

The MAC TW1 is a powerful, silent tungsten wash light with a clean, even, soft-edged beam, a motorized zoom, rich CMY color mixing and can be run from the built-in dimmer or from an external dimmer.

- 1200 W tungsten halogen lamp
- CMY color mixing system
- Motorized zoom
- Fresnel (included), narrow, and micro-Fresnel
- Internal & external electronic dimming plus mechanical dimming
- Strobe effect up to 10 Hz, random strobe
- Pan and tilt range of 540°/242°
- Patented very low-noise cooling
- Modular design for easy maintenance and servicing
- Various front accessories for theatre, television and film applications
- IGBT or 80 V dimmer options for universal operating voltage
- Accepts 240 V, 230 V, 115 V or 80 V lamps (depending on dimmer and mains voltage)

Physical Length: 454 mm (17.9 in.)
Width: 362 mm (14.3 in.)
Height: 709 mm (27.9 in.), head straight up
Weight: 26.8 kg (59.1 lbs.), IGBT dimmer model
Weight: 27.4 kg (60.4 lbs.), 80 V dimmer model

Lamp Type: 1200 W tungsten halogen
Approved lamps: Philips 1200/115, 1200/230 or 1200/240 FastFit, Philips Hi-Brite 1200/80 FastFit
Socket: PGJX-50
Lamp voltage must match internal or external dimmer output voltage

Dynamic Effects Color mixing: CMY, independently variable 0 - 100%
Electronic dimming: Multi-voltage IGBT and 80 V internal dimmer options, 'plug and play' external dimming
Mechanical dimmer: 0 - 100%
Shutter: Strobe effect up to 10 Hz, random strobe
Zoom: Narrow 14.5° - 27°, Standard 20° - 41°, Very wide 97° - 105°, 1/10 peak angles, 80 V lamp
Pan: 540°
Tilt: 242°

Control and Programming DMX channels: 14/20
Setting and addressing: Control panel with display
16-bit control: CMY, mechanical dimmer, electronic dimmer, zoom, pan & tilt
Movement control options: Tracking and vector
Dimming curve options: Various available
Protocol: USITT DMX512-A
Receiver: Opto-isolated RS-485
Firmware update: Serial upload via DMX link

Dimming System Options Internal multi-voltage IGBT dimmer: 0 - 100%, 8- or 16-bit dimming resolution, controlled via DMX
Internal 80 V dimmer: 0 - 100%, 8- or 16-bit dimming resolution, controlled via DMX
External dimmer input: Intelligent lamp power control

Construction Color(s): Black
Housing: Magnesium alloy, UV-resistant fiber-reinforced composite
Reflector: Glass, cold light
Protection rating: IP20

Installation Orientation: Any
Mounting points: 2 pairs of 1/4-turn locks

Connections AC power input: 3 m (9.8 ft.) integral cable without power plug
DMX data in/out: 3-pin and 5-pin locking XLR
External dimmer: Neutrik Powercon

Electrical AC power: 100-120/200-240 V nominal, 50/60 Hz
Power supply unit: Auto-ranging electronic switch-mode
Main fuse: 20 A

Typical Power and Current 115 V, 60 Hz: 1226 W, 10.7 A, PF 0.998
230 V, 50 Hz: 1220 W, 5.3 A, PF 0.995
240 V, 50 Hz: 1233 W, 5.2 A, PF 0.996
230 V, 50 Hz using internal 80 V dimmer: 1219 W, 5.5 A, PF 0.970
230 V, 50 Hz using external dimmer, figures for fixture only: 93 W, 1.0 A, PF 0.420
Measurements made at nominal voltage. Allow for a deviation of +/- 10%.

Thermal Lamp cooling: Patent-pending low noise ducted forced air system
Cooling: Filtered forced air (temperature-regulated, low noise)
Maximum ambient temperature (Ta max.): 40° C (104° F)
Minimum ambient temperature (Ta min.): 0° C (32° F)
Maximum surface temperature, steady state, Ta=40° C (104° F): 200° C (392° F)
Total heat dissipation (calculated, +/- 10% at 110 V, 60 Hz / 230 V, 50 Hz): 4180 / 4160 BTU/hr.

Acoustic Sound power level: 31 dBA (steady state, lamp on, effects static, Ta=20°C (68° F), test conditions ISO 3743-2:1994)

Approvals



US safety: ANSI/UL 1573
Canadian safety: CSA E60598-1, E598-2-17
EU safety: EN 60598-2-17, EN 61347-1
EU EMC: EN 55 015, EN 55 103-1, EN 55103-2

Included Items Two Omega clamp attachment brackets with 1/4-turn fasteners: P/N 91602001
Four 20 AT main fuses (installed): P/N 05020051
User manual: P/N 35000184

Accessories Philips Hi-Brite 1200/80 FastFit 80 V lamp: P/N 97000006
Philips 1200/115 FastFit 115 V lamp: P/N 97000112
Philips 1200/230 FastFit 230 V lamp: P/N 97000113
Philips 1200/240 FastFit 240 V lamp: P/N 97000114
Very wide-angle lens kit: P/N 91610032
Narrow-angle lens kit: P/N 91610033
Front accessory holder: P/N 91611260
Internal 80 V dimmer: P/N 91614026
Internal multi-voltage IGBT dimmer kit: P/N 91614027
Flightcase (holds 2 fixtures): P/N 91510019
Half-coupler clamp: P/N 91602005
G-clamp: P/N 91602003
Quick trigger clamp: P/N 91602007
Omega bracket: P/N 91602001
T-shaped omega bracket with quarter-turn fasteners: P/N 91602008
Safety wire, universal, safe working load 50 kg (110.2 lbs.): P/N 91604003
Gel frame
Top hat
Top hat with louver
Accessories listed without part numbers are available from City Theatrical www.citytheatrical.com

Spare Parts 20 AT main fuse: P/N 05020051

Ordering Information MAC TW1, Multi-voltage, IGBT dimmer in cardboard box: P/N 90202000
MAC TW1, Multi-voltage, IGBT dimmer in 2-unit flightcase: P/N 90202001
MAC TW1, Multi-voltage, 80 V dimmer in cardboard box: P/N 90202400
MAC TW1, Multi-voltage, 80 V dimmer, 2-unit flightcase: P/N 90202401

Photometric Data

115V/60Hz, Standard , Zoom at Minimum	Efficiency: 26.2% One-tenth peak angle: 18° Total output: 8800 lm
115V/60Hz, Standard , Zoom at Median	Efficiency: 30.7% One-tenth peak angle: 27° Total output: 10300 lm
115V/60Hz, Standard , Zoom at Maximum	Efficiency: 32.6% One-tenth peak angle: 40° Total output: 10900 lm
115V/60Hz, Narrow , Zoom at Minimum	Efficiency: 19% One-tenth peak angle: 14° Total output: 6300 lm
115V/60Hz, Narrow , Zoom at Median	Efficiency: 21% One-tenth peak angle: 18° Total output: 7000 lm
115V/60Hz, Narrow , Zoom at Maximum	Efficiency: 23% One-tenth peak angle: 26° Total output: 7800 lm
115V/60Hz, Very Wide , Zoom at Minimum	Efficiency: 35% One-tenth peak angle: 94° Total output: 11700 lm
115V/60Hz, Very Wide , Zoom at Median	Efficiency: 38% One-tenth peak angle: 99° Total output: 12800 lm
115V/60Hz, Very Wide , Zoom at Maximum	Efficiency: 39% One-tenth peak angle: 102° Total output: 13200 lm
230V/240V/50Hz, Standard , Zoom at Minimum	Efficiency: 25.1% One-tenth peak angle: 20° Total output: 7500 lm
230V/240V/50Hz, Standard , Zoom at Median	Efficiency: 27.6% One-tenth peak angle: 28° Total output: 8300 lm
230V/240V/50Hz, Standard , Zoom at Maximum	Efficiency: 29.6% One-tenth peak angle: 41° Total output: 8900 lm
230V/240V/50Hz, Narrow , Zoom at Minimum	Efficiency: 16% One-tenth peak angle: 14° Total output: 4700 lm
230V/240V/50Hz, Narrow , Zoom at Median	Efficiency: 18% One-tenth peak angle: 19° Total output: 5300 lm
230V/240V/50Hz, Narrow , Zoom at Maximum	Efficiency: 19% One-tenth peak angle: 26° Total output: 5700 lm
230V/240V/50Hz, Very Wide , Zoom at Minimum	Efficiency: 29% One-tenth peak angle: 93°

	Total output: 8700 lm
230V/240V/50Hz, Very Wide , Zoom at Median	Efficiency: 32% One-tenth peak angle: 98° Total output: 9500 lm
230V/240V/50Hz, Very Wide , Zoom at Maximum	Efficiency: 33% One-tenth peak angle: 103° Total output: 9900 lm
80V, Standard , Zoom at Minimum	Efficiency: 32% One-tenth peak angle: 20° Total output: 11500 lm
80V, Standard , Zoom at Median	Efficiency: 35.5% One-tenth peak angle: 28° Total output: 12800 lm
80V, Standard , Zoom at Maximum	Efficiency: 37.6% One-tenth peak angle: 41° Total output: 13600 lm
80V, Narrow , Zoom at Minimum	Efficiency: 19% One-tenth peak angle: 14.5° Total output: 6700 lm
80V, Narrow , Zoom at Median	Efficiency: 22% One-tenth peak angle: 20° Total output: 7800 lm
80V, Narrow , Zoom at Maximum	Efficiency: 24% One-tenth peak angle: 27° Total output: 8800 lm
80V, Very Wide , Zoom at Minimum	Efficiency: 35% One-tenth peak angle: 97° Total output: 12700 lm
80V, Very Wide , Zoom at Maximum	Efficiency: 39% One-tenth peak angle: 105° Total output: 14200 lm

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