

MAC 401 Specifications

Physical

Length	.221 mm (8.7 in.)
Width	.505 mm (19.9 in.)
Height	.527 mm (20.7 in.)
Weight	21 kg (46.3 lbs.) incl. 2 head modules, excl. brackets

Dynamic Effects

All models

Strobe effect	Electronic, with pulse and random effects
Electronic dimming	0 - 100%, four dimming curve options
Zoom	16° (Hypermode), 20° - 50°
Pan	630° with two speed settings
Tilt	300° with two speed settings
Pre-programmed effects	Two superimposable chase/pulse/flip/flicker/strobe/static effects with variable intensity, effect x-fading and 'pixel wheel' rotation speed

RGB Zoom module, MAC 401 Dual

Color mixing	RGB + CTC or HSV
Red or hue	0 - 100%
Green or saturation	0 - 100%
Blue or value	0 - 100%
Color temperature control	Variable 10 000 - 2000 K
Electronic 'color wheel' effect	33 LEE-referenced colors plus white, variable speed color wheel rotation effect and random color

CTC Zoom module, MAC 401 CT Zoom

Warm white	0 - 100%
Cool white	0 - 100%
Color temperature control	Variable 7 000 - 3 000 K

Light Source

RGB Zoom module

Light source	36 x Osram multi-color LE ATB S2W high power emitters
LED lifetime	50 000 hours to 70% luminous maintenance*

CT Zoom module

Light source	36 x LedEngin 10 W warm white/daylight white emitters
LED lifetime	90 000 hours to 90% luminous maintenance*

**Manufacturer's figures obtained under manufacturer's test conditions*

Control and Programming

Control	DMX
Setting and addressing	Control panel with LED display
DMX channels	8 - 33 depending on control mode & pixel grouping
Protocol	USITT DMX512/1990
Transceiver	RS-485

Construction

Color	Black
Housing	High-impact flame-retardant thermoplastic and die-cast aluminum
Protection rating	IP 20

Installation

Mounting points	2 pairs of 1/4-turn locks
Orientation	Any
Minimum distance to illuminated surfaces	200 mm (8 in.)
Minimum distance to combustible materials	200 mm (8 in.)
Minimum distance to persons in the beam zone	1 m (3.4 feet)

Connections

AC power input	Neutrik PowerCon
DMX data in/out	5-pin locking XLR, RJ-45

Electrical

AC power	100-240 V nominal, 50/60 Hz
Power supply unit	Electronic switch mode
Mains fuses	2 x 10 AT

Typical Power and Current

Only RGB Zoom module installed

100 V, 50 Hz	367 W, 3.7 A, PF 0.995
100 V, 60 Hz	367 W, 3.7 A, PF 0.995
110 V, 60 Hz	364 W, 3.3 A, PF 0.994
120 V, 60 Hz	367 W, 3.1 A, PF 0.993
208 V, 60 Hz	360 W, 1.8 A, PF 0.967
230 V, 50 Hz	360 W, 1.7 A, PF 0.973
240 V, 50 Hz	360 W, 1.6 A, PF 0.969

Only CT Zoom module installed

100 V, 50 Hz	398 W, 4.0 A, PF 0.994
100 V, 60 Hz	400 W, 4.0 A, PF 0.995
110 V, 60 Hz	399 W, 3.7 A, PF 0.993
120 V, 60 Hz	400 W, 3.4 A, PF 0.992
208 V, 60 Hz	396 W, 2.0 A, PF 0.964
230 V, 50 Hz	396 W, 1.8 A, PF 0.965
240 V, 50 Hz	399 W, 1.8 A, PF 0.959

RGB Zoom and CT Zoom modules installed

100 V, 50 Hz	770 W, 7.8 A, PF 0.996
100 V, 60 Hz	765 W, 7.8 A, PF 0.997
110 V, 60 Hz	755 W, 7.0 A, PF 0.995
120 V, 60 Hz	749 W, 6.3 A, PF 0.993
208 V, 60 Hz	732 W, 3.6 A, PF 0.980
230 V, 50 Hz	731 W, 3.3 A, PF 0.965
240 V, 50 Hz	730 W, 3.2 A, PF 0.955

All measurements made with all LEDs at full intensity. Measurements made at nominal voltage. Allow for a deviation of +/- 10%. PF = power factor

Thermal

Cooling	Filtered forced air, temperature-regulated, low noise
Maximum ambient temperature (Ta max.)	40° C (104° F)
Minimum ambient temperature (Ta min.)	5° C (41° F)
Maximum surface temperature under steady state condition	80° C (176° F)
Total heat dissipation (calculated, +/- 10%), RGB Zoom module installed	1250 BTU/hr
Total heat dissipation (calculated, +/- 10%), CT Zoom module installed	1360 BTU/hr
Total heat dissipation (calculated, +/- 10%), RGB Zoom and CT Zoom modules installed	2630 BTU/hr

Approvals



EU safety	EN 60598-1, EN 60598-2-17
EU EMC	EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4
US safety	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	2 x P/N 91602001
Neutrik PowerCon NAC3FCA AC mains power input connector	P/N 05342804
Two 10 AT mains fuses (installed)	2 x P/N 05021029

Accessories

MAC 401™ RGB Zoom module	P/N 91611325
MAC 401™ CT Zoom module	P/N 91611349
MAC 401™ double flightcase	P/N 91510150
Color frame kit for MAC 401™	P/N 91610102
Omega bracket	P/N 91602002
G-clamp	P/N 91602003
Half-coupler clamp	P/N 91602005
Quick trigger clamp	P/N 91602007
Safety wire, universal, SWL (Safe Working Load) 50 kg	P/N 91604003
DMX cable, STP, 1 pair + shield, 5-pin male XLR to 5-pin female XLR, IEC/UL-CL, 1 m	P/N 91611242
DMX cable, STP, 1 pair + shield, 5-pin male XLR to 5-pin female XLR, IEC/UL-CL, 2 m	P/N 91611243
DMX cable, STP, 1 pair + shield, 5-pin male XLR to 5-pin female XLR, IEC/UL-CL, 5 m	P/N 91611244
DMX cable, STP, 1 pair + shield, 5-pin male XLR to 5-pin female XLR, IEC/UL-CL, 10 m	P/N 91611245
DMX cable, STP, 1 pair + shield, 5-pin male XLR to 5-pin female XLR, IEC/UL-CL, 20 m	P/N 91611246

Spare parts

10 AT mains fuse	P/N 05021029
Replacement head air filter	P/N 62407156

Related items

Martin Universal USB/DMX Interface Device	P/N 90702045
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Ordering Information

MAC 401 Dual™, in cardboard box, RGB Zoom module installed	P/N 90231200
MAC 401 CT Zoom™, in cardboard box, CT Zoom module installed	P/N 90231210

Specifications subject to change without notice. For the latest product specifications, see www.martin.com



Disposing of this product

Martin™ products are supplied in compliance with Directive 2002/96/EC of the European Parliament and of the Council of the European Union on WEEE (Waste Electrical and Electronic Equipment), as amended by Directive 2003/108/EC, where applicable.

Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of Martin products.