Martin M1

Safety and Installation Guide





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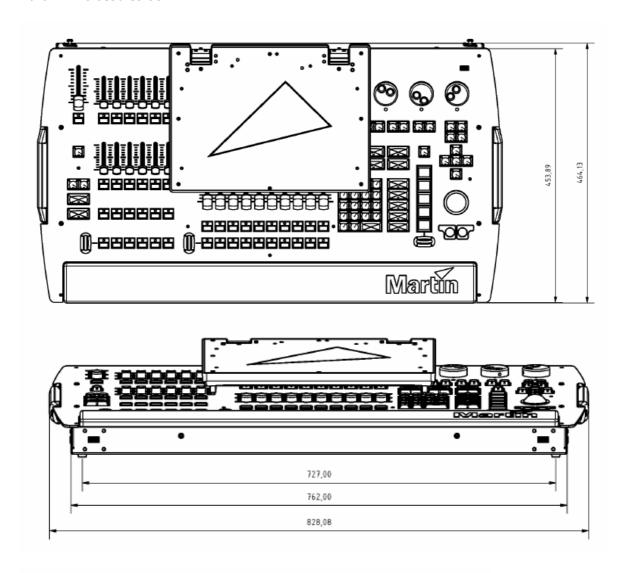
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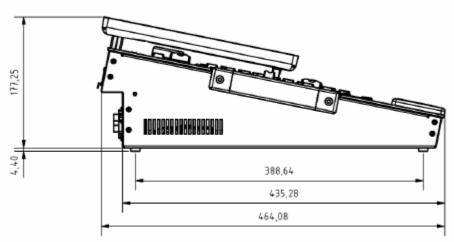
P/N 35000233 - Rev. B

Dimensions

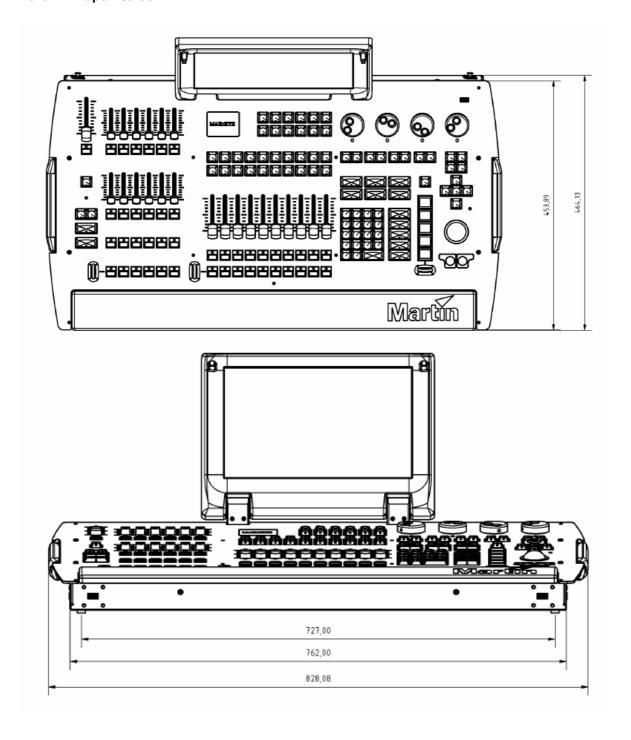
All dimensions are in millimeters

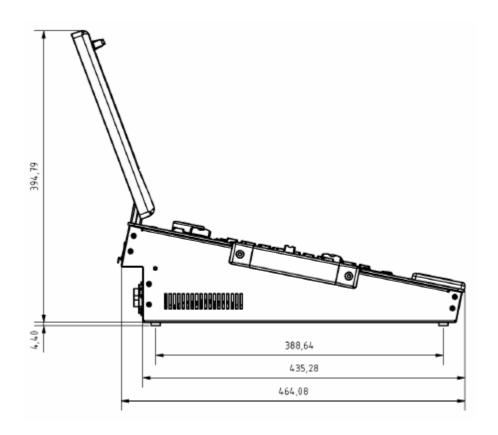
Martin M1 closed screen





Martin M1 open screen





Introduction

Thank you for purchasing the Martin M1 Lighting Control System.

M1 is the next generation of Martin Controllers. With the full power of a larger desk and the agility of a small one, it is the ultimate all-in-one lighting console.

Please read this Safety and Installation Guide carefully. Visit the Martin website www.martin.com for further documentation including the user manual for the M1 and access to our user forums.

Technical Support

For a complete list of Technical Support phone numbers, see the Martin website at http://www.martin.com/service/hotline.asp

Safety Information

This product is for professional use only. It is not for household use. It presents risks of lethal or severe injury due to electric shock. Read this user manual before powering or installing the M1 , follow the safety precautions listed below and observe all warnings in this manual and printed on the product.

If you have questions about how to operate the product safely, please contact your Martin supplier or call the Martin 24-hour service hotline on +45 8740 0000, or in the USA on 1888-tech-180.

- Connect the product electrically to ground (earth).
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault protection.
- Use the supplied power cords and chose the correct one for the country of operation. Use of the factory provided power cable is mandatory for operation in the US and Canada.
- Replace fuses with ones of the same type and rating only. Never attempt to bypass a fuse.
- Disconnect the product from power immediately if the power cable or any cover or component is wet or not in perfect condition. Do not reconnect to power until the damaged item has been repaired or replaced.
- Do not expose the product to rain or moisture.
- Allow free unobstructed airflow to the sides of the product. Do not block the ventilation slots.
- Do not use the product if the ambient temperature exceeds 40°C (104° F)
- Refer any service operation not described in this manual to a qualified technician.
- Do not modify the product or install other than genuine Martin parts.
- Only transport in suitable packaging or a custom fitted road case. Transportation damage is not covered under warranty.
- Caution: Risk of Fire and Electrical Shock. Use only in dry locations.
- Caution: Risk of Explosion if Battery is replaced by an incorrect type. Dispose of used batteries
 according to local environmental regulations.

Included Items

Each Martin M1 contains the following items:

- M1 Contoller
- 1.5 m (4.9 ft.) power cable, 3-pin IEC P/N 11501012 (for use outside the US and Canada)
- 1.5 m (4.9 ft.) power cable, 3-pin IEC P/N 11501502 (with NEMA 15-5P plug for use within the US and Canada)
- Two 2 AT fuses, installed
- User manual (Part number 35000233)

Setup and Assembly

Unpacking

Open the shipping box carefully and stow away all included foam pieces and protective covers. Store them for re-use.

The M1 should never be shipped in any other container than the factory-provided box or a custom manufactured protective case.

Placement

The M1 controller requires a stable mounting position that provides support for all 4 rubber feet on the bottom of the console.

Place the console carefully onto the surface and fold open the attached screen.

Apply some weight with a hand on the rubber hand rest when operating the hinge mechanism. The hinges are strongly damped and the controller could tip over if the screen is not opened carefully.

Power Connections

Martin M1 is rated 100-240V 50/60Hz, operates over 90-264V 50/60Hz. Do not connect it to power outside this range.

The provided IEC cable is not fitted with a country-specific plug.

Please install a plug that meets local and national electric codes and is suitable for the country's specific power outlet types.

A 3-prong grounding-type plug must be installed following the plug manufacturer's instructions. The table below shows some possible pin identification schemes; if the pins are not clearly identified, or if you have any doubts about proper installation, consult a qualified electrician.

A cable with a NEMA 15-5P plug is provided for use of the M1 in the US and Canada. The approved cable must be used in North America.

Wire color (standard EU code)	Pin	Symbol
brown	live	L
blue	neutral	N
yellow/green	ground	(F)

- 1. Check the Power Switch and ensure that is set to the OFF position.
- 2. Insert the provided power cable into the **MAINS IN** connector and connect the cable to a properly protected and grounded power outlet.
- 3. Turn on the M1 by toggling the power switch to ON.

In addition to the IEC inlet the M1 also provides a IEC outlet port to connect a monitor or a MaxModule device.



Do not exceed a current-draw of 4A on the IEC outlet port.

Connections

Front panel

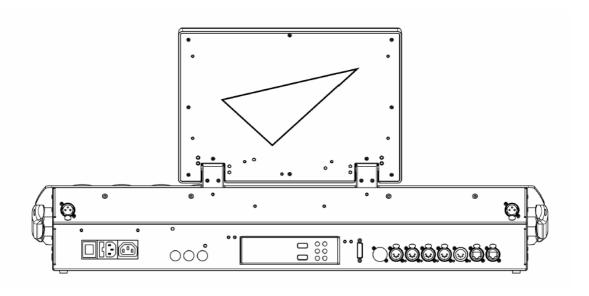
The surface panel offers a USB device socket in the top right corner. This connector is ideally suited for USB memory sticks or a USB desklamp.

On the front of the console are two additional USB device sockets for additional peripherals like keyboard or mouse.

USB connections on the front panel are not suitable for boot operations (e.g. installation of an operating system). Use the USB connectors on the back of the console instead.

Do not exceed a current of 500ma on a USB device port.

Back panel



Maine IN	IFC C14 Power levet
Mains IN	IEC C14 Power Input
Mains Out	IEC C13 Power Output (4A)
Desklight	XLR 3-Pin female, 12V, 200ma for Littlite Type gooseneck desklights
DMX 1-4	XLR 5-pin female DMX Outputs, RDM compatible
DMX IN	XLR 5-pin male DMX Input
Wing Out 1 Wing Out 2	RJ45 Ethercon connections for MaxModules. Do not connect standard Ethernet devices to these ports.
Midi In/Out/ Thru	Optional MIDI connections, 5-pin DIN
USB	USB device connections (max. 500ma.)
Network	RJ45 Gigabit Remote network connection
EtherDMX	RJ45 Gigabit DMX Ethernet connection
VGA	15-pin monitor connection
DVI	DVI-Digital monitor connection
Line Out	3.5mm stereo jack
Line In	3.5mm stereo jack

Service

The Martin M1 is designed as a rugged, roadworthy device. Occasional cleaning is the only service required of the user. For any other service-related concerns, please contact your Martin dealer or visit www.martin.com.

Any service not described in this User Manual must be carried out by a qualified Martin technician.

The M1 requires periodic cleaning, as does any computer. The schedule depends heavily on the operating environment; please consult a Martin service technician for recommendations if needed. As with any computer, never spray the cleaner directly onto the desk, always spray onto a lint-free cloth and wipe clean.

Important! Excessive dust and smoke fluid build-up can degrade performance and cause overheating and damage to the M1 that is not covered by the warranty.

Specifications

Physical

Length: 823 mm Width: 464 mm

Height, screen closed: 178 mm Height, screen opened 395 mm

Weight: 14.4 kg

Operating Temperature: 0° - 40° Celsius

IP Rating: IP20

Connections

- Front: 2 x USB host socket- Front panel: 1 x USB host socket

Rear

AC power input: I.E.C. male socketAC power output: I.E.C. female socket

(Total current draw of all devices linked via AC power outlet: max. 4A)

- Midi (optional) : DIN-5 female socket (Midi in, thru, out)
- Mouse, keyboard: PS2 socket
- EtherDMX data: RJ-45 socket (does not accept Neutrik EtherCon connectors in housing)
- Remote Network data: RJ-45 socket (does not accept Neutrik EtherCon connectors in housing)
- USB: 4 x USB device socket
- Serial: 9-pin D-Sub male
- VGA: 15-pin D-Sub female
- Sound: 3.5 mm audio phone jack + SPDIF
- DV
- DMX-out data (full RDM): 4 x 5-pin locking XLR female socket
- DMX-in data: 5-pin locking XLR male socket
- LINK USB data outputs: 2 x Neutrik RJ-45 socket (accepts Neutrik EtherCon connectors in housing)
- LAMP output: 2 x 3-pin locking XLR female socket

Electrical:

AC-Power: rated 100-240V 50/60Hz, operates over 90-264V 50/60Hz

Power supply unit: Auto-sensing Switchmode

Main fuses: Two 2AT (slow blow) (CAUTION: DOUBLE POLE/NEUTRAL FUSING)

Total current draw of all devices linked via AC power outlet: max. 4A

Lamp output: 2 x 12V PWM Total Current: Max. 0.75 A Total Power: Max. 80 W

Hardware

Industrial 13.1" TFT 16:9 touch screen (1280x800 pixel)

Internal SATA 2.5" hard disk drive

Industrial motherboard with Intel processor

2GB RAM

Integrated Graphics

2 x dimmable XLR desk lamp connections

Software

Industrial Windows Embedded OS

OS Installation via USB storage device or USB optical drive.

Show backup on hard disk or USB storage device (not included)

Support for ELO Accutouch USB touchscreens

Functional

- High resolution folding touch screen
- Digital LCD buttons for fast and direct parameter access
- Multiple wing attachment (Maxxyz Modules)
- 4 x DMX Universe direct from the console, up to 12 Universe with optional license
- Maxxyz Manager Software for programming and triggering via time and calendar schedules
- Customizable Graphical User Interface with context sensitive toolbars and integrated help menu
- Powerful effects engine
- Controls up to 6144 parameters
- 1000 cuelists with fader control
- 1000 cuelists with playback control buttons
- Two separate playback sections
- Parallel execution of multiple cuelists
- Submaster, Groupmaster and Override functionality
- Parameter and time-fanning functionality
- Auto update for presets and cues
- On-the-fly global timing adjustments

Control and Programming

Protocol: DMX512 (RDM), Artnet 2

4 DMX universes, expandable to 12

2048 channels, expandable to 6144

No limit to number of DMX channels per fixture

Extensive fixture library for all known manufacturers

65000 presets for each group of functions (P/T, color, gobo, etc.)

Effect generator for automated programming of complex effects

Customizable highlight and lowlight function to identify individual fixtures

Relative or absolute programming

Fan function for all channels (including timing parameters)

On-the-fly global timing changes

Virtual cuelists

Macros

Wait, follow and link cues

HTP, LTP, chase, timecode, submaster and group master playback functionality

Individual parameter timings

Intuitive patch feature

Fixture type cloning

All channels with 16-bit resolution

Control/User Interface

Main Playback

10 x 60mm playback faders, each with four function-assignable buttons

Sub Playback

24 playbacks

12 x 40mm playback faders with one assignable button

12 x single assignable buttons

2 x Scrollwheel for Bank changes

12 x customizable multipurpose keys

Playback Select button

Master GO Section with Go, Pause, Snap, Release

4 x digital rotary encoders with push function and status LED for fixture parameter control

5 x dynamically labeled digital LCD buttons for parameter groups, effect parameters, fanning, global timings

Grand master fader and button

Blind/preview button

Customizable highlight/lowlight function

Customizable parameter defaults

Next/last fixtures/groups

Trackball with pan/tilt control switch

Left/right mouse button

Numerical keypad surrounded

Large command keys

Playback

Assign a cue, cuelist or effect to any playback fader

100 playback banks, each containing 10 playbacks

100 sub playback banks, each containing 24 playbacks

No limit to cues per cuelist

100 pages of 100 playbacks activated by touch screen button

Full 16-bit fading for high-resolution fixtures

Individual fade in/fade out times for all playbacks

Manual override available at all times

Live 0-1000% override of global cue timings

Live programmer timing

Cuelists can be executed in tracking or non-tracking mode

Included Items

1.5 m (4.9 ft.) power cable, 3-pin IEC P/N 11501012 (for use outside US and Canada)

1.5 m (4.9 ft.) power cable, 3-pin IEC P/N 11501502 (with NEMA 15-5P plug for use within the US and Canada)

User software + documentation CD P/N 39201505

Ordering Information

M1 ts Console P/N 90732040

M1 DMX License 2048 channels P/N 39808013