MAC Encore Performance CLD

MAC Encore™ Performance CLD 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 offers unparalleled 6000 K crisp, neutral daylight. Its advanced color mixing system delivers the full palette from smooth and subtle pastels to rich and vibrant saturated colors. Moreover, it offers a fully variable color correction to tungsten/orange.

Unparalleled 6000 K cold white light quality

Super silent cooling and effects operation

Best-in-class size/weight/performance ratio

GALLERY

FEATURES

- Pure white LED engine with 6000 K CCT
- 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 light and smooth pastel shades to rich, saturated primaries.
- Variable CTO—daylight to tungsten CCT control and expansion of the CMY palette that stays true to the black body curve.
- 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.
- Animotion™ 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 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) flightcase insert for secure shipment.

TECHNICAL SPECIFICATIONS

Physical
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.)
Weight: 31 kg (68.4 lbs.)
Minimum center-to-center distance in side-by-side installation: 700 mm (27.6 in.)

Dynamic Effects
Color mixing: CMY, independently variable 0 - 100%
Color temperature control: Variable 2700 - 6000 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 module, +/- 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: Opto-isolated RS-485
Fixture software update: USB memory device or over DMX link

Optics
Light source: 6000 K white LEDs
Total LED engine power: 468 W
Minimum LED lifetime: 50 000 hours (to >80% luminous output)*
**Figure obtained under manufacturer's test conditions*

Photometric Data
Light engine luminous output: ≥ 39 400 lumens
Fixture luminous output: 11 600 lumens
CRI (Color Rendering Index): >80
CQS (Color Quality Scale): >80
TM-30 Rf (IES TM-30-15 Fidelity Index): >80
TM-30 Rg (IES TM-30-15 Gamut Index): >95
TLCI (Television Lighting Consistency Index): >70

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 curent 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

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™ Performance CLD EPS (in cardboard box, polystyrene packaging): P/N 90234000
MAC Encore™ Performance CLD SIP (in cardboard box with SIP foam flightcase insert): P/N 90234005