale)	>90	>80
TM-30 Rf (IES TM-30-15 Fidelity Index)	.>90	>80
TM-30 Rg (IES TM-30-15 Gamut Index)	.>98	>96
TLCI (TV Lighting Consistency Index)	.>90	>70

WRM

#### INSTALLATION

Mounting points	2 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 materials 2	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

#### **INCLUDED ITEMS**

Two omega brackets with 1/4 turn fasteners for rigging clamp attachment

#### **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
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%.

THERMAL

Cooling ..... Combined convection and forced air (temperature-regulated, low noise, user-definable levels)

#### Max surface temperature, steady state, at Ta 40° C $\ldots \ldots \ldots .75^\circ$ C (167° F) Max ambient temperature (Ta max)... 40° C (104° F) Min ambient temperature (Ta min) $\dots$ 5° C (41° F) Total heat dissipation (calculated, +/- 10%) 2000 BTU/hr

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

3,000 K WARM LED MOVING HEAD | 6,000 K COLD LED MOVING HEAD

SPEC SHEET

# DIMENSIONS

#### PHYSICAL

Length
Width (across yoke)
Height (maximum)
Height (head straight up)
Minimum center-to-center distance in side-by-side installation 730 mm (28.8 in.)
Weight 28.5 kg (62.9 lbs.)

745 mm (29.4 in)



452 mm (17.8 in)







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.