MAC Encore Wash WRM

Designed to produce rich color and premium white light in a wide variety of applications where light quality is critical, the MAC Encore™ Wash WRM is a perfect, LED-based, replacement for the much-loved, discontinued MAC TW1. The feature-packed soft edge moving head offers unparalleled 3000 K warm tungsten emulation that truly challenges the output quality of a real incandescent light source, and doubles as a modern replacement for generic fixtures like tungsten based Fresnel fixtures, with the additional benefit of color mixing and movement.

Unparalleled 3000 K warm white light quality

Super silent cooling and effects operation

Best-in-class size/weight/performance ratio

FEATURES

- Pure white LED engine with 3000 K CCT.

- 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.

- 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

- Foam rubber (SIP) flight case insert for secure shipment.

TECHNICAL SPECIFICATIONS

Physical
Length: 452 mm (17.8 in.)
Width (across yoke): 480 mm (18.9 in.)
Height (maximum): 755 mm (29.8 in.)
Height (head straight up): 745 mm (29.4 in.)

Weight: 28.5 kg (62.9 lb.)
Minimum center-to-center distance in side-by-side installation: 730 mm (28.8 in.)

Dynamic Effects
Color mixing: CMY, independently variable 0 - 100%
Color temperature control: Variable 3000 - 7000 K
Color wheel: 6 x interchangeable dichroic filters + open, indexing, continuous rotation, random color
Barn doors: 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: 24
Setting and addressing: Control panel with backlit graphic display and jog wheel or via DMX
16-bit control: Dimming, 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: Opto-isolated RS-485
Fixture software update: USB memory device or over DMX link

Optics
Light source: 3000 K white LEDs
Total LED engine power: 468 W
Minimum LED lifetime: 50 000 hours (to >80% luminous output)*
Zoom range with Fresnel lens (standard): 14° - 60° one-tenth peak (1:4)
Zoom range with PC lens (optional): 11° - 58° one-tenth peak (1:5)
*Figure obtained under manufacturer's test conditions

Photometric Data
Light engine luminous output: ≥ 31 500 lumens
Fixture luminous output with Fresnel lens (standard): 8500 lumens
Fixture luminous output with PC lens (optional): 9500 lumens
CRI (Color Rendering Index): >90
CQS (Color Quality Scale): >90
TM-30 Rf (IES TM-30-15 Fidelity Index): >90
TM-30 Rg (IES TM-30-15 Gamut Index): >98
TLCI (Television Lighting Consistency Index): >90

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
Minimum distance to combustible materials: 0.2 m (8 in.)
Minimum 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, PF 0.998
208 V, 60 Hz: 2.9 A, 581 W, PF 0.988
230 V, 50 Hz: 2.6 A, 580 W, PF 0.981
240 V, 50 Hz: 2.2 A, 585 W, PF 0.979
Figures are typical, not maximum. Measurements made at nominal voltage with all LEDs at full intensity.
Allow for a deviation of +/- 10%.
PF = power factor

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

Approvals
EU safety: EN 60598-2-17, EN 62471, EN62493
EU EMC: EN 55015, EN 55032, EN 55103-2, EN 61000-3-2, EN 61000-3-3, EN 61547
US safety: UL 1573
US EMC: FCC Part 15 Class A
Canadian safety: CSA C22.2 No. E598-2-17

Canadian EMC: ICES-003 Class A
Australia/NZ: RCM

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

Accessories
PC (planoconvex) Lens for MAC Encore Wash: P/N TBA

Cables and connectors
Power Input Cable, H07RN-F, 2.5 mm2, bare ends to Neutrik TRUE1 NAC3FX-W (female), 1.5 m (4.9 ft.): P/N 91611797
Power Input Cable, H07RN-F, 2.5 mm2, bare ends to Neutrik TRUE1 NAC3FX-W (female), 5 m (16.4 ft.): P/N 91611786
Power Input Cable, SJOOW, 12 AWG, bare ends to TRUE1 NAC3FX-W (female), 1.5 m (4.9 ft.): P/N 91610173
Power Input Cable, SJOOW, 12 AWG, bare ends to TRUE1 NAC3FX-W (female), 5 m (16.4 ft.): P/N 91610174
Cable Connector, Neutrik PowerCON TRUE1 NAC3FX-W (female): P/N 91611789

Installation hardware
G-clamp (suspension with fixture hanging vertically downwards only): P/N 91602003
Quick Trigger Clamp (suspension with fixture hanging vertically downwards only): P/N 91602007
Half-coupler Clamp: P/N 91602005
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

Flightcases
Two-unit Flightcase for MAC Encore™*: P/N 91515048
*Please order SIP variant fixtures to obtain the required SIP foam flightcase inserts

Related Items
Martin® M-PC 2U incl. Martin® M-DMX USB-DMX Interface : P/N 90737070
Martin® M-PC Pro-64 / LJ-4 Controller Kit incl. Martin® M-DMX USB-DMX Interface: P/N 90737060
Martin® RDM 5.5 Splitter: P/N 90758150

Ordering Information
MAC Encore™ Wash WRM EPS (in cardboard box, polystyrene packaging): P/N 90234025
MAC Encore™ Wash WRM SIP (in cardboard box with SIP foam flightcase insert): P/N 90234030