



# MAC TW1

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

## FEATURES

## TECHNICAL SPECIFICATIONS

### Physical

Length: 454 mm  
Width: 362 mm  
Height: 709 mm, head straight up  
Weight: 26.8 kg, IGBT dimmer model  
Weight: 27.4 kg, 80 V dimmer model

### 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

### 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:*

### 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 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 AT (slow blow)

### 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  
Minimum ambient temperature (Ta min.): 0° C  
Maximum surface temperature, steady state, at 40° C ambient: 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, test conditions ISO 3743-2:1994)

Approvals

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

Included Items

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

Accessories

Philips Hi-Brite 1200/80 FastFit 80 V lamp: 97000006  
Philips 1200/115 FastFit 115 V lamp: 97000112  
Philips 1200/230 FastFit 230 V lamp: 97000113  
Philips 1200/240 FastFit 240 V lamp: 97000114  
Very wide-angle lens kit: 91610032  
Narrow-angle lens kit: 91610033  
Front accessory holder.: 91611260  
Internal 80 V dimmer: 91614026  
Flightcase (holds 2 fixtures): 91510019  
Half-coupler clamp: 91602005  
G-clamp: 91602003  
Quick trigger clamp: 91602007  
Omega bracket: 91602001  
T-shaped omega bracket with quarter-turn fasteners: 91602008  
Safety cable, safe working load 50 kg: 91604003  
Gel frame:  
Top hat:  
Top hat with louver:

Accessories listed without part numbers are available from City Theatrical  
[www.citytheatrical.com](http://www.citytheatrical.com) :

Spare Parts

20 AT main fuse: 05020051

Ordering Information

MAC TW1™, Multi-voltage, 80 V dimmer in cardboard box: 90202400  
MAC TW1™, Multi-voltage, 80 V dimmer, 2-unit flightcase: 90202401

