

# MAC 700 Profile Specifications

## PHYSICAL

Length	450 mm (17.7 in)
Width	365 mm (14.4 in)
Height	636 mm (25.0 in)
Weight	34.5 kg (76.1 lbs)

## SOURCE

Lamp	700 W short arc discharge
Base	Double-ended SFC 10-4 with key
Approved models	OSRAM HTI 700/D4/75
Ballast	electronic

## THERMAL

Maximum ambient temperature ( $T_a$ )	40° C (104° F)
Maximum surface temperature	160° C (320° F)
Low noise cooling with fan speed regulation mode	
Total heat dissipation (calculated, 230 V, 50 Hz / 110 V, 60 Hz)	3190 BTU/hr / 3429 BTU/hr

## PHOTOMETRICS

Measurement conditions	230 V, 50 Hz; no effects applied
Measurement test source	OSRAM HTI 700/D4/75

### Photometrics: minimum spread with diffuser

Total output	14300 lumens
One-tenth peak output	14300 lumens
Cutoff angle	16.0°
One-tenth peak angle	15.0°

### Photometrics: median spread with diffuser

Total output	14600 lumens
One-tenth peak output	14600 lumens
Cutoff angle	20.2°
One-tenth peak angle	19.4°

### Photometrics: maximum spread with diffuser

Total output	14700 lumens
One-tenth peak output	14700 lumens
Cutoff angle	30.0°
One-tenth peak angle	29.0°

### Photometrics: minimum spread without diffuser

Total output	16200 lumens
One-tenth peak output	16200 lumens
Cutoff angle	15.8°
One-tenth peak angle	15.1°

### Photometrics: median spread without diffuser

Total output	16500 lumens
One-tenth peak output	16500 lumens
Cutoff angle	20.2°
One-tenth peak angle	19.5°

### Photometrics: maximum spread without diffuser

Total output	16700 lumens
One-tenth peak output	16600 lumens
Cutoff angle	30.6°
One-tenth peak angle	29.6°

## OPTICS

Glass cold light reflector	
Spread angle	14° - 30° (focused on open gobo)
Focal length	46 - 100 mm

## ELECTRICAL

AC input	3 m trailing cable w/o cord cap
Operating ranges	100-130/200-250 VAC, 50/60 Hz
Power supply	auto-ranging electronic switch-mode
Main fuse for 200 - 250 V power	6.3 AT, P/N 05020020
Main fuse for 100 - 130 V power	15 AT, P/N 05020027

### Typical power and current

@ 100 V, 60 Hz	1019 W, 10.3 A, PF 0.996
@ 120 V, 60 Hz	988 W, 8.3 A, PF 0.995
@ 208 V, 60 Hz	949 W, 4.7 A, PF 0.976
@ 230 V, 50 Hz	944 W, 4.2 A, PF 0.973
@ 240 V, 50 Hz	940 W, 4.0 A, PF 0.970
@ 250 V, 50 Hz	940 W, 3.9 A, PF 0.966

*V = volts, Hz = hertz, W = watts, A = amps, PF = power factor*

*Note: Allow for a deviation of +/- 10% from typical figures listed above. Measurements made at nominal voltage. Local supply voltages can vary by +/- 10%.*

## CONTROL AND PROGRAMMING

Protocol	USITT DMX-512 (1990)
Control channels	23 or 31
Receiver	Opto-isolated RS-485
Data I/O	locking 3-pin & 5-pin XLR, pin 1 shield, pin 2 cold (-), pin 3 hot (+)
Setting and addressing	LED control panel, remote with DABS1 or MP-2 uploader
Movement control	tracking and vector
Software installation	serial upload (MUF)

## ELECTROMECHANICAL EFFECTS

### Beam effects

High speed replaceable rotating 3 facet prism, 8-bit control  
Motorized iris, 8- or 16-bit control

### Dimmer/shutter

Full-range dimming, 8- or 16-bit control  
Shutter speed: flash variable 2hz to 10hz, 8-bit control

### Color

1 motorized color wheel with 8 replaceable dichroic color filters, plus open, 8- or 16-bit control

### CMY

Cyan: 0-100%, 8- or 16-bit control  
Magenta: 0-100%, 8- or 16-bit control  
Yellow: 0-100%, 8- or 16-bit control

### Pan/tilt

Pan: 540°, 16-bit control  
Tilt: 246°, 16-bit control  
Position correction system

### Gobos

Rotating gobos: 6 positions plus open with continuous and indexed rotation, 16-bit control  
Static gobos: 9 positions plus open, 8-bit control

### Gobo animation wheel

Vertical, horizontal or angled animation effects.  
Indexed and variable speed continuous rotation, 8- or 16-bit control

### Focus

Motorized focus: 2m to infinity, 8- or 16-bit control

### Zoom

14° - 30°, 8- or 16-bit control

## GOBOS

Outside diameter	27.9 +0/-0.3 mm
Maximum image diameter	23 mm
Maximum thickness	1.1 mm in static slots, 4 mm in rotating slots
Recommended glass	high-temperature Borofloat or better with dichroic or enhanced aluminum coating
Recommended metal	0.5 mm aluminum

## GOBO ANIMATION WHEEL

Outside diameter	116 mm +0/-0.25 mm
Image outer diameter	112 mm
Image inner diameter	32 mm
Construction	0.5 mm aluminum or textured glass with magnet

## APPROVALS



EU EMC	EN 55 103-1, EN 55 015, EN 61 547
EU safety	EN 60598-2-17
US safety	ANSI/UL 1573
Canadian safety	CSA C22.2 NO 166

## CONSTRUCTION

Housing	UV-resistant fiber-reinforced composite shell
Colors	black
Protection factor	IP 20
Shock resistant chassis	
Ergonomic carrying handles	

## INSTALLATION

Mounting points	2 pairs of 1/4-turn locks
Orientation	any
Minimum distance from illuminated surface	1.2 m (48 in.)
Minimum distance from combustible materials	0.5 m (20 in.)

## INCLUDED ITEMS

Lamp	OSRAM HTI 700/D4/75 (installed): P/N 97010212
Dichroic color filters	8 (installed)
Gobos	14 metal and 1 glass (installed), 5 extra metal gobos and extra spring
Gobo animation wheel	Radial breakup (installed): P/N 62325048
Fuse for use with 200 - 250 V power	6.3 AT fuse (installed): P/N 05020020
Fuse for use with 100 -130 V power	15 AT fuse: P/N 05020027
2 omega clamp attachment brackets with quarter-turn fasteners	2 x P/N 91602001
3-pin XLR cable, 5m	P/N 11820008
User manual	P/N 35000137

## ACCESSORIES

Spiral breakup gobo animation wheel	P/N 62325049
Linear breakup gobo animation wheel	P/N 62325050
Coarse tangential gobo animation wheel	P/N 62325051
Cloud breakup gobo animation wheel	P/N 62325094
Elliptical breakup gobo animation wheel	P/N 62325095
Half-coupler clamp	P/N 91602005
G-clamp	P/N 91602003
DABS 1 Uploader	P/N 91611144
MP-2 Uploader	P/N 90758420
MAC 500/550/700 stock gobos	see <a href="http://www.martin.com">www.martin.com</a>

## ORDERING INFORMATION

MAC 700 Profile in cardboard packing case	P/N 90207000
MAC 700 Profile in flight case	P/N 90207001